

# LNG Producer-Consumer Conference 2014

CME Group Remarks

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# After Initial Hesitation, U.S. Energy Policy Favors the Export of LNG to Many Markets, Most Notably to Asian Markets

- U.S. regulators have already given final approval to four LNG export projects – three in the U.S. Gulf of Mexico, one on the U.S. East Coast.
- The next project expected to be approved by early 2015 is the Jordan Cove LNG Export Project, which is on the U.S. West Coast in the State of Oregon.
  - The Draft Environmental Impact Statement (DEIS) for Jordan Cove is being released by the Federal Energy Regulatory Commission this week, indicating that the project is expected to move forward. The project already has conditional authorizations from the Department of Energy.
  - If approved as expected, the Jordan Cove project will be the first large West Coast LNG export project. It will be operational in 2017. Other U.S. and Canadian West Coast LNG export projects are under consideration.
  - The transit time from the Jordan Cove Project to Japan will be 9 days, versus 22 days for U.S. Gulf Coast projects
  - The 9 day transit time direct to Japan and the Asian market gives Jordan Cove a significant economic advantage
- West Coast LNG export projects also have the advantage of access to both U.S. and Canadian supply basins, providing significant flexibility for the purchase of natural gas
- West Coast LNG export projects also benefit from a new “liquid hub” at Malin, Oregon. Malin is the transit point for gas from Canada (via the TransCanada Pipeline system) and the U.S. (via the Ruby Pipeline – which is now 50% owned by the sponsors of the Jordan Cove Project), and provides access to the California, Oregon, Washington and Asian markets via the Pacific Connector Gas Pipeline, which is an integral part of the Jordan Cove project.
  - The existence of a “liquid hub” creates the opportunity for commodity trading vehicles which will permit hedging and other useful pricing activities.
- The Trans-Pacific Partnership Agreement (TPP) is relevant to LNG exports, because exports of LNG to Free Trade Agreement countries are subject to less U.S. Government regulation.

# U.S. LNG Export Coupled with Energy Market Reforms in the Region Will Require a More Robust Hedging Instruments

- Recent trend of signing longer-term LNG contracts linked to global gas benchmarks, including CME Group Henry Hub, versus oil-linked contracts is expected to increase as LNG physical cargoes from U.S. to Asia increase
- As infrastructure development and electricity market reforms proceed in the region, the potential emergence of a regional LNG benchmark in the long-term is likely. However, consumers and producers in the region will require a **liquid** benchmark to hedge their price exposure in the near and medium-term that more accurately reflects the underlying supply-demand dynamics for LNG than crude oil
- Liquid benchmark derivatives that offer narrow bid-ask spreads and significant depth of market and with price discovered through open, transparent, and anonymous transactions vs more opaque indices is preferred by industry standard setters, regulatory authorities, and market participants globally
- Given these factors CME Group Henry Hub Futures and Options are well positioned to serve as a more efficient hedging instrument in the near-term than current alternatives, especially for markets that will receive physical cargoes from North America
  - Henry Hub Futures at CME Group trade over 250,000 lots/day, and the options trade over 50,000 lots/day (where 1 lot = 10,000 Mil BTU), easily sufficient to absorb the hedging requirements of the LNG trading community
  - Options are listed 10 years forward (although liquidity is low more than 5 years out) and allow companies to insure against large price swings and create floors and ceilings to their price risk
  - The 'basis' markets in the US allow for hedging the price at various hubs around the region, including the US West Coast and Canada. By trading the price differential to Henry Hub, basis markets receive locally relevant pricing while enjoying the market liquidity at Henry Hub.