

## Clarification # 7


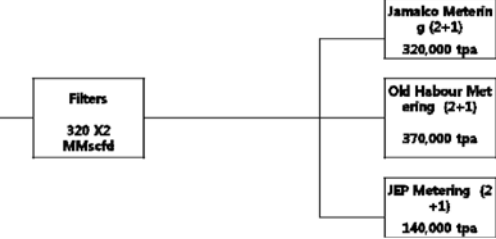
### RFP # 2011/L002 - LNG Floating Storage & Regasification Terminal December 8, 2011

#	Clarification Requested	Response
1	<p><u>TUG BOATS</u></p> <p>Attachment 08 – “Jetty Design Philosophy” Section 3.2, indicates that “.....The normal operation is to support the arrival of ships with four tugs.....”</p> <p>Please clarify that the scope of the LNG Infrastructure supply does <u>not</u> include the supply of the tugboats.</p>	<p>The Terminal Operator is responsible for securing tug boats (and all other maritime services) required for its construction activities or any movement of its FSU/FSRU during the duration of the Terminal Use Agreement (TUA). The Jamaica Gas Trust (JGT) will provide or cause to be provided tug boats and all required port services (other than those required of the Terminal Operator under the TUA) for the berthing and departure the LNG carrier vessels during the operations period (including the provision of the cool down cargo). The responsibilities of the parties will be clarified in the draft Terminal Use Agreement which is anticipated to be issued during the week of December 12, 2011.</p>
2	<p><u>TUG BOAT DOCK</u></p> <p>If tug boats are <u>not</u> included in the scope of supply, please confirm that the tug boat dock will be provided by others.</p>	<p>Please see response to Question # 1 above. The tug boat dock, if required, is anticipated to be provided by others.</p>
3	<p>Has the land for the Onshore Receiving Facility (ORF) (including temporary facilities and lay down area) been procured by COMPANY (GOJ) at the moment? If it is procured, please let us know the specific location and area of ORF. It is</p>	<p>The cost and detailed arrangements for the area required for the Onshore Receiving Facility (ORF) is the responsibility of the Bidder. As noted in Question # 18 of Clarification # 5 (issued on 2 December 2011), the Jamaica Public Services Company (JPSCo) has preliminarily agreed to offer a</p>

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	important information for designing ORF and pipeline route.	five (5) acre parcel on their Old Harbour site for the Onshore Receiving Facility (ORF). However, alternative locations for the ORF within the Port Esquivel or Old Harbour areas may be acceptable pending review of Contractor's proposal. The other landowners in the area of Port Esquivel and Old Harbour (i.e. Old Harbour Estates and Windalco) have indicated a willingness to work with the Bidders on their onshore land requirements. Please send a request to the LNG Project Manager, Mr. Ernie Megginson, at <a href="mailto:emegginson@mem.gov.jm">emegginson@mem.gov.jm</a> for the contact details of the local landowners.
4	If the land for ORF is not secured currently, please let us know the unit price for lease land in the site.	Please see response to Item # 3 above.
5	Would the COMPANY (i.e. the GOJ) be willing to perform "Site preparation works for ORF Area", including "Roads for approaching to Site"?	Site preparation and roadwork required for the jetty, pipeline and Onshore Receiving Facility (ORF) are the responsibility of the Contractor.
6	Will 'water supply' and 'Power supply' be available for the ORF?	Public water and power supplies can be sourced directly from the local utility providers through an application from the bidder.
7	The RFP documents [7] "Jamaican LNG FSRU, Request for Quotation: Technical Form of Bid" isn't included in ITB.  Please provide it.	The references to the "Technical Form of Bid" in the technical specifications attached as Attachments 2-10 of the RFP should be ignored. All required information or forms required for the submission of the bids are specifically identified in Section IV, Bidding Forms.

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8	<p><b><u>Fire Truck Supply</u></b></p> <p>Bidder understands that fire water truck should be supplied by bidder. Please clarify bidder's understanding is right or not. If bidder should supply fire water truck, please give technical specification for cost estimation.</p>	<p>The technical specifications for the standard fire trucks in Jamaica can be found from the Jamaica Fire Brigade at: <a href="http://www.jamaicafirebrigade.org/watert.html">http://www.jamaicafirebrigade.org/watert.html</a></p>
9	<p><b><u>Fire Fighting Building for ORF area</u></b></p> <p>ITB specified Fire Water Truck shall be supplied by contractor. However, fire water truck location is not provided in the ITB. Please clarify firehouse is required or not for standby of fire water truck and fire fighters.</p>	<p>A firehouse is not required for standby of fire water truck and fire fighters. The fire water truck shall be parked in a designated emergency area to be specified by the Contractor and the fire fighters will be taken from a cadre of trained operators of the LNG Terminal. External support will be coordinated with the local fire department (<a href="http://www.jamaicafirebrigade.org/">http://www.jamaicafirebrigade.org/</a>) and neighbouring industrial facilities.</p>
10	<p><b><u>Building fire protection for ORF area</u></b></p> <p>Bidder cannot find any requirement of building fire protection for ORF area on ITB Documents. Please inform the detail requirement/specification of building protection for cost estimation.</p>	<p>The 2003 International Fire Code is to be used as a guide for fire protection for Onshore Receiving Facility (ORF) area. A copy can be purchased from the Bureau of Standards Jamaica: <a href="http://bsj.org.jm/">http://bsj.org.jm/</a>.</p>
11	<p><b><u>ORF area Fire Water Tank Refill</u></b></p> <p>The requirements of the fire water tank refill system at ORF area is not clear. NFPA 24 requires that the system for filling of the tank shall be sized to fill the tank in a maximum time of 8 hours. If seawater shall be using for refill, desalt system to be</p>	<p>The fire water tanks shall be refilled from fire hydrants located strategically within the boundaries of the Onshore Receiving Facility (ORF). Water supply to the hydrants can be either from public water source or from privately operated wells. If seawater is the source, then a desalination system must be centrally located on the compound.</p>

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	added. Please clarify the manner of refill of fire water tank.	
12	The pipeline & ORF scope of work mentions that Contractor shall provide PLEM in the SRT. However, it is recommended that it is not necessary to provide PELM in the SRT. Please clarify.	There is no need for a Pipeline End Manifold (PEM) to be located in the SRT. Please see response to Question # 17 below for the revised description of the piping, filtering and metering arrangement within the Onshore Receiving Facility (ORF).
13	The pipeline & ORF Operating Philosophy mentions that the pipeline entry pressure shall be controlled to ensure design gas rates can be delivered to the ORF at end-user arrival pressure requirements. We wonder about that the control logic for the ORF, based on Phase 1 capacity, is whether individual control for each 3 end-users, or additional pressure / flow control is provided to the outside of tie-ins. At this stage, we understood that this is out of scope for the ORF.	As referenced in Question # 11 in Clarification # 5, which was posted on the Cabinet website on December 2, 2011, pressure letdown will be removed from the requirements of the Onshore Receiving Facility (ORF). Pressure regulation will be handled by the End-Users at their facilities.
14	What are the tie-in points for Onshore Receiving Facility (ORF)? Please clarify.	The tie-in points (i.e. the boundary limit) are at the outlet flanges of the fiscal metering skids within the Onshore Receiving Facility (ORF).
15	Regarding the "selected equipment and machinery" mentioned in the Pipeline & ORF Scope of Work, Who will issue the list of "selected equipment and machinery"...the COMPANY or CONTRACTOR?	The Contractor shall issue the list of "selected equipment and machinery" to the COMPANY for review and approval.

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16	<p>As following the response #6 of Clarification #4, “To this end, the regasification system equipment shall be rated for gas delivery pressures to the pipeline of up to 100-barg.” We understood that all equipment design pressure shall be rated minimum 100 barg considering the ORF arriving pressure 80 barg. Please clarify the ORF arriving operation pressure.</p>	<p>Per Section 2.10.2, Gas Pressure and Temperature, of the Basis of Design, Attachment 2 of the RFP, the desired operating pressure requirement at the delivery point into the pipeline is between 40 and <u>95-barg</u>. Therefore, with the removal of the pressure letdown requirements from the Onshore Receiving Terminal (ORF), the ORF operating pressure should be the maximum stated, i.e. <u>95 barg</u>.</p>
17	<p>Following the Basis of Design, the ORF flow scheme is per the following scheme. Gas filters and metering will be used commonly for the future expansion.</p>  <p>If we follow the recent clarification (Clarification # 5 posted on December 2, 2011), the filter will be used commonly. Separate metering systems including spare metering will be installed without gas heaters. Please clarify the required gas send-out system scheme.</p> 	<p>The second diagram accurately reflects the revised requirements of the metering and filter systems in the Onshore Receiving Facility (ORF).</p>