

Questions and Answers: 2012 Safety, Security Assessment & Operational Planning for LNG fueled Ferries

1. What is the expected capacity of the LNG fuel tanks carried by the ferries?
 - a. *The current concept of operation calls for the installation of two (2) LNG storage tanks 100 m³ each on the uppermost deck. (see PDF link for the Concept of Operations for more detail at http://www.wsdot.wa.gov/Business/Consulting/Ads/Open/2012_Safety.htm)*
2. What is the expected transportation mode for the fuel that will be transferred to the ferries (fixed facility, Mobile facility (truck/rail), vessel/barge)?
 - a. *The current concept of operation calls for delivery of LNG to be accomplished at existing ferry terminal by over the road trucks. (see the PDF link for the Concept of Operations for more detail at http://www.wsdot.wa.gov/Business/Consulting/Ads/Open/2012_Safety.htm)*
3. Does the Waterways Suitability Assessment (WSA) include the ferry slips or just the routes and approaches?
 - a. *Yes, since fueling will be conducted at existing ferry terminals they will have to be included in the safety and security assessment.*
4. Since the expected capacity will be far less than a bulk LNG carrier; have there been discussions about decreasing the Sandia Lab LNG study's zones of concern to scale? If so, what has resulted from those discussions?
 - a. *There has been no specific conversation with the U.S. Coast Guard regarding the Sandia LNG zones of concern. The Sandia LNG study is cited as a reference document. It is expected that the zones of concern would be scaled to the tank capacities referenced in Question and Answer number 1 above.*
5. Is there a risk management plan in place for WSF today, and if so – could we possibly take part of that existing plan?
 - a. *Yes, there is a risk management plan but currently it deals exclusively with life saving equipment requirements. A great deal of risk analysis has been done with regards to navigation safety, but nothing regarding LNG.*
6. Could we use part of the existing Operations Manual for regular bunker and connected systems?
 - a. *We have a rough draft of the bunkering procedures for LNG and we have existing procedures for diesel bunkering, but we have not developed any documentation regarding an LNG Operations Manual. (see PDF link for the Concept of Operations for more detail at http://www.wsdot.wa.gov/Business/Consulting/Ads/Open/2012_Safety.htm)*
7. Could we use part of the existing Emergency Manual?
 - a. *Yes, we have extensive emergency policies and procedures within our existing Safety Management System Manuals.*
8. In order that we have a clear and common understanding of the right direction, what are the needs / requirements that triggered this assessment? The reason for this

question is because the NVIC 01-2011 and 33 CFR 127 have been referred to as guides in this RFQ.

- a. You are correct. The NVIC 01-2011 and 33 CFR 127 have been referred to as guides in the RFP. Currently the U.S. Coast Guard has no regulations regarding the operation of LNG fueled passenger vessels (they have however recently issued policy letters stating that they are accepting IMO standards for the design criteria LNG passenger vessels, see <http://www.uscg.mil/hq/cq5/cq521/docs/0112.pdf>). The U.S. Coast Guard has no regulations nor have they formally adopted any recognized standards for the operation of LNG passenger vessels. As such, the U.S. Coast Guard has left our approach open ended and asked for a proposal from WSDOT. There are no regulatory requirements for WSDOT to conduct these assessments. WSDOT felt that it was prudent to do a detailed safety and security assessment prior to making any long term financial commitments.*
9. NVIC 01-11 is intended for LNG carriers and not LNG fueled vessels, as part of FERC. Is WSDOT required to submit to FERC for permit and approval to operate LNG fueled ferries?
 - a. No, the Federal Energy Regulatory Commission (FERC) will not be involved in this project.*
10. 33 CFR 127 is intended for the transfer of LNG to vessels from large onshore facilities. Is the transfer of LNG to WSDOT LNG fueled ferries intended to be from a small scale shore based facility or from LNG tank trucks?
 - a. The current concept of operation calls for delivery of LNG to be accomplished at existing ferry terminals by over the road trucks. (see the PDF link for the Concept of Operations for more detail at http://www.wsdot.wa.gov/Business/Consulting/Ads/Open/2012_Safety.htm)*
11. Is WSDOT conducting the assessment solely to satisfy USCG requirements? If so, will WSDOT be open for us to contact the USCG for discussions / clarification of what the requirements should be?
 - a. As stated in Question and Answer number 8, there are no specific regulatory requirements at this time. However, WSDOT does not object if the consultant wishes to contact the U.S. Coast Guard for discussion and clarification.*
12. If FERC permit is not required and LNG fuel transfer is intended to be carried out by truck or small scale onshore facility and the USCG agrees, will WSDOT consider proposals such as risk based methods that do not follow the requirements (that may be a showstopper) outlined by the RFP? (with justifications provided)
 - a. Yes, WSDOT will accept alternatives to the guideline provided in the RFP with justification. We welcome the consultant's experience and knowledge of best practices that have been applied to similar projects.*