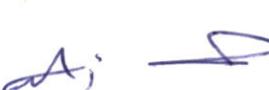
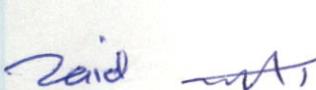


S. No.	Department	Reference to the RFP document	Item Reference	Technical clarifications	Status	Employer Respond
1	Process	Section 5, Terms of references	Scope	<p>Bidder understanding is the project scope is limited to two new pipeline + Offtake and Receiving stations as follows:</p> <ol style="list-style-type: none"> (KHTBDA Pipeline): 20 km pipeline from Mafraq Industrial Estate to JGTP; ZIE Pipeline: 30 km pipeline from the tie-in point to the main gas pipeline. <p>Company to please confirm Bidder understanding.</p>	Open	<p>With respect to the Mafraq Industrial Estate and the ZIE Pipeline, we confirm that the indicated pipeline routes are preliminary and for reference purposes only. The final pipeline alignment and routing for both industrial estates shall be determined by the consultant, based on detailed technical, environmental, and regulatory assessment ...etc., the pipeline facilities shall include all required systems such as pigging system (similar to JGTP used facilities), E&I, Telecommunications, PRMS's, Cathodic Protection, Civil ...etc</p>
2	Process	Section 5, Terms of references	Filter and Metering Skid/ Pig launcher	<p>Company to please clarify below requirement at offtake (Launching) station as a minimum requirement for each pipeline (KHTBDA and ZIE pipelines).</p> <ol style="list-style-type: none"> Requirement of Filter and Metering Skid (for Mass Balance Leak Detection) along with the pig launcher at Offtake (Launching station); 	Open	<p>The minimum requirements and related documents will be provided to the successful bidder, some of the project systems to be considered is : Leak Detection system, 2 redundant Fiber optic cables, SCADA System & anti Intrusion system (shall be integrated with Existing system at JGTP) which shall be supplied from Same JGTP approved suppliers and shall be integrated with it with the same spec's.</p>
3	Process	Section 5, Terms of references	Facilities	<p>Receiving stations shall include Filter, Metering Skid, Pressure Regulating Skid, Water Bath Heater and Pig receiver as a minimum requirement.</p> <p>Please confirm above understanding.</p>	Open	<p>The Consultant to list the expected systems to be considered in the project in his technical proposal while its confirmed as a general items mentioned in the clarifications, The minimum requirements and related documents will be provided to the successful bidder.</p>
4	Process	Section 5, Terms of references	Vent stack	<p>Company to please confirm the availability of vent stack at each tie-in station, or else Client to please clarify the requirement of new vent stack to depressurize each pipeline.</p>	Open	<p>Consultant to consider performing location calls survey, QRA, HAZOP and Gas Dispersion studies to estimate the required venting and depressurization facilities as needed according the applicable codes. Detailed requirements and specifications will be defined by MEMR and provided to the successful bidder.</p>
5	Process	Section 5, Terms of references	Utilities	<p>Please clarify the availability of following utilities as minimum requirement:</p> <ol style="list-style-type: none"> Instrument Air for water Bath Heater; Instrument Air for ESD valves and Control Valves; Make-up Water for Water Bath Heater; Fuel Gas for Water Bath Heater; Availability of Electrical Power for all users (Control System, MOVs, ...). 	Open	<p>No intrument Air system is requested the supplier to use either Solinoid valve or to use gas operated valves</p> <p>Make up water shall be considered</p> <p>Fuel Gas system shall be considered</p> <p>The Power supply shall be considered from 2 Sources (from Grid, and from Diesel Generator (for emergency). Control room shall be equiped with UPS - Detailed Layout for the control room will be send for the succesful bidder</p>
6	Process	Section 5, Terms of references	Fuel Gas Skid	<p>If Fuel Gas shall be provided by Gas Pipeline, Company to confirm installing new Fuel Gas Skid for fire Bath Heater.</p>	Open	<p>Fuel Gas System for WBH shall be considered, Indicative P&ID will be submitted for the succesful bidder. This matter will be discussed and addressed during the project implementation stage</p>
7	Process	Section 5, Terms of references	Instrument air Package	<p>If Instrument air is not available for Heater and control valves / ESD valves, Company to confirm installation of new Instrument air Package for the system;</p>	Open	<p>Please refer to previous point reply, natural gas is typically used for the operation of the control and ESD valves.</p>
8	I&C	Section 5 TOR	Control and safety systems	<p>Consultant understands that the facilities at both ends of the pipeline have their control and safety systems. These systems will be modified as part of the project to accomodate the control and monitoring of the new pipelines.</p> <p>During the scoping study, the Consultant will gather the information of these system from COMPANY. In this regard, Consultants requests Company to confirm that the existing documents and drawings of these system are available and will be shared with the Consultant.</p>	Open	confirm
9	I&C	Section 5 TOR	OEM	<p>Consultant requests Company to advise the Make/OEM name of the existing control/safety systems (discussed in the above point).</p>	Open	<p>This will be coordinated during the service escusion period with the existing system operator</p>

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10	I&C	Section 5 TOR	I/O list	Consultant understands that the adequacy check of the existing control / safety systems is not under scope of the FEED consultant. Consultant will provide the necessary engineering documents such as I/O list, Architecture, Block diagram etc. to the Company and the Company will engage the OEM for adequacy checks. Kindly confirm this understanding.	Open	Confirmed
11	I&C	Section 5 TOR	Company Standards	Consultant requests Company to advise if the existing Company Standards are available to be used during the FEED engineering? Or consultant can utilize in-house/International standards during the FEED?	Open	MEMR will provide the winning bidder with the Existing Standards and Specifications, requirements while the Standard and spec's shall be proposed by the Consultant
12	Mechanical	Section 5 TOR	Filter separator	Please confirm if the filter separator needs to be installed before the metering skid.	Open	Yes, it's confirmed to be considered with condensate tanks; Detailed P&ID for all PRMS's items to be delivered to Consultant (dimension-less) - The detailed P&ID shall be delivered by Consultant
13	Mechanical	Section 5 TOR	Fuel gas skid	Could you please clarify whether the water bath heater uses gas or diesel as fuel? If it uses gas, is a fuel gas skid required? If it uses gas oil, should the storage and diesel transfer facilities be included in the consultant's scope?	Open	Fuel Gas will be used from the PL, Fuel Gas Skid to be considered (Detailed P&ID will be delivered)
14	Mechanical	Section 5 TOR	Power supply	On page 48, the scope mentions the power supply. Could you please clarify whether the power will be provided from the network, solar, or gas and diesel engine generators? If gas and diesel engine generators are considered as power sources, please confirm whether the fuel gas skid and diesel storage and transfer facilities should be included in the consultant's scope of work or not?	Open	Refer to point number 5
15	Mechanical	Section 5 TOR	Instrument air package	Please clarify if instrument air is available? If not, are the instrument air package and dryers included in the consultant's scope?	Open	Refer to point number 5
16	Pipeline	Section 2 Scope of Work	Design code	The Bidder requests the Company to confirm the applicable design code for the onshore pipeline (International or Local). Company to confirm.	Open	The international design codes will be adopted, taking into consideration the available local codes, such as those issued by the Civil Defense ETC.
17	Pipeline	Section 2 Scope of Work	Survey	Please confirm whether survey activities (topographical and geotechnical investigations) fall under the Company's responsibility.	Open	Consultant to provide optional price for the activities in the offer
18	Pipeline	Section 2 Scope of Work	KMZ	Bidder request Company to provide KMZ file of the pipeline route.	Open	Regarding the Mafraq Pipeline, we will provide it. With respect to the ZIE Pipeline, no proposed route is available. The Jordanian gas pipeline route will be provided to the winning bidder, and it will be the responsibility of the winning bidder to determine the most suitable route.
19	Pipeline	Section 2.1 Scoping Study Report for KHBTD	Pipeline coordinates	Kindly provide the route details of the pipeline to enable a clearer understanding of the scope of work. What are the coordinates (centreline) of the start and end points of the pipeline?	Open	It is the responsibility of the winning consultant to determine the pipeline route, conduct a site visit, and identify the most suitable route.
20	Pipeline	Section 2.1 Scoping Study Report for KHBTD	Hot tapping	Please clarify whether hot tapping should be considered as part of the rerouting procedure.	Open	No Pipeline Re-routing is requested, the Hot Tap shall be designed for the Connection points for both Pipelines, Kindly clarify what's the meaning of re-routing
21	Pipeline	Section 2. 3	Material specifications and data sheets	Bidder request Company to confirm that preparation of the material specifications and data sheets is under Bidder's scope.	Open	cofirm, included as part of the consultant Scope.
22	Piping	2. Scope of Work 3. Duration & Completion of Services Pdf Page 49/79 :	GAD, 3D modeling	Bidder understands that the Piping deliverables under FEED is limited to: 1. Development of plot plan and general arrangement drawings (GAD) for pigging facilities (launcher on spur and receiver at PRMS), tie-in piping at source (SOL facility) & PRMS station. 2. Preparation of required PMS, specifications and datasheets for piping components and valves. <u>Exclusions:</u> No requirement of 3D modeling No requirement of comprehensive stress caesar analysis No Isometric drawings etc at FEED stage, considering the compressed schedule. COMPANY to confirm Bidder's understanding	Open	Refer to the scope of work in the tender document., Its Requested "as optional SOW to perform the Detailed Engineering according to the Attached deliverables list,
23	Piping	General	Existing facilities	Bidder understands that COMPANY will provide all existing facilities drawings during the FEED stage for the respective SOL facility (tie-in point) and PRMS station. This includes general arrangements, piping layouts, and isometrics etc for integration with new works. COMPANY to confirm Bidder's understanding.	Open	The Connection point location will be provided, other data will be provided upon need

24	Civil and structural	Section 2.3 TOR	Geotechnical and topo survey	Consultant assumes that only Scope of work for Geotechnical and topo survey shall be prepared by consultant and Company MEMR will award survey contracts to a third party. Consultant will hire a competent Civil Engineer to coordinate and expedite the survey works. Company to confirm consultant understanding	Open	A draft scope of work will be prepared for the third party, and the reports will be reviewed by the consultant.
25	THSE	Section 5 TOR	HAZID/ HAZOP	Company to confirm if the following safety studies shall be considered for this FEED Phase 1. HAZID Workshop, Report and Closeout 2. HAZOP Workshop, Report and Closeout No SIMOPS, QRA, ESIA, FERA and other SAFETY & risk assessments studies are required from above for FEED Phase.	Open	✓ ESIA (Needed) ✓ QRA (Needed) ✓ HAZID, HAZOP and its closing reports (NEEDED) ✓ Emergency Response Plan (NEEDED) FERA (Optional Price) SIMPOS (Not Required)
26	THSE	Section 5 TOR	Technical Safety	Company to confirm if the following safety engineering activities/ deliverables shall be considered for the FEED Phase 1. Technical Safety Philosophy 2. Hazardous Area Classification Schedule and Layout 3. Passive Fire Protection Schedule and Layout 4. Firefighting & Safety Equipment Layout (Placement of loose firefighting & safety equipment only) 5. Fire and Gas Detector Layout and Cause & Effect.	Open	In accordance with international standards and Civil Defense requirements
27	THSE	Section 5 TOR	Fire water system	Company to confirm that No fixed Fire water system and other scope for technical safety aside from above shall be considered for FEED Phase.	Open	confirm
28	Process			It's mentioned in section 1 [page 3] and in section. 5 [page 48] that the local low pressure distribution network is excluded, and in section 5 [page 49] under SOW section scope includes configuring end of line facility and gas distribution system, MEMR to advise whether it's included in the scope or not, if yes further details of the gas distribution system to be advised.		The distribution network within the industrial cities is not included in the scope of work(the scope of work is limited up to PRMS).
29	Loss Prevention			Reference to RFQ, Section 2, Scope of Work: It is noted that there is no scope is mentioned related to Fire Protection: Based on project's Configuration we understand that FEED could consider the following scope in Both KHBTF & ZIE and Tie-in Facilities 1- Fire and Gas detection system deliverables. 2- Hazard Area Classification Schedule. 3- Fire Extinguishers and safety equipment layouts. MEMR to advise & confirm		In accordance with international standards and Civil Defense requirements
30	Loss Prevention			Reference to RFQ, Section 2, Scope of Work: It is noted that there is no scope is mentioned related to Process Safety Studies: Based on project's Configuration we understand that FEED scope could consider the following Studies: 1- HAZID 2- HAZOP 3- SIL 4- QRA MEMR to advise & confirm		all these studies are needed ato be perfomed, its not excluded
31				Is the gas demand assessment part of the consultant's responsibilities?		The consultant is requested to provide a report on the selection of the recommended pipeline size and PRMS capacity.

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