



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

MINUTES OF COMPULSORY BRIEFING SESSION MEETING FOR TENDER W1057-WTE: DESIGN, MANUFACTURE, REFURBISH, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF THE MECHANICAL AND ELECTRICAL WORK AT THE RAW WATER KHUTALA PUMP STATION, HELD ON THE 20 AND 22 OCTOBER 2015 AT 11:00am.

WELCOME

Mr Edward Nwamafela and Ms. Nomthandazo Plaatjie welcomed everyone and the attendees were requested to complete the briefing attendance register.

DISCUSSIONS.

The SCM representative gave a brief presentation on the compulsory documentation that all bidders must fully complete and comply to. It was indicated that the bid will be evaluated on a three phased approach outlined as follows, phase 1: Administrative compliance, phase 2: Technical compliance (Specification) and phase 3: Price and preference. Each phase requirement will be outlined below:

Phase 1: Administrative compliance

Bidders are required to submit and complete the following documents which should form part of the bid submitted by closing date.

1. An original and valid tax clearance certificate. If bidders do not submit an original and valid tax clearance the bidder will be disqualified.
2. Pricing and completion of all items of the bill of quantities.
3. Company must be registered with the UIF. Attach letter of good standing with COIDA and UIF. Letters issued out for bidding purposes from the Department of Labour will also be accepted, failure to do so the bid will be disqualified. No applications for UIF will be accepted.
4. Completion and inclusion of standard bidding documents. The following standard bidding documents must be completed in full and signed:
 - SBD 1, SBD 4, SBD 6.1, SBD8 and SBD9.
 - On SBD 4: companies must declare truthfully and honestly on SBD4. And must also disclose if they had done any business with the state and/ or state owned entities.
 - Bidders were informed to fill in the SAP Vendor form and read Annexure 7 but these documents will not lead to disqualification.
5. Prospective bidders shall be registered with CIDB with a minimum grading of 7EP and/or 7ME and submit a recent printed certificate as proof.
6. There shall be a compulsory site visit for perspective bidders. Failure to attend shall disqualify a bidder.

NB: It was indicated that in a case of a Joint Venture or Consortium the bidder will be required to submit Tax clearance and CIDB certificate of all the companies involved, failure to do so will invalidate your bid and it will be rendered non-responsive.

Phase 2: Technical Compliance

The bid will be evaluated using the below criteria and failure to comply with **all** the specifications as listed will render your bid as not to specification and non responsive and the bid will not be considered for phase 3 evaluation.

1. Completion and inclusion of all the technical schedules.
2. The bidder shall submit a complete detailed design and design drawings with the contract.
3. Completion and inclusion of the schedule of similar work undertaken by the bidder.
(Returnable documents Schedule B17)

Phase 3: Evaluation of Price and Preference Points.

It was indicated that the bid will be evaluated on a 90/10 system, 90 points being for price and 10 points for BBBEE points.

- Mr. Edward Nwamafela indicated that failure to complete the bills of quantities in full will render your bid non-responsive and the bid will not be considered for financial evaluation.
- Mr. Edward Nwamafela indicated that bidders are required to submit certified and valid BBBEE status level verification Certificates or an affidavit from the DTI indicating the BBBEE status level with bid in order to claim preference point, failure to do so will not invalidate the bid however the bid will be evaluated only for price. They will score out of 90 for price only and zero (0) points out of 10 for BBBEE.
- In case of a Joint Venture it was indicated that the bidder will be required to submit consolidated BBBEE certificate in order to claim points, failure to submit the consolidated certification will result in the bidder not being allocated preference points.

Technical minutes or discussions were as follows:

Mechanical Engineering -

It was mentioned that:

- The Bidder shall do a design of the work and submit a copy of the design with the submission of the bid document on the closing date.
- The pipe work in the pump station will be replaced with new pipes.
- A ring needle type control valve is needed after each pump.
- An extra pump and motor is required and will be stored on site.
- Each plinth accommodating the motor should be modified to accept the new larger motor.

- In the BOQ, item 2.23 (P.398) is cancelled from the tender.
- A list with additional IO points was circulated.
- The pumps was refurbished recently, it is therefore only required to price on a strip and quote on the pumps. This is only to make provision when it appears that a pump needs attention after completion of each new pipeline installation. If required it might be considered to do repair work on the pump by making use of contingencies with further proof of fair and reasonable quotations.

Electrical Engineering -

The bidders were introduced to the current low voltage room where the main switchgear is situated. The Electrical designer explained that currently motors and all equipments in the pump stations are supplied by two, 400V transformers. In this project the motors will be supplied directly with 11kV from the Eskom supply outside the pump station.

The following was described to the bidders:

- The bidders are expected to communicate with Eskom regarding the scope limits when connecting the new feeder that will supply the Main Incomer. The supply cable to the new incomer will also be replaced.
- The current Low Voltage (LV) room will be changed to a High voltage (HV) room as the new panel will be larger in size. This means that the bid includes civil work: to breakdown the walls inside the current LV room and; to build new rooms inside the new LV room (to accommodate telemetry panel and the batteries). The equipment in the current LV room (telemetry panel and batteries) will be removed by the contractor.
- The budget includes the required civil work. The bidders were advised to estimate the civil works costs in the bid after the DWS have been outlined. The civil work includes the electric motor plinths.
- The pump station DB will be placed in the new LV room and the contractor will ensure that everything that was supplied by this DB will be powered and connected. Thus, the bid also includes low voltage cabling.
- Bidders were told that a cable duct is available for the Eskom 11kV supply feeder.
- The new Main feeder is included in the Bills of Quantities, though, the appointed contractor shall determine, in association with DWS, if it is necessary to replace the existing feeder.
- The power factor correcting capacitors, motor cables and remote switching panel is included in the tender (to be placed outside the new HV room).

- DWS personnel suggested that Power factor correcting capacitors be placed in the cable gallery below the LV- and HV rooms.
- A storage room outside the pump station must be supplied with power and a distribution board, lighting and plugs. No existing cable ducts are available for the supply to this room and will be included when compiling a bid.
- Electrical drawings must take the form of detailed designs as is stipulated in the bidding document.
- The contractor will perform the work in stages when replacing the pumps. One pump should remain operational all the time.

Telemetry -

It was mentioned that:

- Under item 3.11 in the BOQ, the bidder should allow for a total of R 100 000.

Closing of bids

- Mr. Edward Nwamafela indicated that there is a cost for participation on this project which amount to R200.00 which must be paid at ABSA bank (EFT payments not allowed) and bidders must attach the original proof of payment in the tender document when submitting. Failure to do so your bid will not be considered.
- Bids received before or on the closing date before 11:00am (timing derived from Telkom time) will be accepted. No late tenders will be accepted. The tender box is opened 24/7.

Conclusion

It was agreed on the day of the briefing that the cut of date for questions will be Thursday 29th October 2015 to allow Mr. Chris Deysel to respond before the end business 30th October 2015. A separate document will be uploaded on the website with question and answers. No extension of the closing date will be granted and the closing date remains on the 5th November 2015 at 11:00.

SCM Representative:

A. Ndumase

Date:

30/10/2015

Signature:

[Handwritten Signature]

Technical Representative:

G. J. Giliomee

Date:

30/10/2015

Signature:

[Handwritten Signature]

W 1057 WTE: KHUTALA PUMP STATION Q&A SHEET

1. With reference to the Pump Control Valves on the Variation Specifications (PS 2510.3):
Each control valve supplied needs to be connected to a control panel local to the Valve.
 - Where is the power supply for these valves coming from, as this is not indicated on any EC&I drawings? **Power is coming from the existing pump DB boards at each pump.**
 - Where on the BOQ must the above mentioned items be allowed for? Is this to be included on the EC&I portion or under the Mechanical section under the control valves 2.11? **It is part of the control valve so it could be included in item 2.11.**
 - Is there any drawing available of these connections? **No. This shall form part of your detail design.**

2. With reference to the Pump Control Valves on the Variation Specifications (PS 2510.1.1):
There is mention of a copy of a 'Valve/hydrant information sheet', Reference 6.3.2 to be filled out for each valve.
 - Is the information sheet perhaps a data sheet? (The data sheets supplied are not numbered) **Yes.**
 - If so, then the only data sheet provided is for the Control Valves. **Correct.** Where is the reference 6.3.2 located in the tender documentation? **This is an error in the document. There is no Section 6.3.2**

3. According to drawing number 170931/14 ME:
 - The Rising Main Valve (Q 16) or reflux valve is shown to have an incoming power supply. **Correct.** From our understanding this is a NRV. **Correct.** Is this correct? **Correct.** Please clarify. **This supply should still be included in your design.**
 - We cannot find any reference on the EC&I drawings indicating the 3 Control Panels/Valves which need to be supplied. Please clarify. **This forms part of the control valve and should form part of your design.**

4. Regarding the existing crane at the pump station. What is the capacity of this crane?
This could be seen after attending the compulsory site meeting. Capacity: 5 tons.

5. On page 177, bullet point 6: is for delivery isolating valves either refurbished or new, this is not reflected in the BOQ. Please clarify. **The valves will most probably be left as is after inspection by the successful contractor. If refurbishment or replacement of the valves are required, this will be done with contingencies.**

6. BOQ Item 2.15 - Is there a specification regarding ball valves (as per cooling system) that we may receive? **Specifications regarding valves can be found in the document under section 7.4 General Technical Specifications on P.255. There are no specific specification on these particular ball valves for the cooling system. The valve should be of high quality.**
7. BOQ Item 2.15 - Is there a specification regarding pressure reducing valves (as per cooling system) that we may receive? **Specifications regarding valves can be found in the document under section 7.4 General Technical Specifications on P.255. There are no specific specification on these particular pressure reducing valves for the cooling system. The valve should be of high quality.**
8. Regarding the re-flux valve on the rising main. There is no specification on the refurbishment process that would be required for this valve. This would only be at this present time, a visual inspection. Would you be able to define the extent of the refurbishment so that all bidders may quote consistently? **Refer to the minutes of the compulsory site meeting regarding this valve. This item is cancelled.**
9. BOQ Item 2.23 refers to the Re-flux (Energy Saving) Valve, however the general technical specification provides a different specification. Please clarify. **This item is cancelled from the document.**
10. On page 118 (Contract data), the heading reflecting Priority of documents, point b: the order of precedence is not clearly defined. Please clarify. When referring to schedules, is that the data sheets or the BOQ? **In point b all the mentioned items are considered equal. There is no precedence. All the data sheets and BOQ's are seen as schedules.**
11. Please confirm the pressure rating on the suction and discharge lines. According to the drawings of the reducers, the suction line flanges are PN 25 and the discharge line flanges are PN 16. Usually the discharge line has a higher pressure rating. Please confirm if these are correct? **The drawings are correct. Suction side is 250kPa (PN2.5) and the discharge side is 1600kPa (PN16)**
12. According to the General Specifications for motors (Page 243 - S66.6), States the terminal and cable entry boxes shall have a IP 55 rating, however the Particular Specifications (Page 335 PC 4.2.1), state IP 65 Terminal boxes. Please confirm which of these takes precedence, the general or particular specifications? **The Particular Specification with IP 65.**
13. With regards to the standby Pump and Motor that would be supplied to site, where exactly would this equipment be stored? Also are there any special storage or packaging requirements? **The motor and pump will be stored on site. The motor heater shall be energised. No special packaging is required.**
14. We require the size of the Control Valves (ring needle) and the Rising Main Reflux Valves. **The estimated size is DN 400 but this should be confirmed in the design.**

15. The length of the reducers will be determined after the Face to Face dimensions of the Valves are determined. Please confirm. **Correct. This should be confirmed in the design.**
16. Can the existing piping within the pump station be modified? If so, may we receive a GA Drawing of the pump station indicating the piping configuration and sizes? If we are replacing sections of pipe within the Pump Station, where in the BOQ should the rate for this go? **No, all the pipes shown in the tender document should be manufactured and replace the existing.**
17. The reducers shown on the "drawings for tender purposes" seem to be to an incorrect specification. The material indicated as SANS EN 10025 Gr S355JR is a structural steel specification. Is this correct? Or may we offer a material usually associated with SANS 719 large bore pipes? **SANS 719 may be used for a similar steel to S355JR.**
18. The flange dimensions indicated does not reflect on any of the SANS 1123 tables. Please advise on the correct specification. **The tables are reflected in SANS 1123:2011 Edition 3.2.**
19. There are 3, 25mm stub-ins located on the reducers. We assume one is for the suction/discharge pressure gauges. What are the relevance of the other stub-in points for? **We require three for the installation of a piezo ring for measuring average pressures over the pipe cross section.**
20. The complete detailed design of the cooling water system for the motors must be carried out at tender stage? Please confirm. **That is correct. This should be included in the design.**
21. General Specification calls for starting current for the motors from 150kW to 1000kW to be limited to 5xFLC, but the variation, PC2 states this starting current must not be more than 4xFLC. The motors to be supplied falls within this range - 550kW. However the Project Specification calls for DOL Starting method, which normally has starting current of 6 to 8 times of full load current. These documents contradict each other, please clarify which one takes precedence. Or should we consider another solution, e.g. VSD? Specially Engineered DOL/Motor? **A starting current of 4x FLC or less is possible as requested in the Particular Specification PC2.**
22. The Project Specification, clause 3.2.1, states that Power & Energy Monitoring Unit must measure THD. The motor starting drives specified are DOL. DOL starters are considered to be Linear loads causing no Harmonic Distortion. If this is required so as to measure Harmonics coming from the Main Power Supply to the plant, then no mitigations can be priced until the actual execution of the project. Please clarify this requirement. **THD measurement not required.**
23. The General specification states that the motor rating must be at least 10% margin of the pump. The variation states that the motor rating must be at least 10% in excess of the pump worst load condition. This motor has already been sized for us and we do not have the pump details to do our calculation, hence it will be 550kW as indicated in the Tender Scope of Work, BoQ and Drawings. **It might be that the motor should be greater than 550kW. The size of the motor shall be confirmed by the bidder in the**

design report with the additional 10% in excess of the pump worst load condition. The type of pump is Sulzer SM 302-640.

24. Please advise what Control System will be preferred (PLC, SCADA, Telemetry) for the Control Philosophy described in clause S.96 of the general specification. Make and Model numbers if possible. **The control system should be ammended to adapt to the new control philosophy as described in the document and confirmed by your design.**
25. The general specification states that the insulation materials ussed in motor windings shall be rated Class F or Higher, while the Project specification states that the insulation used shall be Class H of IEC85 (Copper winding). Please confirm that the insulation to be quoted on is definitely Class H (Copper winding) per project specification. **Particular Spec takes precedence.**
26. The general specification states that the sleeve type bearings are preferred, while the project specification states that the end-shield mounted ball or roller type bearings are preferred for all motors, it goes on to say pedestal mounting & sleeve bearings are to be avoided as far as practical. **Particular Specs takes precedence.**
27. Project specification states that an IP rating of IP65 is required. This being the 11kV motor some suppliers states that it is not practical, please confirm. **Particular Specs takes precedence.**