

# LNG Operations

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Facilities & Vessels  
April 26, 2019

Facilities Engineering Seminar 2019



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# Objectives

- 1) Have a thorough understanding of Sector Jacksonville's various LNG operations
- 2) Understand what the initial process looks like for establishing new LNG facilities in your AOR
- 3) Become familiar with the resources and guidance to assist you during this process



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# Initial Steps

- **Receive Letter of Intent (LOI)**
  - **Owner/operator submits LOI to COTP NLT date that a pre-filing request with Federal Energy Regulatory Commission (18 CFR parts 153 and 157) is submitted, but at least 1 yr. prior to the start of construction**
- **Items that LOI must include for submission are located in 33 CFR 127.007 (c)**
- **Owner/operator who submits an LOI must notify the COTP in writing within 15 days of any of the following:**
  - **Any change of information submitted**
  - **If there aren't LNG transfer operations are scheduled within the next 12 months**



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# Waterway Suitability Assessment (WSA)

- **The owner/operator must file a preliminary WSA with the LOI.**
  - The WSA must be updated, as appropriate, with the COTP for the zone in which the facility will be located.
- **WSA is a two-fold process consisting of a Preliminary WSA and a Follow-On WSA.**
  - **WSA requirements for submission can be found in 33 CFR 127.007 (f) & (g)**
  - **Until the facility begins operations, owner/operator must annually review the WSAs and submit a report to the COTP detailing findings.**
  - **Submit a final report to COTP at least 30 days, but not more than 60 days, prior to the start of transfer operations.**



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# Letter of Recommendation (LOR)

- After COTP receives the LOI, COTP issues a LOR as to the suitability of the waterway for LNG marine traffic
- Owner/operator or a state, local, or tribal government in the vicinity of the facility, may request reconsideration from the LOR (33 CFR 127.010)



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# LNG-Tote

- **Marlin Class Vessels**
  - **M/V PERLA DEL CARIBE - fully operational**
  - **M/V ISLA BELLA - fully operational**
- **Intermodal Bunkering Facility (IBF)**
  - **Utilized “as needed”**
    - **Trucks → ship transfers**
    - **Contingency operations for the barge, CLEAN JACKSONVILLE**



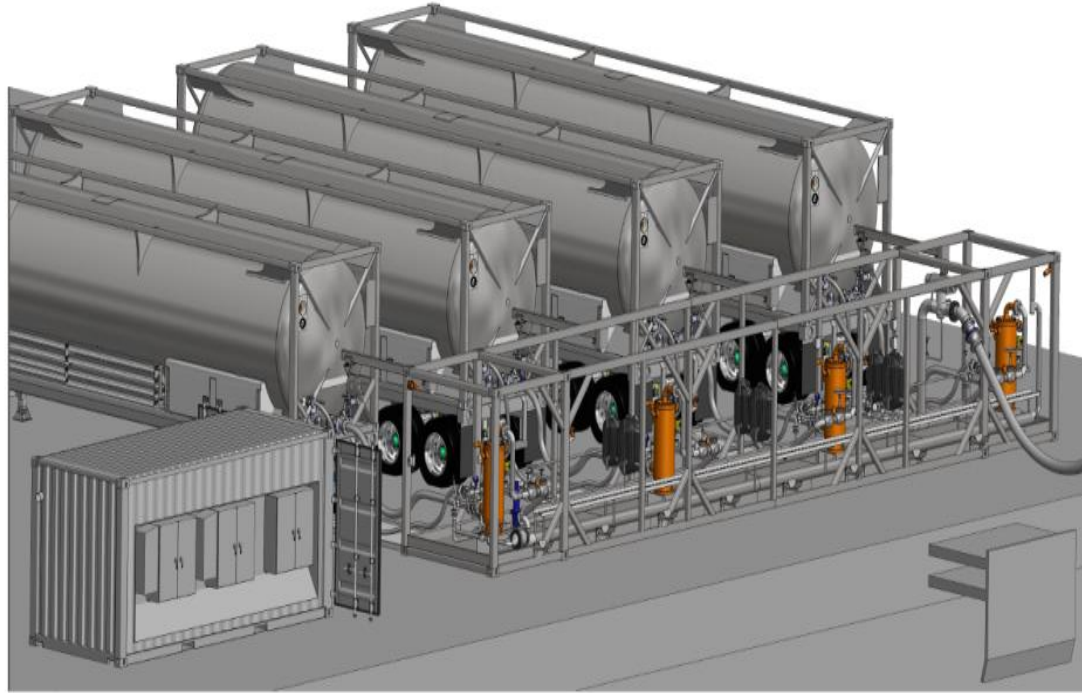
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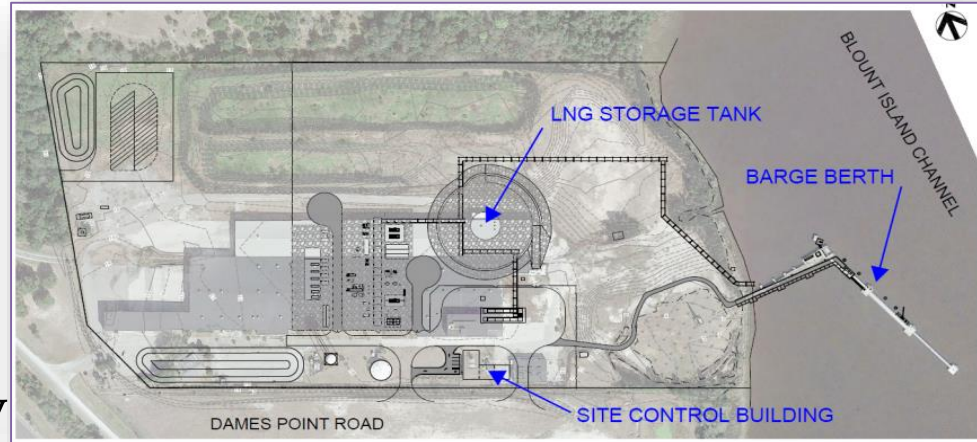






# LNG-Pivotal/Jax LNG

- Pipeline → liquefaction → CLEAN JACKSONVILLE barge & trucks
  - Produces 120,000 gallons of LNG/day
  - 2M gallon storage capacity
- <https://www.youtube.com/watch?v=1u6X-Puc4DM&spfreload=10>



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# LNG-CLEAN JACKSONVILLE

- Pivotal/Jax LNG → CLEAN JACKSONVILLE → Tote vessels



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# LNG-Crowley

- Commitment Class Vessels
  - M/V COQUI
    - Delivered to Jacksonville in June 2018
    - Currently operates Jacksonville → San Juan
    - <https://www.youtube.com/watch?v=rLJNN-rBWao&spfreload=10>
  - M/V TAINO
    - Delivered to Jacksonville in January 2019
    - Currently operates Jacksonville → San Juan
    - <https://www.youtube.com/watch?v=biy7sPPTQes&spfreload=10>



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# LNG-Eagle

- **Maxville Liquefaction Facility (West Jacksonville)**
  - **Not a designated waterfront facility, therefore not inspected under CG regulations**
  - **Supplies Eagle LNG/Talleyrand facility via trucks**
  - **Fully operational**
    - **Produces 200K gallons of LNG/day**
    - **1M gallon storage capacity**



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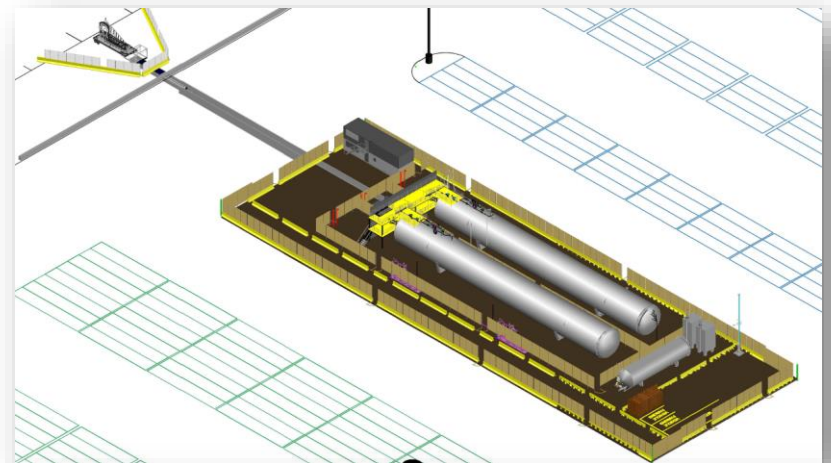
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# LNG-Eagle

- Talleyrand Marine Terminal
  - Trucks → storage → vessel bunkering
  - Bunkers M/V COQUI & M/V TAINO (Crowley)
  - 2 LNG storage tanks w/250K gallons of LNG each
  - Pumps 900 gallons of LNG per minute w/max of 2400 gallons of LNG per minute
- <https://www.youtube.com/watch?v=fd79A3sZYCw&spfreload=10>



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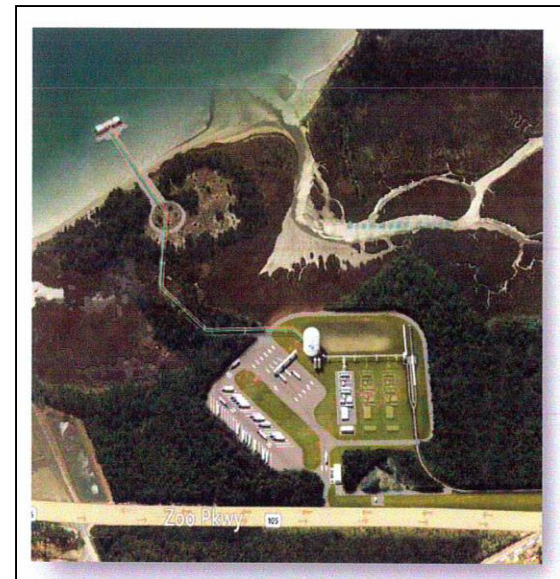




# Future LNG Facilities

- Eagle LNG Export Facility
  - Planning/development ongoing
    - FEIS received from FERC
    - 8M gallon tank
    - Barge (3K m<sup>3</sup>)
    - Small carriers (5-30K m<sup>3</sup>)

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# Guidance

- 33 CFR Parts 127, 155, and 156
- Title 46 CFR Subchapter D
- Marine Safety Manual Volume II
- COMDT (CG-521) Policy Letter 01-12 (April 19, 2012)
- COMDT (CG-OES) Policy Letter 01-15 (February 19, 2015)
- COMDT (CG-OES) Policy Letter 02-15 (February 19, 2015)
- LNG Bunkering Facility Inspection Job-Aid



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# Questions?



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