

Name of Work : RWTP, RO-DMP, CPU & ZLD Plant for Panipat Refinery Expansion Project (P25) of M/s Indian Oil Corporation Limited (IOCL), India
Bidding Document: SG/B269-475-PA-T-8701/23

PRE-BID QUERIES

SL. No.	REFERENCE OF ENQUIRY DOCUMENT				BIDDER'S QUERY	EIL/IOCL REPLY	Further Query	EIL/IOCL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT				
2	JOB SPECIFICATIONS (INSTRUMENTATION) Doc. No. B269-475-16-51-SP-8701 Rev. F	1340/7166	2.4.3		<p>It is indicated under this clause that “Redundant PLC control system with all the following modules (cards) and network components as being redundant:</p> <p>a. PLC Processor (CPU) and Communication Processor</p> <p>b. Processor power supply, IO rack power supply & IOs Bulk Power Supply (BPS),</p> <p>c. Serial communication (Modbus) module.</p> <p>d. IO cards / modules (all closed loops, controls, logics, interlocks, safety, shutdown signals).</p> <p>e. PLC network and its components (switches).</p> <p>We understand as below.</p> <p>(i) The PLC system required is General purpose (NOT SIL Certified) with redundancy as specified in this clause.</p> <p>(ii) IO Cards for Monitoring shall be Non Redundant.</p> <p>(iii) Analog IO cards are NOT required with HART Pass through feature and IAMS (Instrument Asset Management system software) is also NOT required.</p> <p>Please confirm our understanding.</p>	<p>It has been clarified as below for point No.(iii) “Noted. Refer clause 3.3.9 of Instrumentation design basis Doc. No. B269-999-16-51-EDB-1001</p>	<p>Please note that as per clause 3.3.9 sr.1 of Instrumentation Design Basis, Asset management system is required and as per note For package PLCs interfaced through MUX and dual Input barriers in PLC.</p> <p>Generally the requirement specified in Instrument Design Basis is for Overall Project. Requirements pertaining to specific package are generally specified in Job Specification. However the requirement of Asset management system has NOT been specified in Job Specification .</p> <p>In view of above, please clarify following</p> <p>(i) Whether for the PLC system of ETP, Asset Management system software to be considered or NOT.</p> <p>(ii) Whether the HART</p>	<p>(i) Asset management System is not required for ETP PLC.</p> <p>(ii) Not Required.</p>

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							signals to be interfaced through MUX and dual Input barriers in PLC	
24	Engineering Design Basis (Instrumentation) Doc. No. B269-999-16-51-EDB-1001 Rev No. 3	3062/7 166	4.5.4		<p>It is indicated under this clause that "In general ball type valves shall be used for shutdown unless any other type specifically required for the application. For line sizes 20" and above triple offset butterfly valves with double flange design shall be used.</p> <p>1. Kindly note that Detailed P&ID is provided in tender documents indicating type of On-Off valves as per EIL process requirement.</p> <p>From above we understand that the type of valve Ball/Butterfly shall be followed as per tender P&ID.</p> <p>Kindly confirm</p> <p>2. The On- Off valve shall have following specifications.</p> <p>Ball Valve type</p> <p>(a) Body & Flange rating – 300# Min or as per relevant pipe class whichever is higher.</p> <p>(b) Body Material as per relevant pipe class.</p> <p>(c) Ball material – SS316</p> <p>(d) Seat Material – PTFE</p> <p>Butterfly Valve type</p> <p>(a) Body rating – 300# Min or as per relevant pipe class whichever is higher</p> <p>(b) End Connection – Lugged</p> <p>(c) Design --- Double Offset design</p> <p>(d) Body material – as per relevant pipe class</p> <p>(e) Disc Material – SS316</p>	<p>Sr. No. 1 & 2: For Ball & Butterfly valve follow MR requirement.</p> <p>S. No. 3 Auto on off valves shall be as per Instrumentation EDB B260-999-16-51-EDB-1001</p>	<p>In EDB B260-999-16-51-EDB-1001 clause no. 4.5.4 "On Off valves" specifies use of Ball valves for shutdown valves.</p> <p>We would like to submit that on off valves used in ETP in refineries are process isolation valves and NOT shutdown valves. Therefore in all EIL's ETP projects On Off Ball valves are used only upto 4" size and for sizes above 4", Double eccentric Butterfly valves with lugged end design are used.</p> <p>We request you to review the above and kindly allow us use of Double eccentric lugged end design butterfly valves for size 6" and above</p>	<p>On-Off valves shall be ball type for size below 20" and triple offset butterfly valves with double flange design shall be used for size 20" and above.</p>

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					<p>(f) Seat Material – PTFE</p> <p>Kindly confirm.</p> <p>3. Further we would like to inform that in P & ID at some places On Off valve type has been depicted as Gate valve. However since On Off valves are mainly available as either Ball or Butterfly valve, for places where On - Off Gate valve has been depicted, we will consider On Off Butterfly valve with above specifications.</p> <p>Kindly confirm</p>			