



US DOT Pipelines and Hazardous Materials Safety Administration  
and  
National Association of Pipeline Safety Representatives

# Liquefied Natural Gas Workshop

US DOT Headquarters  
West Building Atrium  
1200 New Jersey Ave. SE  
Washington, D.C.

May 17-18, 2016



# LNG Incident Reporting

- Required since January 1, 2011
- Required by 49 CFR 191 – Transportation of Natural and Other Gases by Pipeline; Annual Report, Incident Reports, and Safety-Related Condition Reports
- §191.7: Report Submission Requirements



# §191.3 Incident

- 1) An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:
  - i. A **death, or personal injury necessitating in-patient hospitalization**;
  - ii. Estimated **property damage of  $\geq$  \$50,000**, including loss to the operator and others, or both, but excluding cost of gas lost;
  - iii. Unintentional estimated **gas loss of  $\geq$  3 million cubic feet**;
- 2) An event that results in an **emergency shutdown of an LNG facility**. Activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident.
- 3) An event that is **significant in the judgment of the operator**, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.



# §191.5 Immediate notice of certain incidents

- a) At the **earliest practicable moment** following discovery, each operator shall give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.
- b) Each notice required by paragraph (a) of this section must be made to the **National Response Center** either by telephone to 800-424- 8802 (in Washington, DC, 202 267-2675) or electronically at <http://www.nrc.uscg.mil> and must include the following information:
  - 1) Names of operator and person making report and their telephone numbers.
  - 2) The location of the incident.
  - 3) The time of the incident.
  - 4) The number of fatalities and personal injuries, if any.
  - 5) All other significant facts that are known by the operator that are relevant to the cause of the incident or extent of the damages.



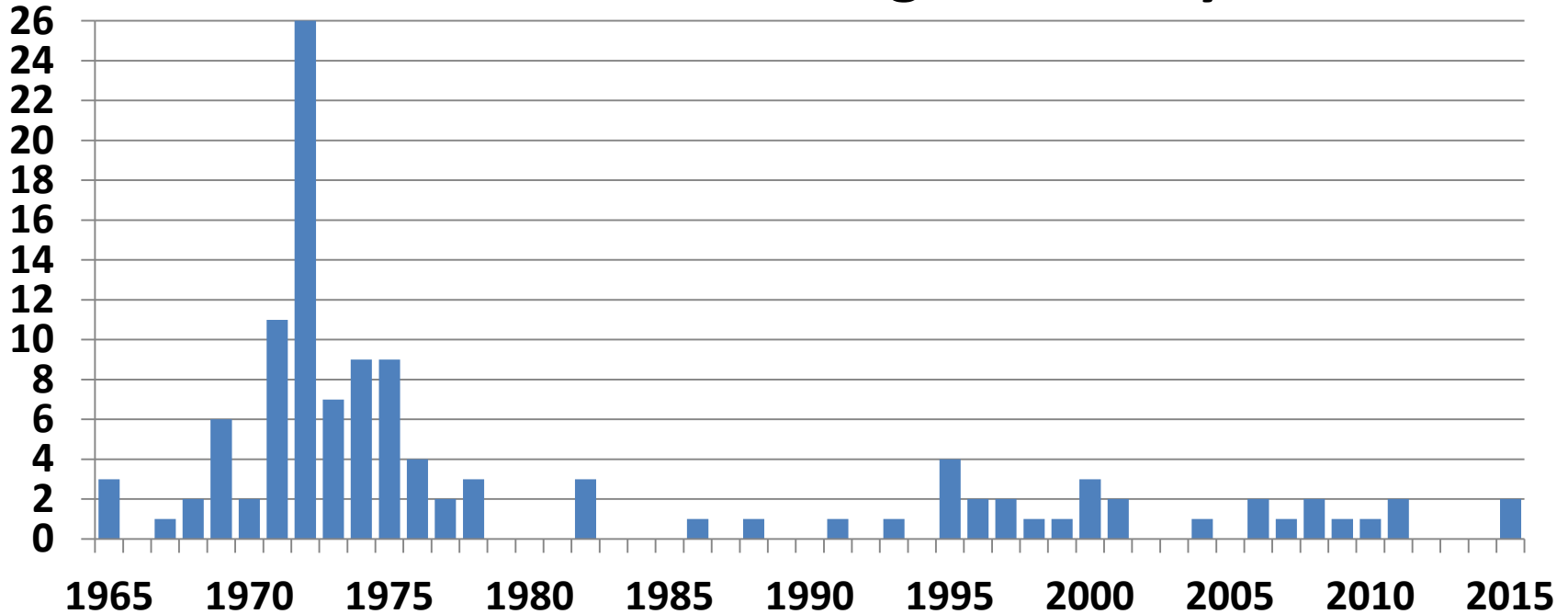
# 9 LNG Incidents Reported since 2011

- Incident Causes:
  - Purging (2)
  - Back-up generator (2)
  - PLC board failure
  - Regulator failure in portable LNG facility
  - Heat exchanger tube failure
  - Maintenance equipment not fit-for-service
  - Overpressure from flange gasket failure
- Resulted in 1 Fatality (Contractor) and 1 Injury (Employee)



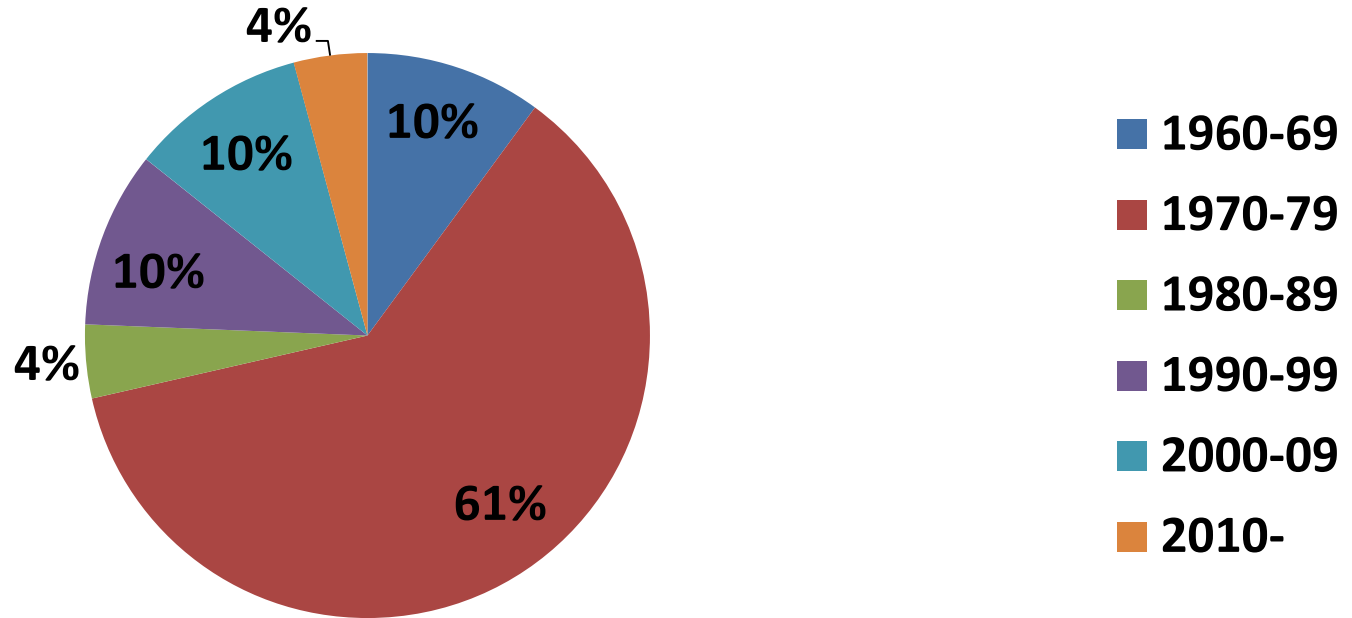
# Age of LNG Facilities

## # LNG Facilities Entering Service by Year



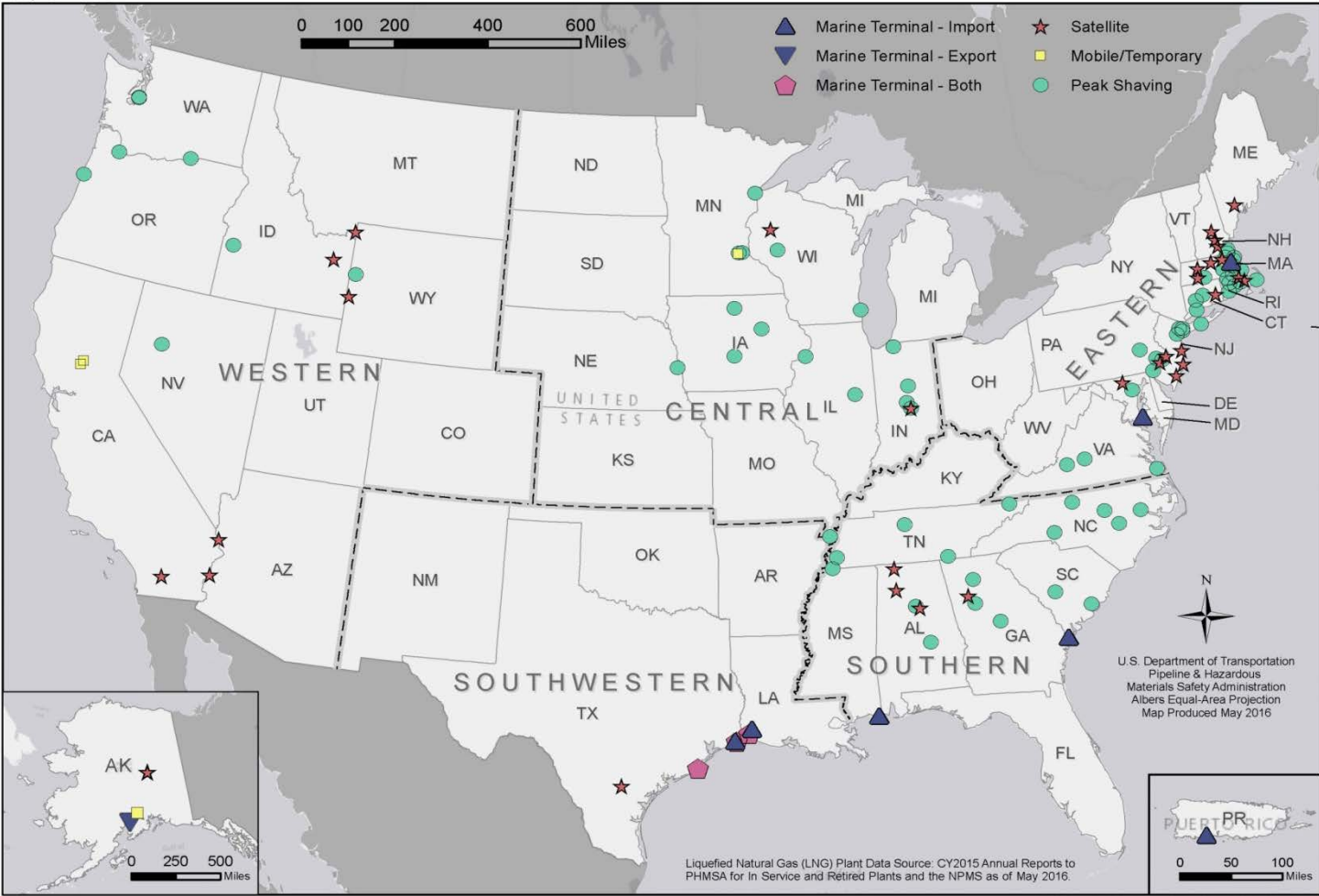
# Age of LNG Facilities

## % of LNG Facilities by Decade Entering Service





# LNG Plants Connected to Natural Gas Pipeline Systems





# Questions?

