



## **FACTS YOU NEED TO KNOW ABOUT THE CALYPSO DEEPWATER PORT**

**Overview:** The proposed Calypso Deepwater Port (DWP) is a safe and environmentally-friendly project that would provide a much-needed new supply of natural gas for South Florida. The ships and the underwater buoy and anchoring system would be located approximately 8 to 10 miles offshore of Broward County northeast of Port Everglades. Liquefied Natural Gas (LNG) will be turned back into gas onboard the ships, replacing the need for a land-based facility. Here are a few of the most important facts you need to know.

- 1. The Liquefied Natural Gas (LNG) shipping industry has an unparalleled safety record.** In LNG's 45-plus year shipping history, LNG carriers have conducted more than 40,000 voyages worldwide, traveling more than 100 million miles without a major incident. No explosions or fatalities from a cargo spill have ever occurred aboard an LNG carrier. There has never been a breach of a cargo tank onto the sea from an LNG ship in the history of the industry.
  - a. The truth about the Cleveland incident in 1944 -- In 2005, the National Association of Fire Marshall's reported that if the Cleveland facility had been built to current codes, this accident would not have happened. Please go to <http://www.ch-iv.com/links/history.html> for more information.
  - b. The truth about the Skikda accident in 2004 -- the land-based liquefaction plant where the accident occurred was poorly maintained and scheduled for demolition. There was a lack of automatic shutdown and hazard detection required by U.S. LNG design codes. No one outside the industrial facility was injured. For more information go to: <http://archives1.iomosaic.com/whitepapers/Managing%20LNG%20Risks.pdf>
- 2. The Calypso Deepwater Port is safe.** The Independent Risk Assessment (IRA) conducted by the U.S. Coast Guard concludes that, even in a worst case credible scenario, coastal communities would not be affected. In the extremely unlikely worst case event, the natural gas would disperse to below a flammable concentration, several miles before it reaches the shore. The radius of a worst case LNG pool fire with "immediately damaging radiant heat" is within the vicinity of the ship, even further away from shore. One should not draw a comparison between the sometimes cities Oxnard study of 1977 and the Calypso Deepwater Port. Understanding of dense cloud dispersion and the associated models have improved considerably since 1977. In addition, no two projects are alike and each must be analyzed based on its own design, location, environmental conditions, among other factors. You can find the IRA at <http://www.regulations.gov/> and search for Docket Number USCG-2006-26009.

**3. It is wrong to compare the Calypso Deepwater Port to any kind of bomb.** Based purely on its energy content, a myth has circulated comparing this project to the destructive force of 55 nuclear bombs. This is a disingenuous and irresponsible analogy that makes no scientific sense. Bombs are designed to release significant energy in a very short time creating destructive shockwaves. Natural gas, which people use every day for heating and cooking, simply burns. Only if natural gas is combusted within a confined space will it cause an explosion. LNG is natural gas cooled to -260° F and it cannot ignite or combust in its liquid, cryogenic state, nor will it explode. Only when LNG is vaporized into natural gas does the potential exist for any ignition. For this to happen, the LNG tanks must be breached. Because of the double hull tanker design and the robust tank containment systems, it is very difficult to breach an LNG tank. As cited above, a breach on an LNG tank has never occurred in the history of the LNG industry. Let's look at some examples that have been raised by critics:

- a. Fire a firearm weapon at a tank. A firearm is unlikely to pierce the tank, but if it did the tank would not explode. Rather, LNG would leak from the "bullet hole," vaporize, and the resulting gas would be able to catch fire. The gas would not explode because it is not in a confined space. The resulting fire would be very small and localized, even in the event of multiple bullets being discharged and piercing the tank. The LNG in the tank, because of its nature, will not catch fire or explode.
- b. Fire a rocket propelled grenade (RPG) at a tank. If an RPG were fired at and pierced the tank, the LNG would not catch fire or explode. The LNG would be released into the air at the point of the breach, and would vaporize into gas which could catch fire. Again, because the gas is unconfined it will not explode.
- c. Fly a plane into the LNG tanker. If a plane were to be flown into the LNG tanker, the plane would likely burst into flames because of the jet fuel present in its (confined) tanks. It is not certain that the LNG tanks on the tanker would be breached, but it may be possible that the engines would pierce a tank. The LNG would be released through the breach, vaporize into gas, and likely catch fire due to the burning plane. Because the gas is unconfined it will not explode.

In all three scenarios above the resulting fire and thermal radiation would be highly localized and not threaten or impact the shoreline. You can find the IRA at <http://www.regulations.gov/> and search for Docket Number USCG-2006-26009.

**4. The Calypso Deepwater Port will be protected from any potential threats.** Calypso and the U.S. Coast Guard will work collaboratively to develop an operations and security plan to prevent or minimize the potential for accidents and intentional threats. Additionally a number of local law enforcement and public safety agencies are involved. There is no evidence to prove deepwater ports are more attractive targets for terrorists than any other energy facility located in Broward County, a tall building or a public meeting area. The fact is that the residents of Fort Lauderdale and Broward County already live with 7 million barrels of fuel storage at Port Everglades, over 700 fuel tanker deliveries annually, and a large natural gas pipeline system (FGT), and other infrastructure that carry risks. These risks are taken very seriously by the owner and operators, the Federal, State, and local agencies responsible for safety and emergency response, and other stakeholders. The U.S. Coast Guard would not

permit nor would SUEZ propose a project that presented a high risk of danger to any community.

5. **The Calypso Deepwater Port is the best location in South Florida for safety, environmental and logistical reasons.** The proposed location was determined with input from many stakeholders and regulatory agencies. The port is proposed to be miles away from the Broward County coastline, beyond the coral reefs, commercial anchorage, and near shore commercial vessel traffic, and avoids impacts to the deepwater coral habitat further offshore.
6. **Rising energy prices affect everyone. Calypso LNG will help diversify Florida's energy supply and alleviate high energy costs.** People who appreciate the growing needs of Florida, and want clean, reasonably-priced energy sources for themselves and future generations understand the benefits of this project. They join many other business organizations and the non-governmental and environmental organizations who understand the need for the Calypso project.
7. **Clean alternative energy sources support Florida's economic future.** Florida has the chance to be part of a growing group of states that take their role seriously in combating climate change. The Calypso Deepwater Port is a safe, environmentally-friendly solution to Florida's ever growing need for clean energy. Additionally, since currently the state relies 100 percent on Gulf Coast sources for natural gas, Calypso would help prevent the type of gas shortage endured during the 2004 and 2005 hurricane seasons.
8. **The Calypso Deepwater Port would blend with other ship traffic and anchorage on the eastern horizon and have little impact on views.** While more than 6,000 ships and tankers call Port Everglades annually, coming within hundreds of feet of view of local residents, the Calypso Port and all ships would remain miles away, providing almost no impact on views along the eastern horizon. Numerous photos have been taken showing an actual LNG ship at each of the buoy locations. [www.calypsodwp.com/images.html](http://www.calypsodwp.com/images.html) Other ships coming in to Port Everglades routinely anchor much closer to shore.
9. **Calypso is committed to open and honest dialogue with the community about the facts of the project.** There have been nine informational meetings and two comment periods over the past two years, 25 newspaper articles written about the project, with more than 3.3 million people reached through these efforts. City and county officials have been at all Harbor safety meetings and have taken part in the risk assessment process. Visit [www.calypsodwp.com](http://www.calypsodwp.com) for more information.
10. **The Calypso Deepwater Port would use proven technology.** The Calypso Deepwater Port is a modern, safe and environmentally-friendly solution to Florida's ever growing need for clean energy. Petroleum Deepwater ports have been in operation since 1977, and six LNG deepwater port licenses have already been issued in the United States. SUEZ's recently licensed Neptune Deepwater Port to serve Massachusetts is in the construction phase. There are also six land-based LNG facilities in the United States that have been operating safely for more than 35 years, with the longest operating in the U.S. being a SUEZ facility. The import of LNG is quite common in other parts of the world too. On average, one LNG tanker enters bustling Tokyo Harbor at least every 20 hours with virtually all of the country's natural gas needs being met through LNG. In addition, approximately one third of natural gas consumption in continental Europe is met through LNG.
11. **SUEZ has two deepwater port projects in the U.S.** SUEZ has two deepwater port projects. SUEZ has permitted and is in the construction phase for its LNG Deepwater Port offshore of

Massachusetts called Neptune and is pursuing the Calypso LNG Deepwater Port project offshore of Broward County, Florida. These locations were selected because of the specific needs for additional natural gas sources and lack of fuel supply diversity. SUEZ is not pursuing any other projects at this time.

**12. The Calypso DWP benefits the City of Fort Lauderdale and other coastal cities.** Calypso LNG will pay state income tax based on its assets within the state of Florida, and will pay a license fee based on use of County property to Broward County. The project will directly employ 40-50 individuals and create many more indirect jobs via contracts for tug services, supplies, etc. and generate significant local expenditures. [www.calypsodwp.com/images.html](http://www.calypsodwp.com/images.html)  
On an annual basis it will:

- a. Create 172 jobs for ongoing operations
- b. Provide direct stimulus from \$15 million in payroll and supplies expenditures
- c. Generate \$23 million per year in business sales to Broward County
- d. Generate \$6.5 million in personal income
- e. Generate \$1.5 million in Federal tax revenues and \$1.4 million in state and local taxes
- f. Contribute an average of approximately \$40 million in income taxes per year

**13. SUEZ is the right company to build this project.** SUEZ is a global energy leader committed to environmental responsibility and sustainable development:

- a. Nearly 40% of SUEZ's electric generation produces no carbon dioxide emissions, and another 40% is natural gas
- b. Renewable energy represents nearly 30% of SUEZ's total power generation capacity globally
- c. SUEZ has been included in the Carbon Disclosure Project's Climate Disclosure Leadership Index, a prestigious honor roll for global corporations addressing the challenges of climate change
- d. In 2000, SUEZ was among the first companies to sign and become a member of the United Nations Global Compact, focusing on protecting the environment among other key world issues
- e. SUEZ's Everett Terminal is the longest operating LNG import facility in the United States, recognized for its exemplary safety standards
- f. SUEZ is currently the largest importer of LNG into North America
- g. SUEZ Energy North America was recognized in 2006 and 2007 by the Chamber of Shipping of America for the environmental excellence of its LNG supply vessels
- h. [www.suezenergyna.com](http://www.suezenergyna.com), [www.suezenergyint.com](http://www.suezenergyint.com), [www.suez.com](http://www.suez.com)

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