



# LNG Uncertainty Issues

IEPR and Electricity and Natural Gas Committee  
Workshop on Natural Gas Activities

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## Items to Discuss

- Introduction
- Highlights
- California's Background on LNG
- LNG Around the World
- Looking Ahead for LNG
- Discussion



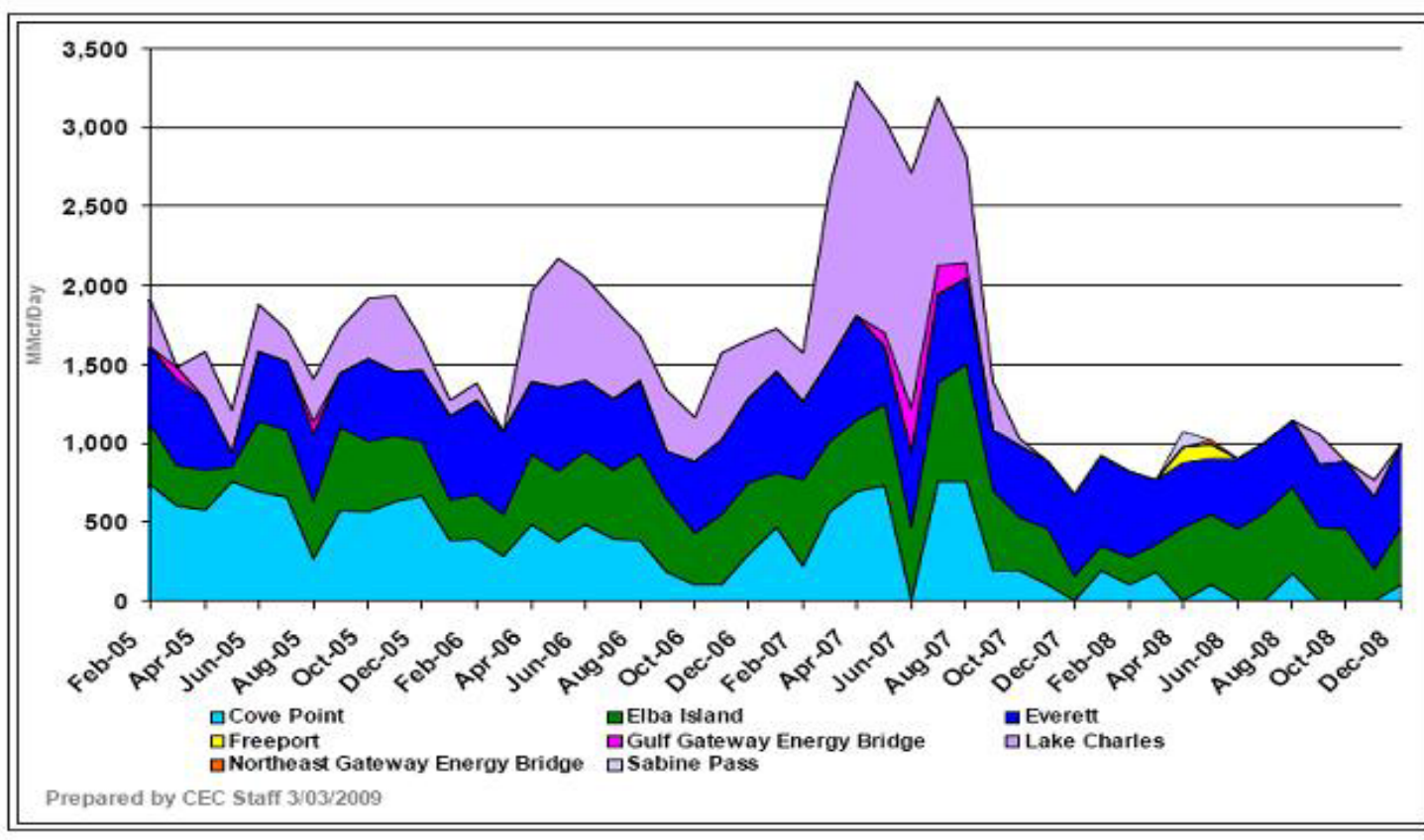
## Introduction

- LNG is the acronym for Liquefied Natural Gas
- Natural gas cooled to -260 degrees F
- 1/600<sup>th</sup> the size of natural gas
- Produced at Liquefaction Export Facilities
- Received at Regasification Import Facilities
- Major Markets: Atlantic Basin and Pacific Basin



# Highlights

## U.S. LNG Imports 2005-2008

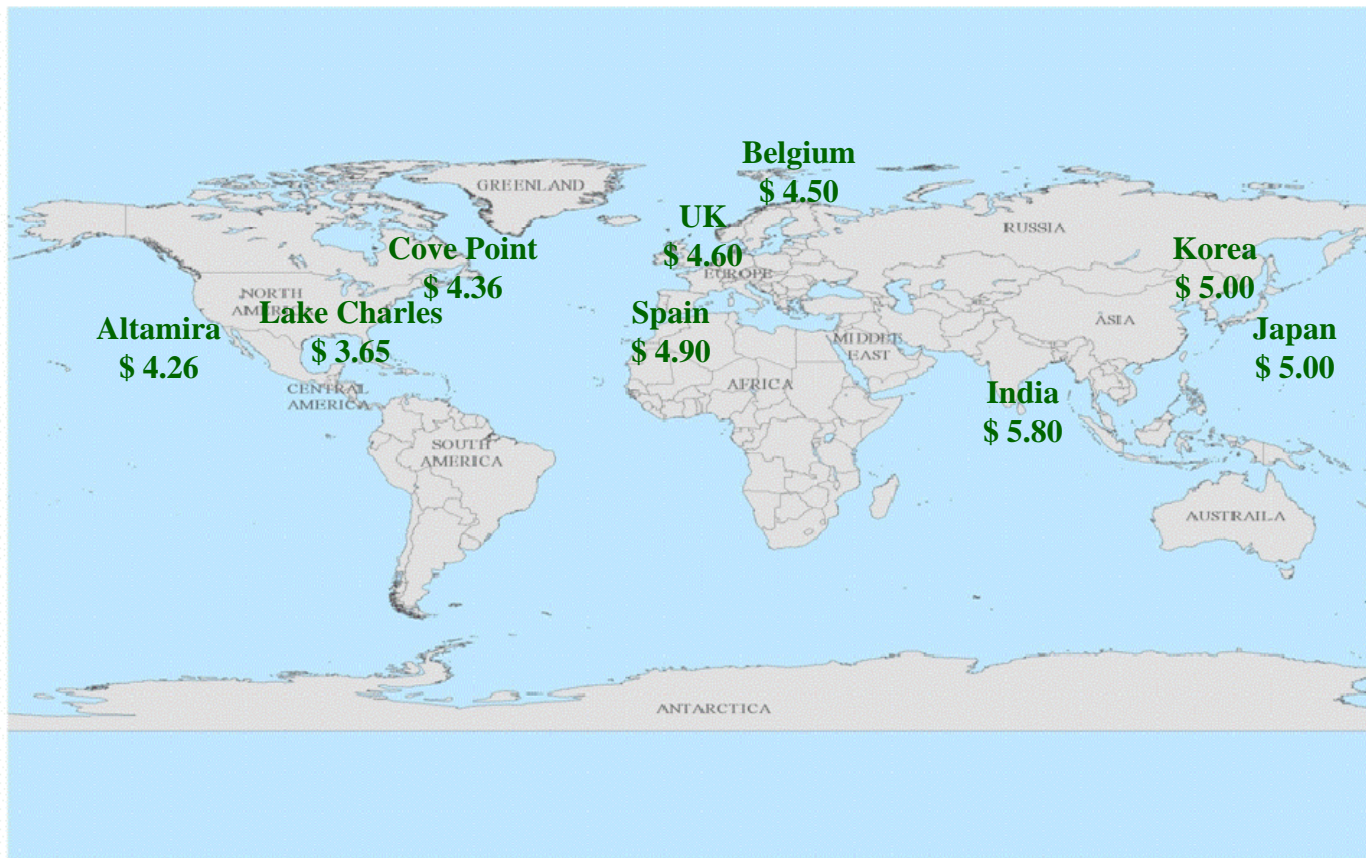




## California Energy Commission

# Highlights

## LNG World Prices \$/Mmbtu March 2009



Prepared by California Energy Commission Staff in March 2009 from FERC data



## California's Background on LNG

- LNG projects had opposition on issue of safety (Port of Long Beach).
- California has stringent environmental laws (Cabrillo Port)
- Change in the market (OceanWay Project)
- Two remaining Projects (ClearWater, Esperanza)
- Past and present market picture for LNG



# LNG Around the World

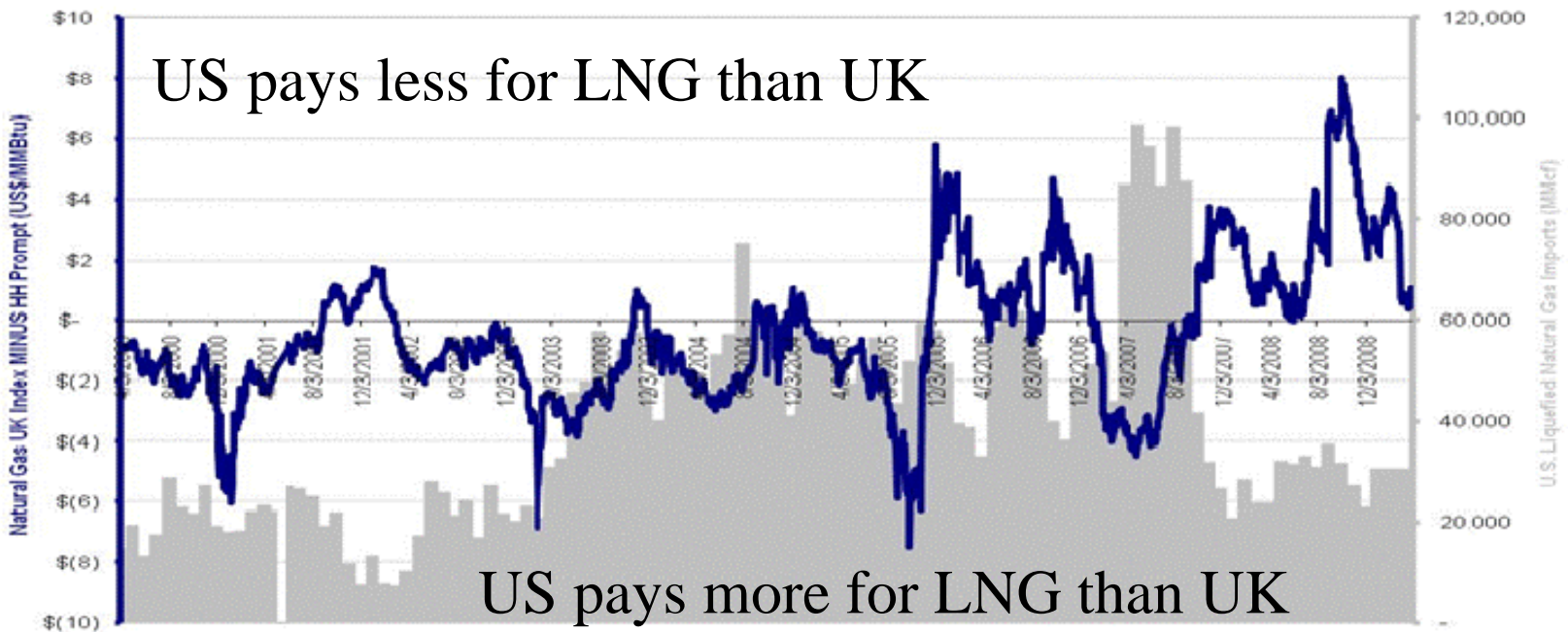
- Asian Market
- European Market
- North American Market



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# LNG Around the World

## U.S. LNG Imports Versus UK Minus U.S. \$/MMBtu Spread



Source: RW Beck using data from EIA, NYMEX and Oanda





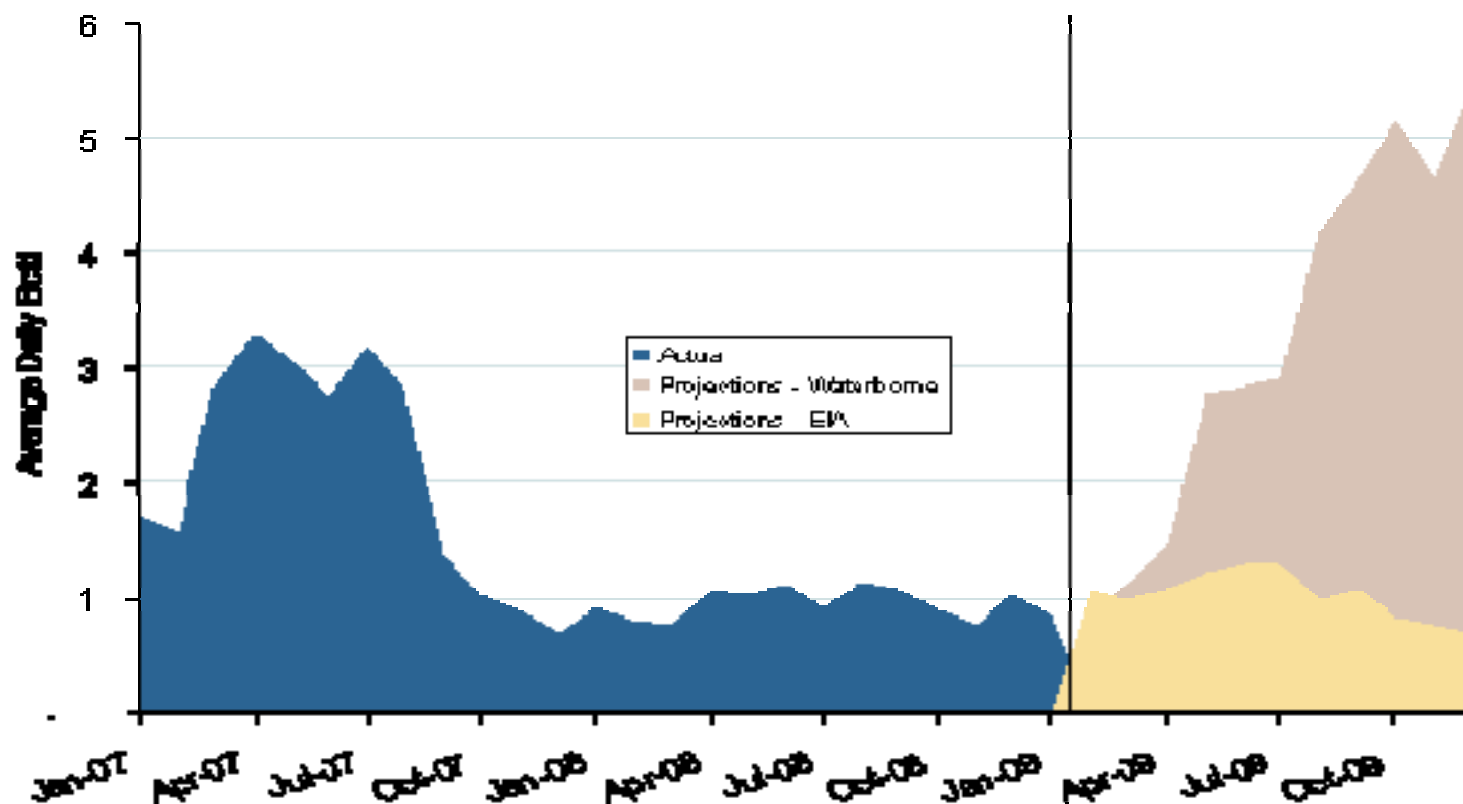
## Looking Ahead for LNG

- Outlook for California
- LNG and Natural Gas Quality
- Carbon Footprint of LNG
- Geo-Politics (Russia-Ukraine)
- New Liquefaction and Regasification Capacity
- Expert Views on the Future of LNG



# Looking Ahead for LNG

U.S. Actual and Projected LNG Imports Billion cf/day



Source: FERC Market Snapshot February 2009



## Discussion

- Factors to determine landed LNG prices in U.S., Europe and Asia?
- LNG availability given price differences between U.S., European and Asian markets?
- Prospects of energy cartel for natural gas?
- Carbon Footprint of LNG vs Coal?
- Non-economic factors to drive development of LNG?



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# Questions?

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