

1 Q. **Re: Refurbishment of Marine Terminal at the Holyrood Thermal Generating**  
2 **Station (Tab 3)**

3 What is the time required for connection and disconnection with a 16 inch flange?  
4  
5

6 A. Currently, the time required for connection and disconnection with a 16 inch flange  
7 to the existing loading arm system is one and three hours, respectively. Please refer  
8 to the response to P2-CA-NLH-16 for the explanation of these times. The proposed  
9 modification to the fuel arms is to install a 16 inch quick coupler release, which will  
10 connect and disconnect from the vessel in reduced time as compared to the current  
11 design which requires the installation and torquing of multiple bolt flanges. Also,  
12 installing a new pedestal for the loading arms will increase the height of the system  
13 and create better angles for improved drainage of remaining oil required for vessel  
14 disconnect. These modifications will reduce delays and allow vessels to disconnect  
15 quicker in the event of an emergency on the Marine Terminal or if weather  
16 conditions change rapidly.