

**LNG Safety Workshop
Delta Centre-Ville Hotel
Montreal, 6th January 2005**

Purpose

Provide a forum for dialogue among departments and agencies to:

- develop a common understanding of what regulators need to know when dealing with an LNG project in Canada and;
- examine the safety and technical components related to the construction and operation of LNG receiving terminals (including shipping, jetty, receiving lines, storage facilities, re-gasification facilities, etc.) and to identify any gaps in the current regulatory environment.

Proposed Outcomes

An understanding of:

- how LNG projects have been regulated by others (in Canada, the U.S. and Mexico);
- the construction and operational issues related to the safe operation of an LNG facility;
- what is needed to be able to effectively and efficiently deal with a project application in Canada (or what would an effective regulatory model look like?)

AGENDA

8:00 a.m. *Continental Breakfast*

8:30 a.m. *Welcomes and Introductions (15 minutes)*

8:45 a.m. *Confirmation of the Workshop Agenda (10 minutes)*

8:55 a.m. **Stephen Zwicker, Environment Canada: summarizing past workshops and conclusions drawn; identifying where we are starting today (15 minutes)**

9:10 a.m. **Small Group Discussions (25 minutes)**

- **Group 1:** What are the minimum *construction and operational safety components* of an LNG facility?

(For example, QA programs, management systems, emergency preparedness, defined standards, training, maintenance, integrity assessments.)
- **Group 2:** What are the characteristics of an *effective regulatory model* for siting, construction and operation of an LNG facility?

(For example, a clear mandate, a defined application and approval process, the need of public consultation.)
- **Group 3:** What are the characteristics of a *well designed project proposal*? Select examples not limited to LNG projects; and define what steps and processes would a responsible project manager insist on?

(For example, project management procedures, identifying environmental impacts and regulatory requirements, formal risk assessments, approved design standards, quality control, change management, ID of variances and corrective actions, pre-start-up reviews.)

9:35 a.m. Report Out: 5 minute report from each group

9:50 a.m. Discussion (25 minutes)

- What are the differences between the requirements of each group?
- What differences are significant?
- Are there any gaps?

10:15 to 10:30 a.m. Coffee Break

10:30 a.m. Presentations by Discussion Leaders from FERC, CRE and CSA (15 minutes each)

- “Strengths and weaknesses” of previously completed and assessed LNG projects, and the challenges for future projects, focusing on best practices, standards and effective regulatory models.
- Contents of the CSA Standard, other standards referenced, plans for additions to the Standard, membership invited.

Richard Hoffman – Division Director, Gas – Environment and Engineering, U.S. Federal Energy Regulatory Commission (FERC)

Alejandro Brena – Director General, Natural Gas, Comisión Reguladora de Energía (CRE - Mexico)

Norm Trusler – Chair, CSA Z276 Technical Committee for LNG, Production Storage and Handling

11:15 a.m. Questions and Answers with Panel Discussion (45 minutes)

12:00 noon Buffet Lunch

1:00 p.m. Overview of morning and set up for afternoon discussion (20 minutes)

- Confirm outline of workshop report.
- LNG facility scope diagram

1:20 p.m. Building on morning discussions using scope diagram as a guide (1 hour 40 minutes)

- Which agencies have a clear interest/responsibility for each component at present?
- What gaps or overlaps are there?
 - with regard to regulatory models?
 - with regard to project safety and technical components?
- Which gaps identified are the most important/urgent to address?
- Prioritization in terms of importance and urgency
- How could these gaps be addressed?

3:00 to 3:15 p.m. Coffee Break

3:15 p.m. Discussion of possible next steps and wrap-up (45 minutes)

4:00 p.m. Adjournment

Requirements to Achieve the Proposed Workshop Outcomes

- Representatives from appropriate provincial and national authorities who have an interest in safety as it relates to the regulation of shipping, terminals, process facilities and pipelines in Canada.
- Representatives from other national or international agencies that have knowledge and experience in the subject area(s).