# Alaska LNG Projects

A status report for the Matanuska-Susitna Borough Port Commission

Brad Keithley, President
Keithley Consulting, LLC
July 15, 2013

# Agenda

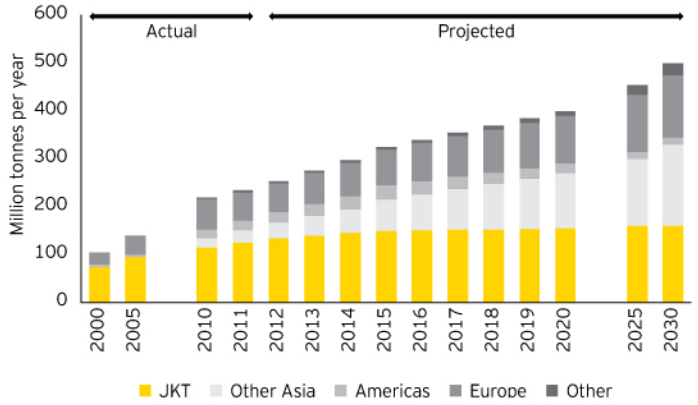
Keithley| Consulting, LLC

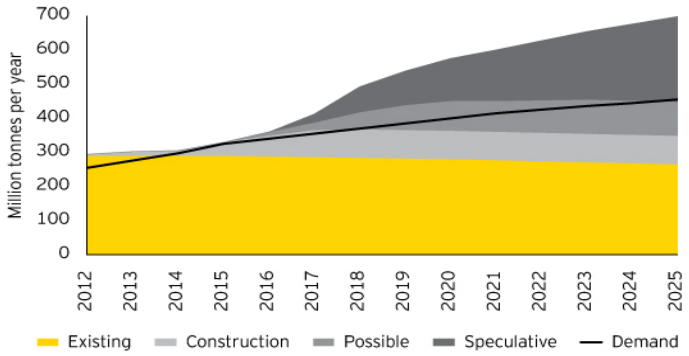
- Current global LNG environment
- Proposed Alaska projects & status
- Timeline & decisional process

# Global LNG environment

Keithley| Consulting, LLC

- Demand
  - Increasing demand
- Supply
  - But, increasing supply
- Price
  - Significantly higher prices currently in Pacific Rim
  - *But* serious questions about whether that persists long term



# Competitive Environment

Keithley| Consulting, LLC

- Alaska faces an intense competitive environment
  - All the above, plus potential L48 projects
- Alaska's opportunity is in the 2020's openings
  - Includes contract reopeners
- Overall keys
  - Cost competitive
  - Market involvement
  - Alignment with host government


# Proposed Alaska Projects

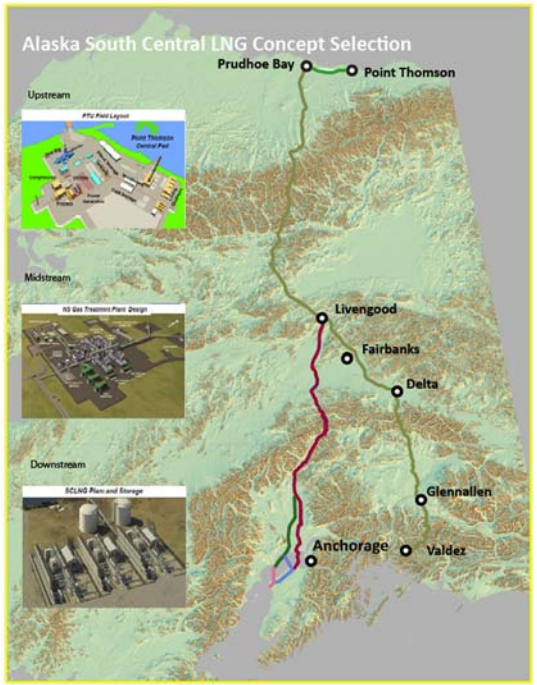
Keithley| Consulting, LLC

- Alaska Gasline Inducement Act (AGIA)
  - Evolving into the producer project ("Alaska Southcentral LNG Project")
  - "Big line" with terminus at "tidewater"
- Alaska Gasline Development Corporation (AGDC)
  - HB 4 implementation ("ASAP Project")
  - "Plan B" with terminus at Enstar connection in Big Lake area
- Alaska Gasline Port Authority (AGPA)
  - Fairbanks North Star Borough/Valdez Port Authority ("Bill Walker") line with terminus in Valdez
  - North Slope Borough has withdrawn

# AGIA ("Alaska Southcentral LNG Project")

Keithley| Consulting, LLC

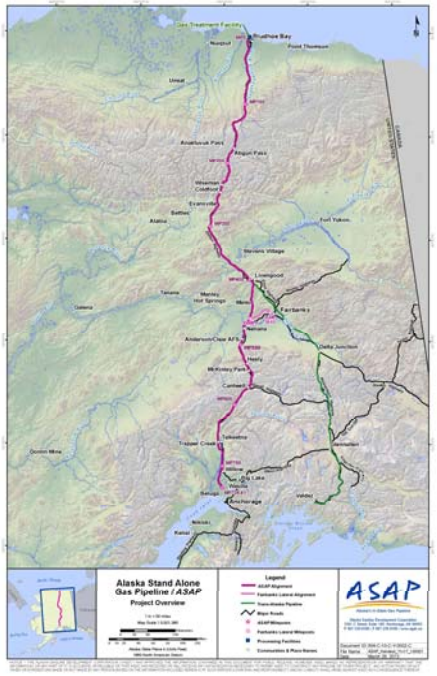
- "Big line": 2.5 Bcf/d
- Current status:
  - Project decision in 3-4 years
  - Recently missed Governor's benchmark to enter into "pre-FEED" agreements
- Issues
  - Uncertain fiscal terms
  - High capital costs (est. $45 – 60 billion)
  - Long lead time to market



# AGDC ("ASAP Project")

Keithley| Consulting, LLC

- "Small line": 500 MMcf/d
- Current status:
  - HB 4: Corporate entity formed and engineering work funded by state
  - "Open season" 4th Qtr 2014
- Issues
  - Dependent on "major customer"
  - Even then, project economics at current size are marginal
  - Market/financeability



# AGPA ("Port Authority")

Keithley| Consulting, LLC

- "Big line": 2.5 – 4 Bcf/d
- Current status:
  - Has permits acquired from TAGS project, but aged and value uncertain
  - No field or other activity planned
- Issues
  - Never completed either supply or market arrangements

# Port Issues

- Carrier size, port access and reliability are competitiveness issues
- Q-Max class:
  - Currently largest LNG carrier in the world
  - 345 meters (1,132 ft) long
  - 53.8 meters (177 ft) wide
  - 34.7 meters (114 ft) high
  - Approximately 12 meters (39 ft) draft

# Timeline & decisional process

Keithley| Consulting, LLC

- Timeline
  - At this point, AGIA project timeline likely will set the pace (3 – 4 years to investment decision)
  - My prediction: AGDC likely will merge into AGIA project
- Key factors
  - State fiscal terms/involvement
  - Market participant involvement
  - Oil/gas tradeoff (AOGCC offtake rule): key to producer involvement
- Decisional process
  - Market based, but will require state involvement to fix fiscal terms (a critical element of project costs)