



16715
CG-OES Policy Letter
No. 01-17

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From:  S. J. Kelly, CAPT
COMDT (CG-OES)

To: Distribution

Subj: GUIDANCE FOR EVALUATING SIMULTANEOUS OPERATIONS (SIMOPS)
DURING LIQUEFIED NATURAL GAS (LNG) FUEL TRANSFER OPERATIONS

Ref: (a) CG-OES Policy Letter No, 01-15, Guidelines for Liquefied Natural Gas (LNG) Fuel
Transfer Operations and Training of Personnel on Vessels Using Natural Gas as
Fuel, dated February 19, 2015.

1. **Purpose.** This policy letter provides guidance to Coast Guard Captains of the Port (COTPs) considering safety issues associated with SIMOPS¹ while conducting LNG fuel transfer operations. This policy is limited to those SIMOPS which are planned to occur at facilities regulated pursuant to 33 Code of Federal Regulations (CFR) Part 127 – Waterfront Facilities Handling LNG.
2. **Action.** In locations where LNG bunkering operations are proposed to occur, cognizant COTPs are encouraged to determine in advance whether the facility and vessel owner/operator intend to conduct SIMOPS in the waterfront facility's marine transfer area. If SIMOPS are planned to occur, COTPs should consider the discussions and recommendations provided in this policy letter when evaluating Operations and Emergency manuals for LNG facilities regulated under 33 CFR 127.
3. **Directives Affected.** None.
4. **Background.**
 - a. Currently, LNG bunkering operations are occurring, or are planned to occur, in several locations around the United States (e.g., Port Fourchon, LA; Jacksonville, FL; Seattle-Tacoma, WA). Due to its low cost and comparatively clean air emissions profile, it is expected that LNG as a marine fuel will continue to be an attractive alternative to marine diesel.
 - b. Examples of SIMOPS for a LNG fuelled ship may include; passenger and crew embarkation/debarkation; loading of stores and cargo; discharging waste; loading and unloading materials and consumables including potable water, lubricants, and fuel other than LNG; gangway and mooring line operations; tour bus operations; hull cleaning, maintenance

¹ For purposes of this Policy Letter, SIMOPS is defined as two or more operations occurring simultaneously, one of which involves LNG bunkering operations, and the combination of which may present heightend safety, environmental and security concerns.

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and repair; and/or the unloading and loading of tour equipment (e.g., bicycles, segways, gazebos, etc.) while simultaneously transferring LNG fuel. In order to maintain tight sailing schedules, some vessel owners who are considering conversion to, or new construction of, LNG fuelled vessels have indicated they would not be able to call upon U.S. ports without the ability to conduct SIMOPS.

- c. When reference (a) was published, there was limited Coast Guard experience or industry guidance available concerning SIMOPS during LNG fuel transfer operations. As a result, enclosure (1) of reference (a) suggested that if SIMOPS were to occur, a formal operational risk assessment could be conducted using available industry standards to identify and mitigate the potential impacts that SIMOPS may present.
- d. Since the release of reference (a), several industry-led groups and Classification Societies have published detailed SIMOPS guidance which may be used to conduct risk assessments. DNVGL-RP-G105, *Development and operation of liquefied natural gas bunkering facilities*, includes specific details on how to address SIMOPSs in a risk assessment (Appendix D). The American Bureau of Shipping's (ABS) *Bunkering of Liquefied Gas-fueled Vessels in North America* contains useful information for evaluation of SIMOPS. Finally, the LGC NCOE convened a Coast Guard working group, the recommendations of which led to development of a recommended systematic process for a COTP to use in the evaluation of SIMOPS.

5. Discussion.

- a. The Coast Guard regulates waterfront facilities handling LNG pursuant to 33 CFR Part 127. Among the requirements in 33 CFR Part 127, the facility owner/operator must conduct a detailed risk assessment for maritime safety and security; risk management strategies; and resource needs for maritime safety, security, and response.²
- b. In addition to the above, 33 CFR Part 127 also requires the owner/operator of the facility to develop an Operations and Emergency Manuals, which are both to be "examined" by the COTP prior to commencement of LNG transfer operations.³ COTPs have explicit authority to suspend transfer operations at a Part 127 facility if unsafe conditions exist.⁴
- c. It is recommended that if SIMOPS are planned to occur at a facility regulated pursuant to 33 CFR Part 127, a description of the scope of intended SIMOPS should be included in the Operations Manual with specific procedures to mitigate any safety or security concerns that may attend the more dynamic activity in the marine transfer area. During the examination of the Operations Manual, the COTP may ask for clarification of any aspect of the proposed SIMOPS in order to better evaluate the activities which are planned to occur. Similarly, during

² These filings are collections of information that require Office of Management and Budget (OMB) approval. Please keep CG-OES informed of the number and scope of documentation changes prompted by SIMOPS, so that CG-OES can revise the burden estimate necessary for renewed OMB approval.

³ See 33 CFR § 127.305, 127.307 and 127.309.

⁴ See 33 CFR § 127.013.

the COTP's examination of the required Emergency Manual, appropriate response and containment protocols should be described.

- d. If SIMOPS are planned to occur, the COTP may engage, where applicable, local stakeholders (e.g., the vessel owner/operator, the persons in charge of the vessel and shoreside transfer facility, the Port Authority, stevedores) and other port users operating in and adjacent to the bunkering area who may be affected by the bunkering operation. Factors which the COTP may consider include, but are not limited to: overall risk and consequences regarding the safety of persons and vessels in the vicinity of where SIMOPS will take place, operational issues, the geographic area, port needs, contingency plans, and mitigation measures.
 - e. Evaluations of SIMOPS should be conducted on a case-by-case basis. COTPs are encouraged to suggest that the processes and procedures outlined by the LGC NCOE, or industry standards identified in paragraph 4.d, may be used by the maritime industry as a means for demonstrating that SIMOPS can be conducted safely and securely. COTPs should consider probable safety and security risks of known SIMOPS involving LNG bunkering operations to ensure that these risks are properly characterized and mitigated.
 - f. COTPs are encouraged to contact the LGC NCOE for technical assistance due to the complex information that risk assessments involving SIMOPS may contain. LGC NCOE personnel have gained valuable experience and insight while attending and monitoring several LNG bunkering evolutions at different U.S. ports. The technical support they provide will enhance the COTP's ability to consider aspects of a SIMOPS risk assessment including the modeling programs used and the modeling results obtained. Early consultation with the LGC NCOE will help to establish a nationally uniform level of expertise and procedural consistency for evaluation of SIMOPS.
 - g. LNG bunkering suppliers and receivers should be encouraged to incorporate the results of the risk assessment into the procedures for conducting SIMOPS and responding to emergencies in their respective Operations and Emergency Manuals. Similarly, LNG transfer procedures and declarations of inspection should include provisions and mitigation measures for managing SIMOPS during LNG transfer operations as may be identified in the risk assessment.
6. Disclaimer. This guidance is not a substitute for applicable legal requirements, nor is it itself a regulation. It is not intended to nor does it impose legally binding requirements on any person. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. Members of the public may use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. Each COTP has discretionary authority on how best to address specific safety and security concerns within his/her area of responsibility. Nothing in this policy letter is meant to override or subvert the discretion of the COTP when addressing the unique safety and security concerns for an LNG operation.

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7. Changes. This policy letter is accessible for public review on the web at the <https://www.uscg.mil/hq/cg5/cg522/cg5222/PolicyLetters.asp>. Suggestions for improvements of this policy should be submitted in writing to Commandant, U.S. Coast Guard Headquarters, Office of Operating and Environmental Standards (CG-OES) at the address listed on the first page.

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