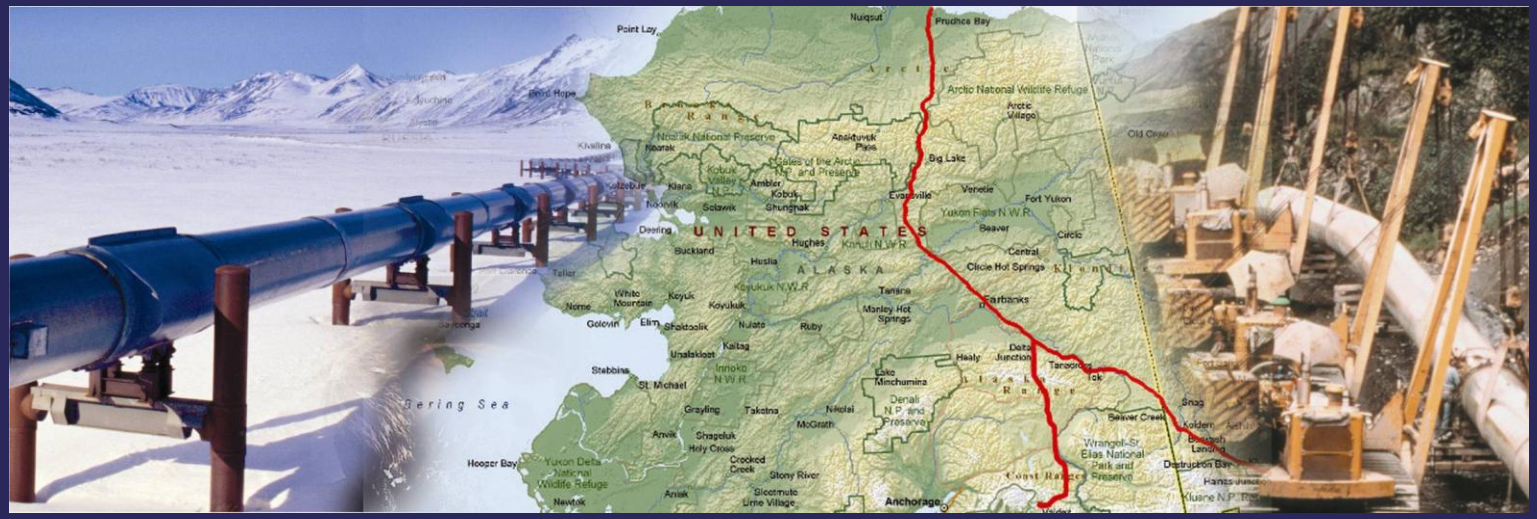
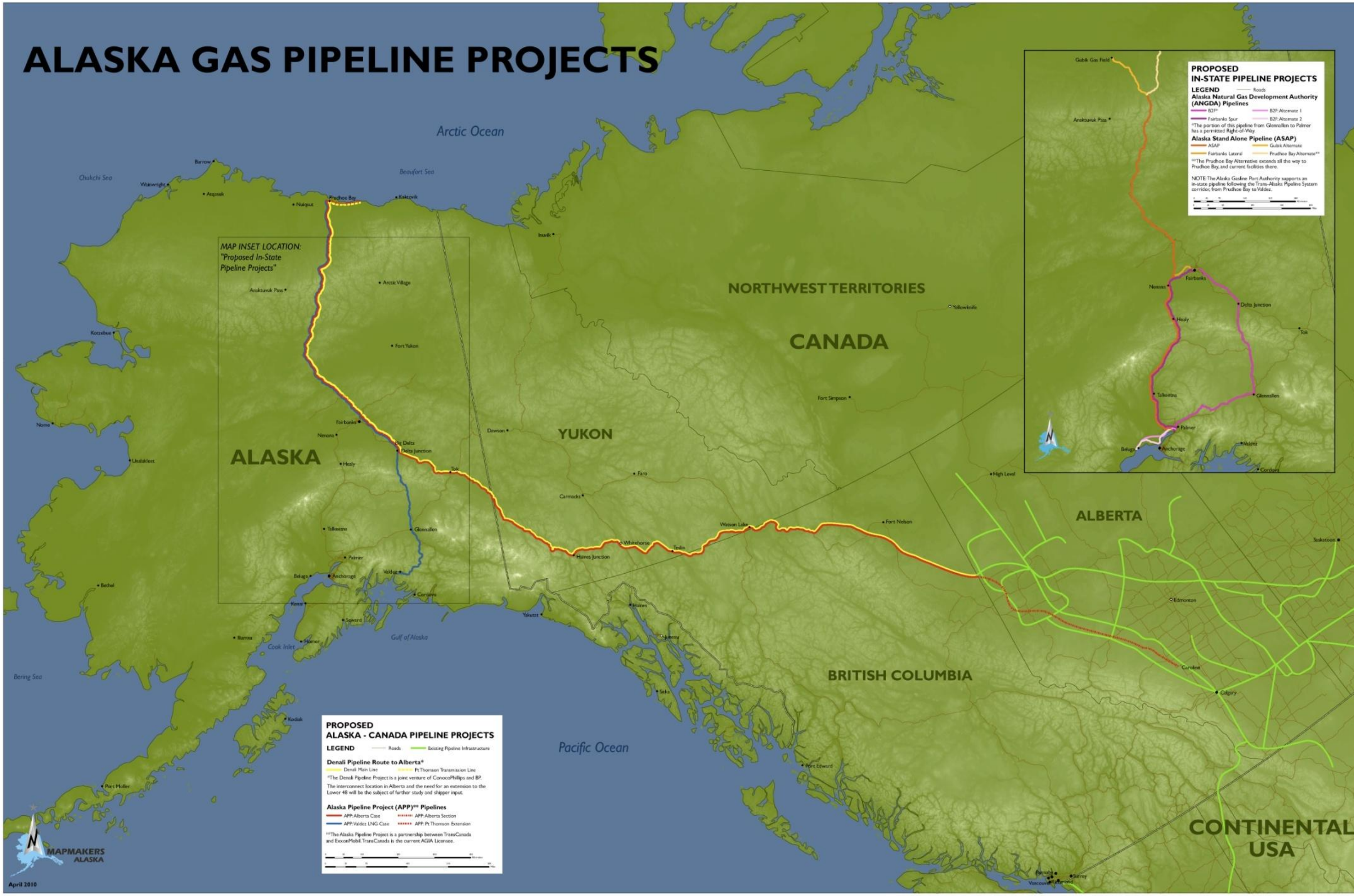
The Alaska Natural Gas Pipeline
A Federal Update



Admiral Tom Barrett
Deputy Federal Coordinator
Office of the Federal Coordinator for
Alaska Natural Gas Transportation Projects

May 4, 2010

ALASKA NATURAL GAS TRANSPORTATION PROJECTS
OFFICE OF THE FEDERAL COORDINATOR


ALASKA GAS PIPELINE PROJECTS
Arctic Ocean
Beaufort Sea
Chukchi Sea
Bering Sea
Gulf of Alaska
Cook Inlet
Pacific Ocean
MAP INSET LOCATION: "Proposed In-State Pipeline Projects"
ALASKA
YUKON
NORTHWEST TERRITORIES
CANADA
ALBERTA
BRITISH COLUMBIA
CONTINENTAL USA
Prudhoe Bay
Fairbanks
Delta Junction
Glennallen
Valdez
Anchorage
Whitehorse
Watson Lake
Fort Nelson
Haines Junction
Dawson
Edmonton
Calgary
PROPOSED
IN-STATE PIPELINE PROJECTS
LEGEND
Roads
Alaska Natural Gas Development Authority (ANGDA) Pipelines
B2F*
B2F: Alternate 1
Fairbanks Spur
B2F: Alternate 2
*The portion of this pipeline from Glennallen to Palmer has a permitted Right-of-Way.
Alaska Stand Alone Pipeline (ASAP)
ASAP
Gubik Alternate
Fairbanks Lateral
Prudhoe Bay Alternate**
**The Prudhoe Bay Alternative extends all the way to Prudhoe Bay, and current facilities there.
NOTE: The Alaska Gasline Port Authority supports an in-state pipeline following the Trans-Alaska Pipeline System corridor, from Prudhoe Bay to Valdez.
PROPOSED
ALASKA - CANADA PIPELINE PROJECTS
LEGEND
Roads
Existing Pipeline Infrastructure
Denali Pipeline Route to Alberta*
Denali Main Line
Pt Thomson Transmission Line
*The Denali Pipeline Project is a joint venture of ConocoPhillips and BP.
The interconnect location in Alberta and the need for an extension to the Lower 48 will be the subject of further study and shipper input.
Alaska Pipeline Project (APP)** Pipelines
APP: Alberta Case
APP: Alberta Section
APP: Valdez LNG Case
APP: Pt Thomson Extension
**The Alaska Pipeline Project is a partnership between TransCanada and ExxonMobil. TransCanada is the current AGIA Licensee.
MAPMAKERS ALASKA
April 2010

OFC Objectives

- Streamline Permitting Process
- Eliminate Delays and Associated Costs
- Limit unnecessary permit conditions
- Coordinate Inspections and Monitoring

OFC TASKS

- Coordination
- Compliance
- Reliable Information Source

Coordination

- Federal Agencies/Administration Officials
- State of Alaska
  - DNR, DEC, DOT&PF, DOL, AG, Fire Marshal
  - Surveillance and Monitoring Agreement
  - In-State Proposals
- Canada
  - Engagement with government authorities
- Project Applicants
- Stakeholders
  - Municipalities, NGOs, Alaska Natives, Businesses

U.S. Federal Agencies

- **Office of Federal Coordinator**
- **Council on Environmental Quality**
- **Federal Energy Regulatory Commission**
- **Department of Interior**
  - BLM
  - BIA
  - FWS
  - MMS
  - NPS
  - USGS
- **Department of Energy**
- **Department of Transportation**
  - FHWA
  - PHMSA
  - FAA
- **Department of Treasury**
- **Department of State**
- **Department of Defense**
  - U.S. Air Force
  - USACE
- **Department of Commerce**
  - NOAA
  - NMFS
- **Department of Homeland Security**
  - CBP
  - TSA
  - USCG
- **Department of Labor**
- **Environmental Protection Agency**
- **Department of Agriculture**
- **Advisory Council on Historic Preservation**
- **Department of Justice**
- **Federal Communications Commission**

Compliance

- Ensure agencies meet timelines
- Ensure unnecessary conditions that would delay the project are not imposed
- Monitor construction

Reliable Information Source

- Source of timely, reliable information about the project and related issues

- Website: www.arcticgas.gov
  - Fact Sheets
  - Project Maps

OFC Work

- Gap Analysis
- Consolidated Implementation Plans
- GIS Prototype Collaborative Effort
- Permit/Authorization Matrix
- Technical Team
- Issues Waterfall (GHG, HIA, SHPO)

One example: Mapping

- Agencies use different sets of sometimes incompatible data and systems when studying the pipeline route.
- Lacking a good, authoritative base map as a reference for developers and agencies during permitting.
- Difficult for public to understand data from multiple sources.
- The challenge is to bring everyone together to use the same data.

GIS prototype initiative

- A sophisticated GIS-based map (geographic information systems) for a 20-mile-long, 1-mile-wide corridor through Atigun Pass.
- Prototype to demonstrate the potential of a detailed, accurate map for the entire route.
- It could save time and money for the project developer and permitting agencies.
- It would be available to the public.
- Of course, it will cost money.

Implementation Plans, Project Matrix

- Preparing detailed plans that list, discuss and explain the project, the laws, and each federal permitting agency that will have a say in the project.

- Prepare and keep updated a matrix showing the status of each permit before every federal agency, providing understandable information on the data and process.

What's Known

- Pipeline to North America would tap into the largest natural gas market in the world
  - North America = 75 to 80 bcf/d
  - Almost three times China, India, Japan, South Korea, Taiwan
- Economic benefits huge for America, especially Alaska
  - Thousands of jobs on the table
  - State revenue source
  - Gas for in-State use;
  - Private Sector Financing
  - Help encourage exploration and extend the life of TAPS

What's Known

- Leverages Existing Infrastructure
  - Leverage what you have
  - Upgrade or construct what is needed
  - Transportation/Access necessary
- Multiple environmental advantages
- Broad project support
  - U.S. Chamber of Commerce, AFL-CIO, Industry and Utilities, ANGA, AGA, NGSA, INGAA, NARUC, NGOs
- Competition to build this project

Market Size and Natural Gas

- Global gas trade in 2007
  - 73% of worldwide gas production was consumed within the producing country
  - 19% of gas production was delivered to foreign customers by cross-border pipeline
  - 8% of gas was delivered by LNG tanker
- The bigger the market, the more new gas it can absorb

The Facts on Shale

- Shale gas production was 10% of U.S. supply last year
- Growing across U.S. and Canada
- Close to markets; easy to raise and lower production
- States are hungry for revenues and jobs
- Shale gas will hold down price spikes; no more $14 gas in the short term

The Facts on Shale (cont.)

- Fracking
  - Water quality concerns
  - EPA review; possible federal legislation
- More questions as it grows bigger, closer to urban areas
- One big environmental disaster could change the game
- Shale needs tens of billions of dollars of new pipeline infrastructure
- Steep production decline curve; deeper wells cost more

LNG

- We're not alone looking west to East Asia
  - Papua New Guinea, Australia (including coal-seam,) Indonesia, Sakhalin, Malaysia and Brunei
  - West African nations, Qatar, Oman, Yemen
- New projects totaling 9 bcf/d went online in 2009-2010
- An additional 7 bcf/d scheduled by 2015
- Once online they don't cut back; need to recover costs
- Mitsubishi forecasts potential Asia Pacific LNG supply could exceed demand by almost 20% in 2015
- Uncertain after that, but no shortage of Pacific options at tide water;

Other Supply Options for Asia

- We're not the only country with shale gas
- Shell signed a 30-year deal to help China unlock tight gas
- China and India are looking for more domestic gas
- China has pipeline gas options: Russia, Turkmenistan
- India looking for pipeline gas, too
- Tokyo Gas recently signed a 20-year deal with BG Group for Australian gas to supply 11% of its needs

Project Risks

- Long Term Global and Domestic Natural Gas Markets(not today-10-20-30 years out)
- Fiscal Structure – Federal and State
  - Loan Guarantees
  - National Energy Policies
- Regulatory Policies/Uncertainties

Project Risks

- Construction cost overrun risks and delays.
- Project cost: Up to $42 billion upfront investment; $100+ billion in long-term, binding ship-or-pay commitments.
- National energy policy; cleaner fuels; renewables; Alaska Native and Canadian First Nations issues.
- Arctic/Alaska environmental considerations.

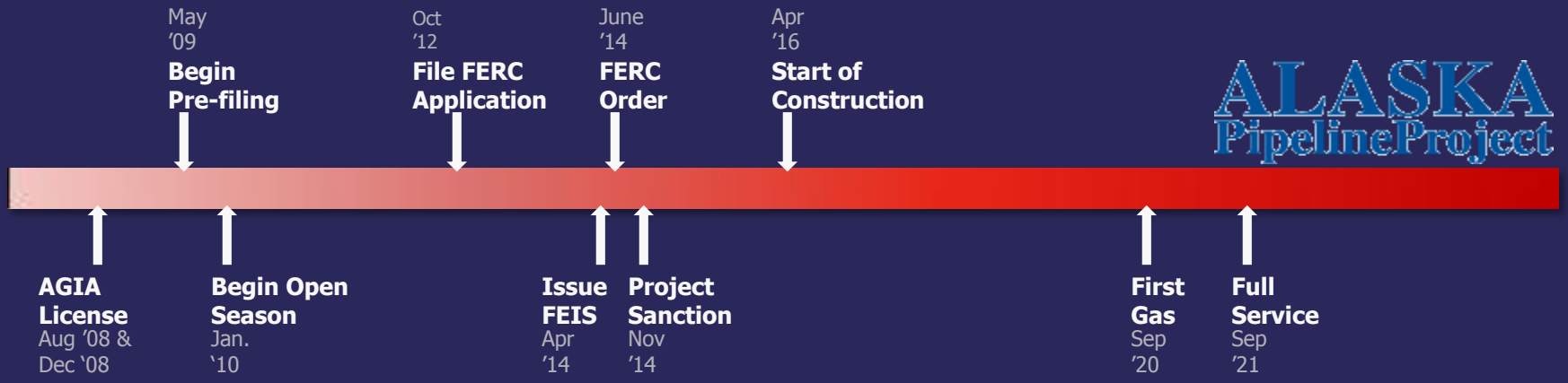
Activity

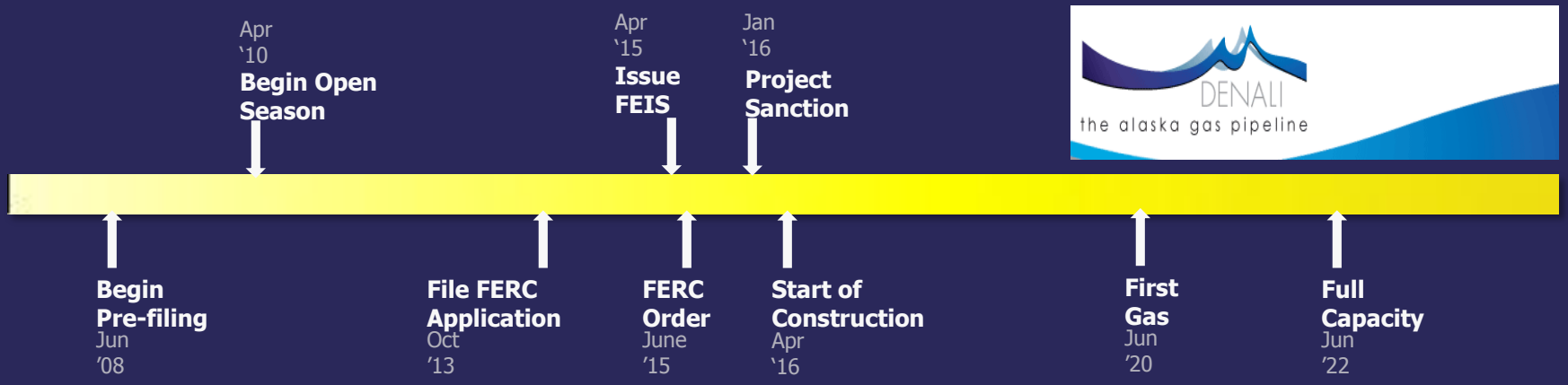
- Congressional
  - Federal Coordinator confirmation-Larry Persily
  - Do No Harm: energy, climate and other legislation
- Administrative Activity and Public Comment
  - Proposed Critical Habitat
  - Non-Attainment Areas
  - CEQ Draft Guidance Documents
- Open Season

What is an ‘open season’

- Project developers ask potential shippers if they are interested in using the pipeline; how much space do they want; and are they willing to meet the price.
- The Alaska Pipeline Project began their open season on April 30.
- Denali—The Alaska Gas Pipeline anticipates beginning their open season on July 6.
- Negotiations are private after open seasons close.
- Developer will not build the pipe without contracts.

Alaska Pipeline Timelines





April 2010

Administration agenda

- Lower carbon emissions to reduce global warming
- Abundant, secure domestic energy supplies.
- Job creation; construction and manufacturing.
- The White House wants to be more involved in encouraging the Alaska natural gas pipeline.

North to the Future

- Energy, environment, economic, human security-more tightly connected
- Perfect Storm for Alaska?
- Partners?
- Investment Climate Change-(transportation/energy)
- Hope not a method-acta non verba(deeds not words)

Thanks!

- Appreciate your time and interest
- How can we help you?
- May 20th –Deadliest Day

Office of the Federal Coordinator
Alaska Natural Gas Transportation Projects

Washington, DC Location:
1717 H Street, NW, Suite 801
Washington, D.C. 20006
(202) 478-9750

Anchorage, AK Location:
188 W Northern Lights, Suite 600
Anchorage, Alaska 99503
(907) 271-5209

http://www.arcticgas.gov
info@arcticgas.gov