

AK LEGISLATURE SPECIAL COMMITTEE FILES SCOMM 155 3290

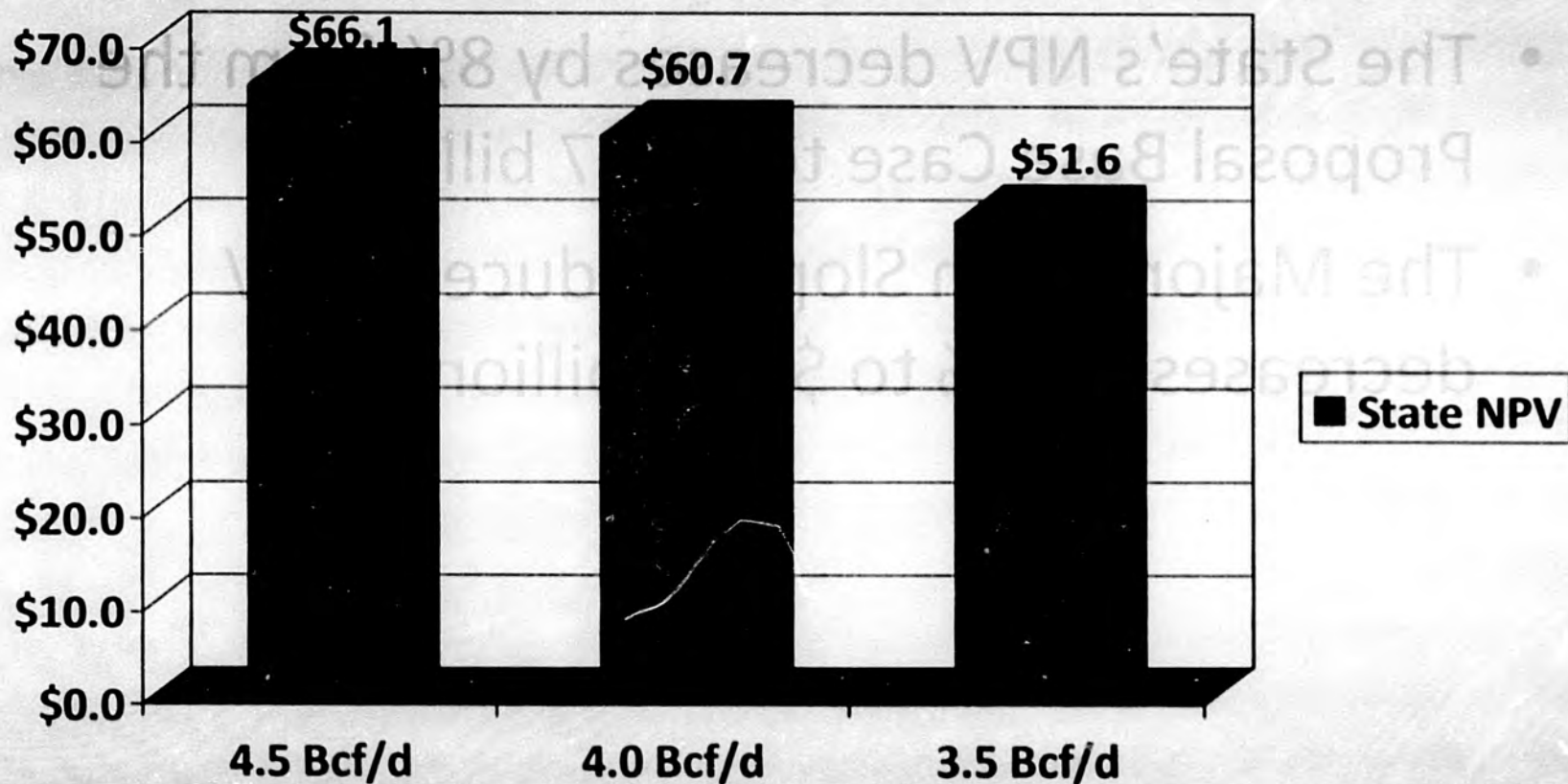
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Project Economic Analysis

AGIA

The Alaska Gasline Inducement Act

State NPV at Various Initial Capacity



Project Economic Analysis



- The Project Economics are Extremely Robust
 - It would take a “perfect storm” of worst case scenarios for multiple factors for the Project to be uneconomic.
 - Indeed, a “perfect storm” of low gas prices and high construction costs, together, are not enough to generate negative state NPV.

\$500 Million Matching Contribution



Effect of State's \$500 Million Matching Contribution to TC Alaska's Project

- Tariff is reduced by 6 cents
- State's NPV increases by \$200 Million

Attracting Gas Commitments to TC Alaska's Project



- Robust economics and reasonable commercial terms.
- Extremely capable pipeline company.
- State's Upstream Inducements
 - 10-year tax certainty
 - Royalty valuation certainty
- Avoid Problems of Not Committing Gas
 - Duty to develop
 - Anti-trust
 - Congressional Attention
 - Shareholder Questions

TC Alaska Project Is Likely to Succeed



The Alaska Gasline Inducement Act

- TC Alaska has submitted a plan for its project that is technically feasible, reasonable, and specific.
- TC Alaska has demonstrated the technical and financial ability to construct the project.
- TC Alaska has submitted a reasonable commercial plan which, coupled with economic and political factors, should help to encourage firm shipping commitments

TC Alaska Project Is Likely to Succeed



Contingent Liability Issue

- Risk of litigation is significantly overstated.
- Potential legal claims by withdrawn partners are, at best, weak and unlikely to succeed.
- Not a reasonable basis for the Major North Slope Producers to refrain from partnering with TC Alaska or contracting with the Project.

TC Alaska Project Comparisons



- Producer Project (Denali)
- LNG Options

Denali Project Is More Risky For the State



- Lack of commitments create risks for state
- No certainty on project schedule
 - Likely Anti-trust Challenges
- Undefined tariff terms
 - Example, 50/50 debt to equity increases the tariff by \$1 compared to 75/25, costing the state over \$8 billion in NPV
- Undefined state fiscal concessions needed for Denali
 - SGDA concessions worth over \$10 billion
- No Certainty on Expansion Provisions
 - Producer Incentives to exercise basin control
 - Stifles North Slope basin development
 - Loss of long-term jobs and careers
 - Loss of Potential LNG development

Producer Pipeline Considerations



- Even if TC Alaska License is issued, Producers can proceed with Denali, commit gas to it, and build it without any additional state concessions
- State has significant interest in attracting Producers to commit gas to TC Alaska's project
 - Expansion Provisions
 - Lowest reasonable tariff - Highest Netback
- State Needs to Use Power of Competition to Protect Alaskans Interests

LNG Analysis



The Alaska Gasline Inducement Act

- Extensive Analysis of LNG economics and likelihood of success
 - Asian market price
 - LNG project costs and schedule
 - How LNG projects are developed
 - Potential hurdles for LNG projects

LNG Economic Analysis



The Alaska Gasline Inducement Act

- Ran economics on “unrealistic” 4.5 Bcf/d project
- Also compared with 2.7 Bcf/d project options
- Confirmed Asian market premium price
- Liquefaction plant costs create economic drag
- LNG does not provide time or cost savings
- Asian LNG does not provide “value added” petrochemical industry
- State NPV lower under all LNG options

LNG Likelihood of Success



- LNG less likely to succeed without TC Alaska
 - Entire project stream, from gas supply, to pipeline, to liquefaction, to tankers, to re-gasification, to gas sales must be negotiated and executed nearly simultaneously
 - Requires reserves certification
 - Expansions are more difficult because of size
 - Liquefaction plant is additional “open access” pinch-point
 - Export authorization is a challenge

Opportunity for “Y line” LNG



- If sufficient gas, TC Alaska willing to expand to transport gas from Delta Junction to Prince William Sound
- LNG project will benefit from TC Alaska's financial and technical abilities
- State will benefit from supplying gas to both LNG and North American markets
- “Y line” is the best option for the state

Additional Considerations



- Treble Damages Exposure
- Competition

Year	Annual Spend	State Expenditure	TC Alaska Expenditure	Expenditure	Cumulative Expenditure
2008	\$41	\$21	\$21	\$21	\$21
2009*	\$42	\$21	\$21	\$21	\$42
2009	\$34	\$31	\$3	\$3	\$45
2010	\$141	\$127	\$14	\$14	\$159
2011	\$144	\$130	\$14	\$14	\$173
2012	\$147	\$132	\$15	\$15	\$188
2013	\$25	\$39	\$39	\$39	\$227
Total	\$625	\$500	\$125	\$125	\$625

*Scheduled Open Season

Expenditure Schedule Based on TC Alaska Application

Treble Damages Exposure



The Alaska Gasline Inducement Act

\$Millions

Year	Annual Spend	State Expenditure	TC Alaska Expenditure	3x TC Alaska Expenditure	Cumulative State Exposure
2008	\$41	\$21	\$21	\$62	\$82
2009*	\$42	\$21	\$21	\$63	\$166
2009	\$34	\$31	\$3	\$10	\$207
2010	\$141	\$127	\$14	\$42	\$376
2011	\$144	\$130	\$14	\$43	\$549
2012	\$147	\$132	\$15	\$44	\$726
2013	\$75	\$39	\$36	\$109	\$874
Total	\$625	\$500	\$125	\$374	\$874

***Scheduled Open Season**

Expenditure Schedule Based on TC Alaska Application

Competition

AGIA

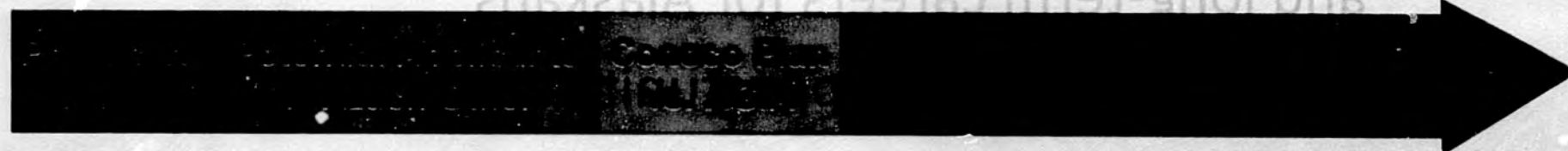
The Alaska Gasline Inducement Act

• TC Alaska's Project Maximizes Benefits to Alaskans

— Best Chance to Get a Pipeline

— Expansion Provisions Provide best chance for jobs

and long-term careers for Alaskans



Intro of AGIA

Passage of AGIA

Release of RFA

Application Due Date

Completeness Review

Award of License

Open Season

FERC Cert

Summary



- TC Alaska's Project Maximizes Benefits to Alaskans
 - Best Chance to Get a Pipeline
 - Expansion Provisions Provide best chance for Jobs and long-term careers for Alaskans
 - Increases Alaskans opportunity of affordable energy
 - Maximizes state revenue
- TC Alaska's Project is Better for the State than LNG Options and the Producer Project (Denali)

25th Legis : 3rd Sp. Session

June 8, 2008
Sunday

presented by
Conrad Mulligan
ARCADIS

Modeling of Short- and Long-Term Employment Generated by Construction and Operation of an Alaska Natural Gas Pipeline Project



Employment projections generated for...

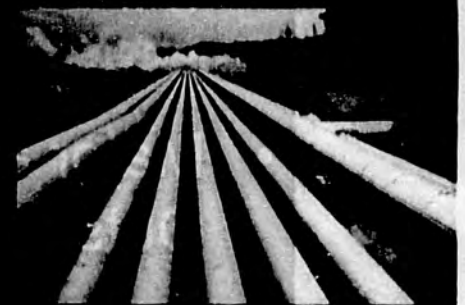
- **Construction Phase** of the pipeline and installation of compressor stations, Gas Treatment Plant and LNG facility
- **Operation Phase** of the pipeline and related facilities (compressor stations, GTP and LNG plants)
- **Exploration and Development** work on the North Slope spurred by operation of natural gas pipeline



Sources of Data/Model Used

- Sources of Data

- Cost data from TC Alaska AGIA Application and other information provided to the State
- Data generated by State's consultants
- Information from Division of Oil and Gas



- Model Used

- IMPLAN
- Cost-driven
- Uses Alaska-specific labor factors



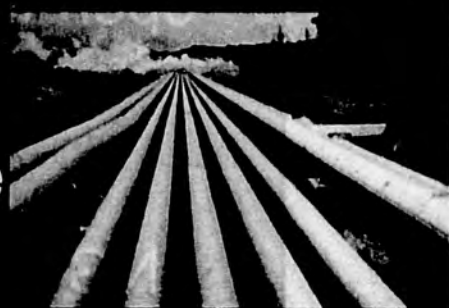
Construction Phase Assumptions

- Gas Treatment Plant and LNG facility will be built Outside
- Major equipment and materials purchased Outside
- Labor force in Valdez constrained by size of camp



Construction Phase Employment Results

- Any natural gas pipeline project will create thousands of short-term construction jobs
- Largest number of construction jobs will be available during a brief peak period
- LNG option
 - 16,000 jobs in peak year
 - Longer 'peak' period due to LNG installation
- TC Alaska/Producer Pipeline
 - 15,000 jobs in peak year

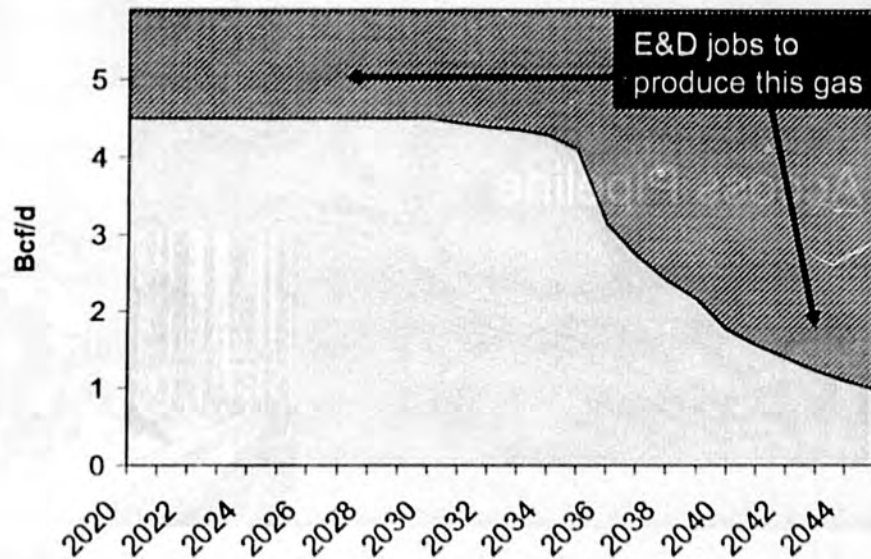
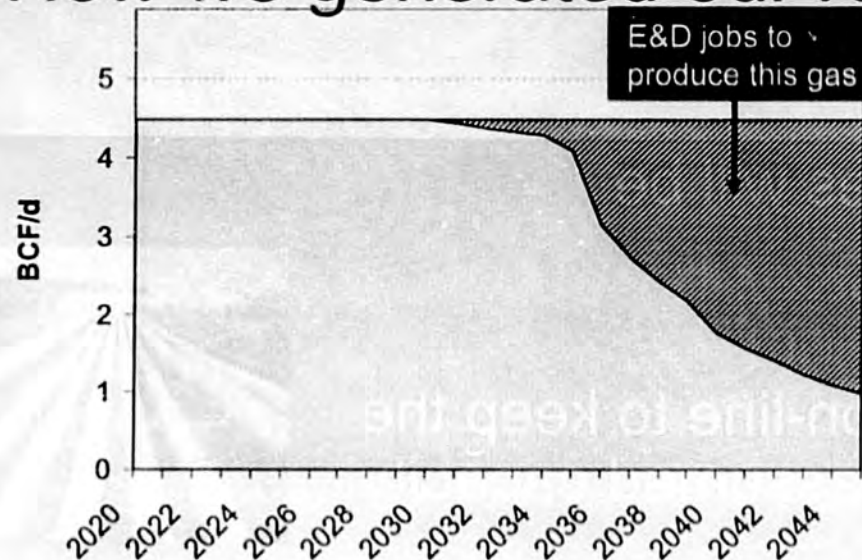


Operations Phase Employment Results

- TC Alaska or Producer Pipeline: ~200 operations jobs in Alaska
- LNG option: ~600 operations jobs in Alaska
 - ~400 jobs at LNG plant in Prince William Sound



E&D Employment: How we generated our results—Scenarios



- **Non-Open Access Pipeline**
 - No capacity expansion
 - No new natural gas production (or E&D work) until current fields fall off plateau
- **TC Alaska Scenario**
 - Capacity expansions as demanded + Reasonable tariffs = Favorable explorer economics = E&D rush

E&D Employment:

How we generated our results—Assumptions

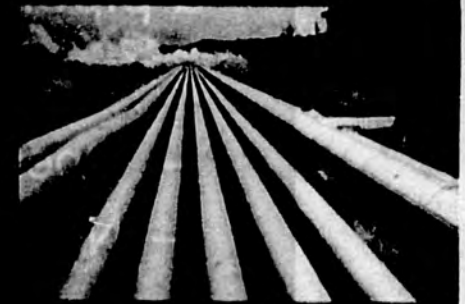
- New production facilities will be constructed in Alaska
- Fields will be brought on-line to keep the pipeline full at a given assumed capacity
 - 5.9 bcf/d for TC Alaska Scenario
 - 4.5 bcf/d for Non-Open Access Pipeline Scenario



Results: E&D Employment

- TC Alaska

- Approximately 72,000 E&D jobs in the 2015 to 2045 timeframe
- Jobs may be created as early as 2015



- Non-Open Access Project

- Approximately 47,000 E&D jobs in the 2015 to 2045 timeframe
- Job creation may be delayed as late as 2026



Results: E&D Employment

- Timing of E&D job creation is a function of a pipeline's characteristics
 - Open Access = Jobs Sooner
 - Non-Open Access = Job Creation Delay
- Creating new natural gas basin-related jobs sooner is important ...
 - Offset job losses likely to occur as existing oil fields decline
 - Maintain existing skill sets and talent pool in Alaska



AGIA
Legislative Special Session
Incentives and Mandates for
Pipeline Expansions

Greg Hopper
Black & Veatch
June 8, 2008

• "Must Haves" Regarding Expansion

- **Bi-annual Open Season Offerings**
 - Allows shippers to plan, reduces risk premiums
- **Capital Structure Certainty**
 - Helps to lower rates for shippers
- **Rolled-in Rates**
 - Shares the benefits of scale economies, level playing field

Development

- Cost control
- Operating control
- Capacity certainty
- Expansion timing
- Strategic

Expansion

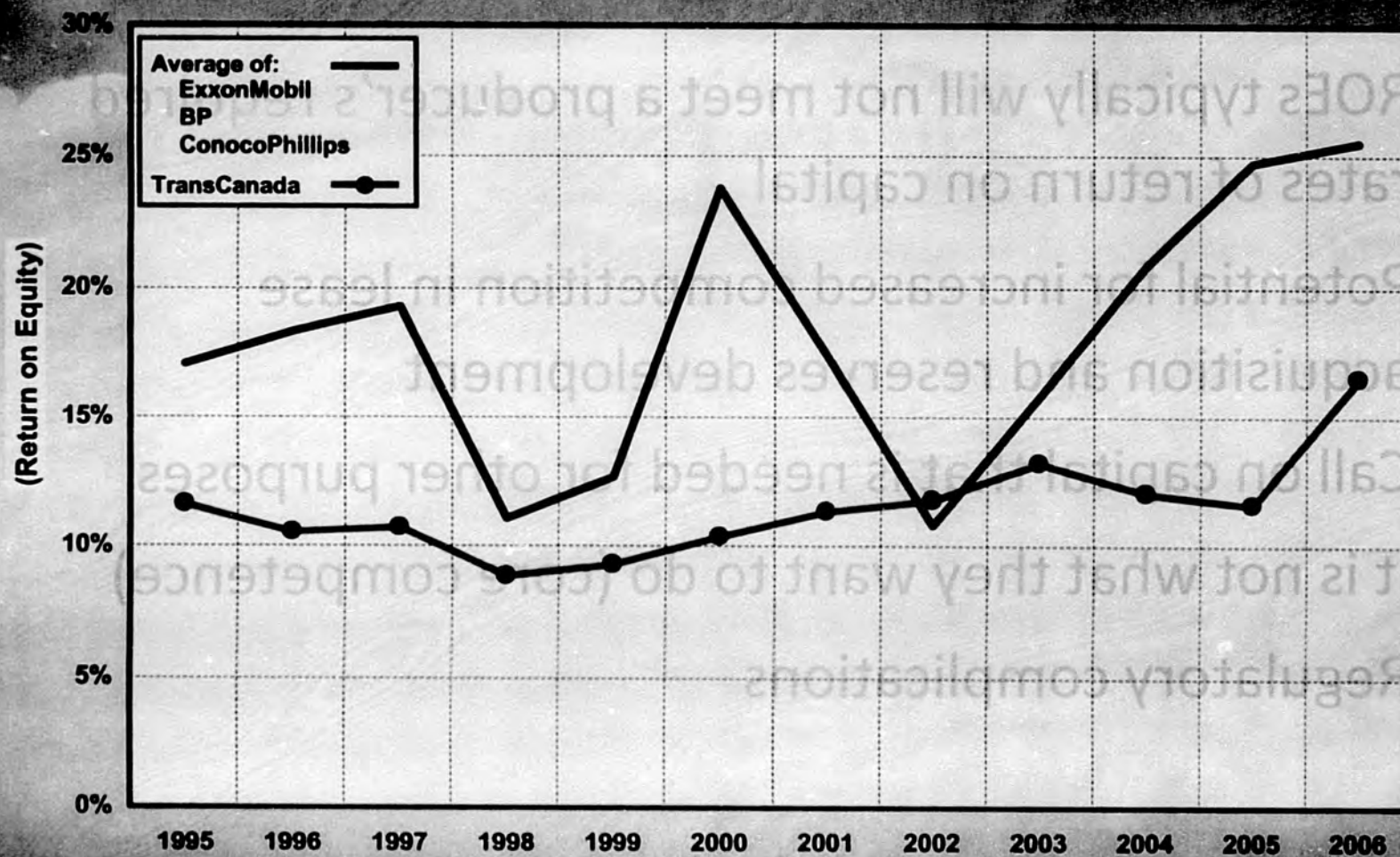
- Outlet for increased equity production
- ?

• Exploration v. Producer Returns on Equity

Gas pipeline regulated rates of return on equity (ROE) generally recognize lower levels of operating risks than other industries

- FERC ROEs of 14% or less are common
- ROEs granted to pipelines prior to in-service are often reduced in subsequent rate cases
- Exploration and Production company shareholders require relatively higher (15% – 20%+) ROEs to compensate for higher perceived risks

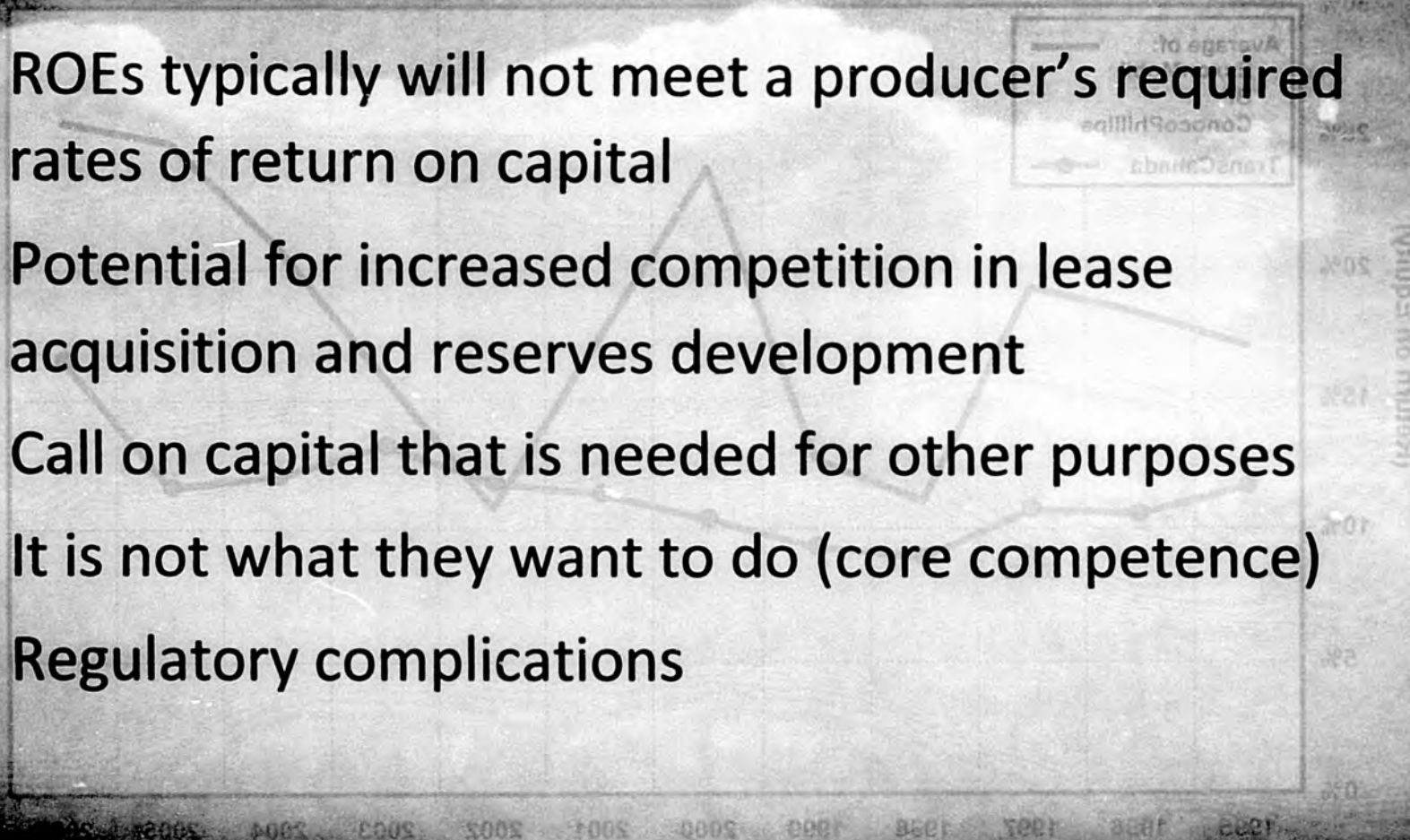
than do Pipeline Companies



Source: Value Line (March 16, 2007).

Should we allow pipeline owners to expand pipeline capacity for non-owners?

- ROEs typically will not meet a producer's required rates of return on capital
- Potential for increased competition in lease acquisition and reserves development
- Call on capital that is needed for other purposes
- It is not what they want to do (core competence)
- Regulatory complications



-FERC Issues-
**Alaska should not rely on Federal
regulators to protect Alaska's
vital interests**

**Don Shepler
Greenberg Traurig LLP**

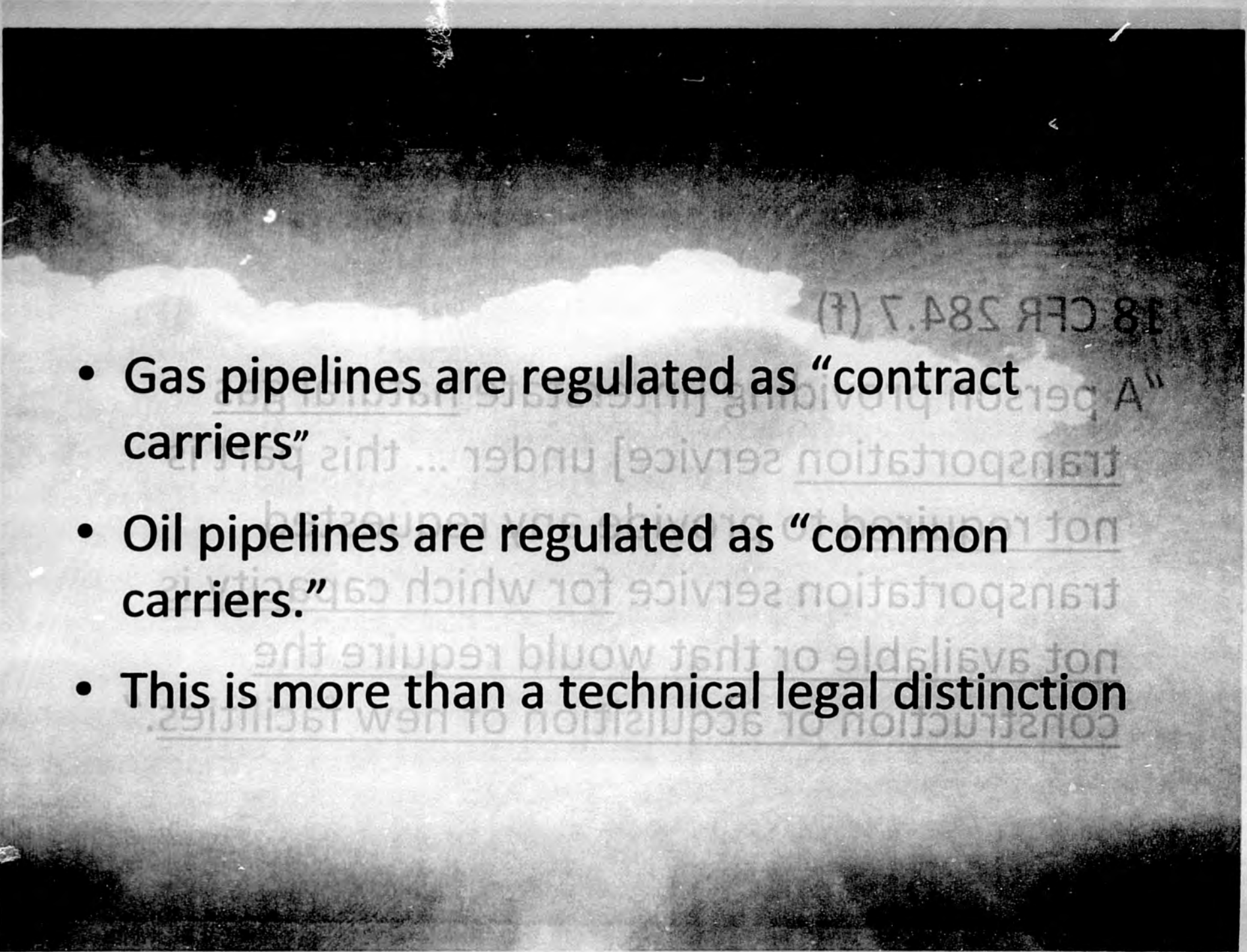
My Background

- Over 30 years of experience representing interstate gas pipelines in Natural Gas Act matters
 - 5 years at FERC writing opinions for the agency and representing FERC Staff in pipeline rate proceedings
 - 25 years representing pipeline companies on all phases of FERC matters—rates, certificates, rulemakings etc.

- Most sophisticated shippers (such as the North Slope Producers) elect to use negotiated rates to protect them from:
 - 1) the vagaries of changing FERC policies,
 - 2) the risk of adverse decisions by FERC, and
 - 3) all other regulatory uncertainties.
- The State of Alaska is best served by following that example and locking in the AGIA commitments that TC Alaska has made.

AGIA protects the State's interests in three vital areas:

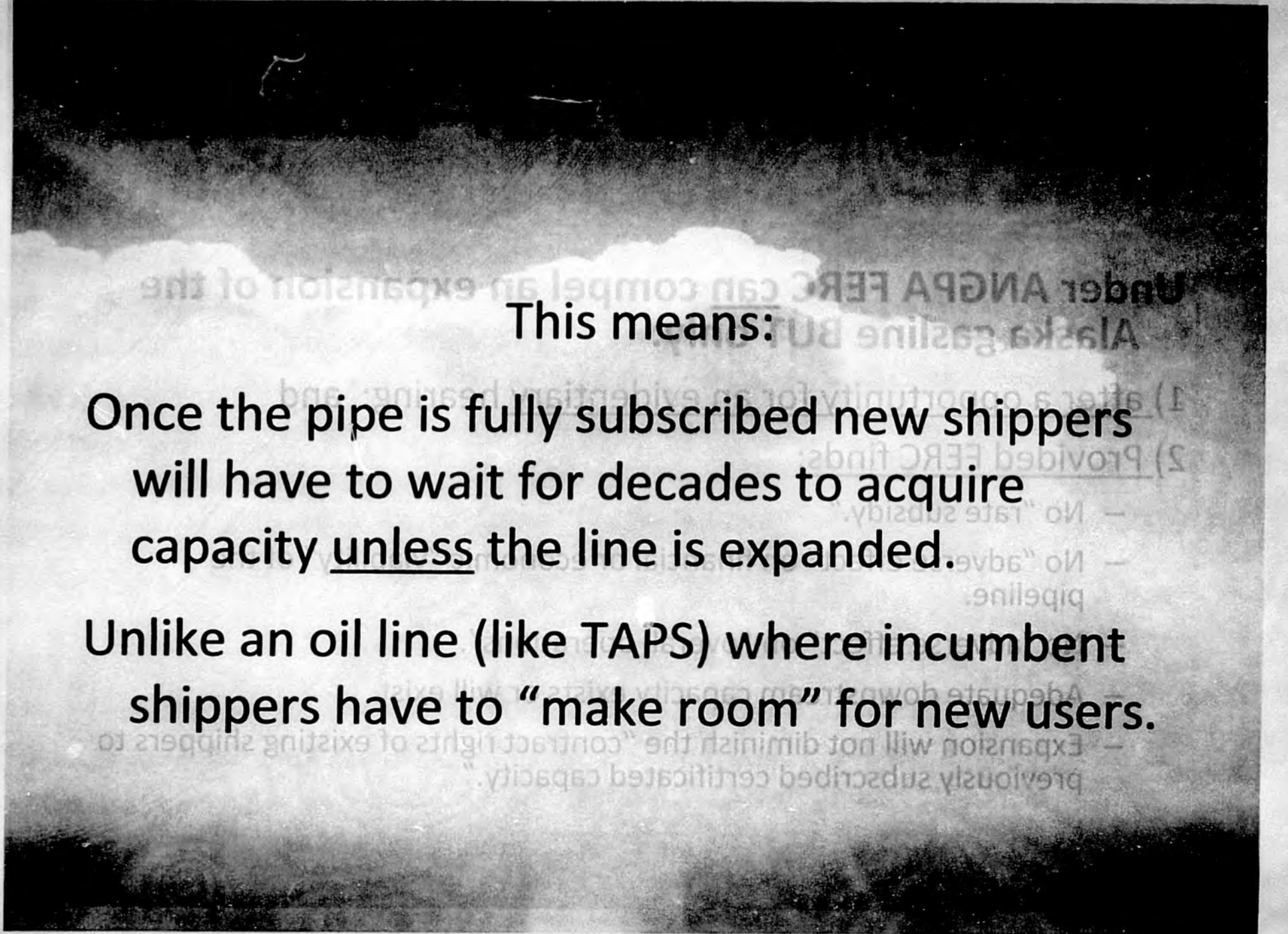
- Expansion commitments
- Ensuring low tariffs through capital structure commitments
- Requiring the Licensee to file for and support rolled-in rates for expansions

- 
- Gas pipelines are regulated as “contract carriers”
 - Oil pipelines are regulated as “common carriers.”
 - This is more than a technical legal distinction

FERC won't bail Alaska out

18 CFR 284.7 (f)

“A person providing [interstate natural gas transportation service] under ... this part is not required to provide any requested transportation service for which capacity is not available or that would require the construction or acquisition of new facilities.”



This means:

Once the pipe is fully subscribed new shippers will have to wait for decades to acquire capacity unless the line is expanded.

Unlike an oil line (like TAPS) where incumbent shippers have to “make room” for new users.

Under ANGPA FERC can compel an expansion of the Alaska gasline BUT only:

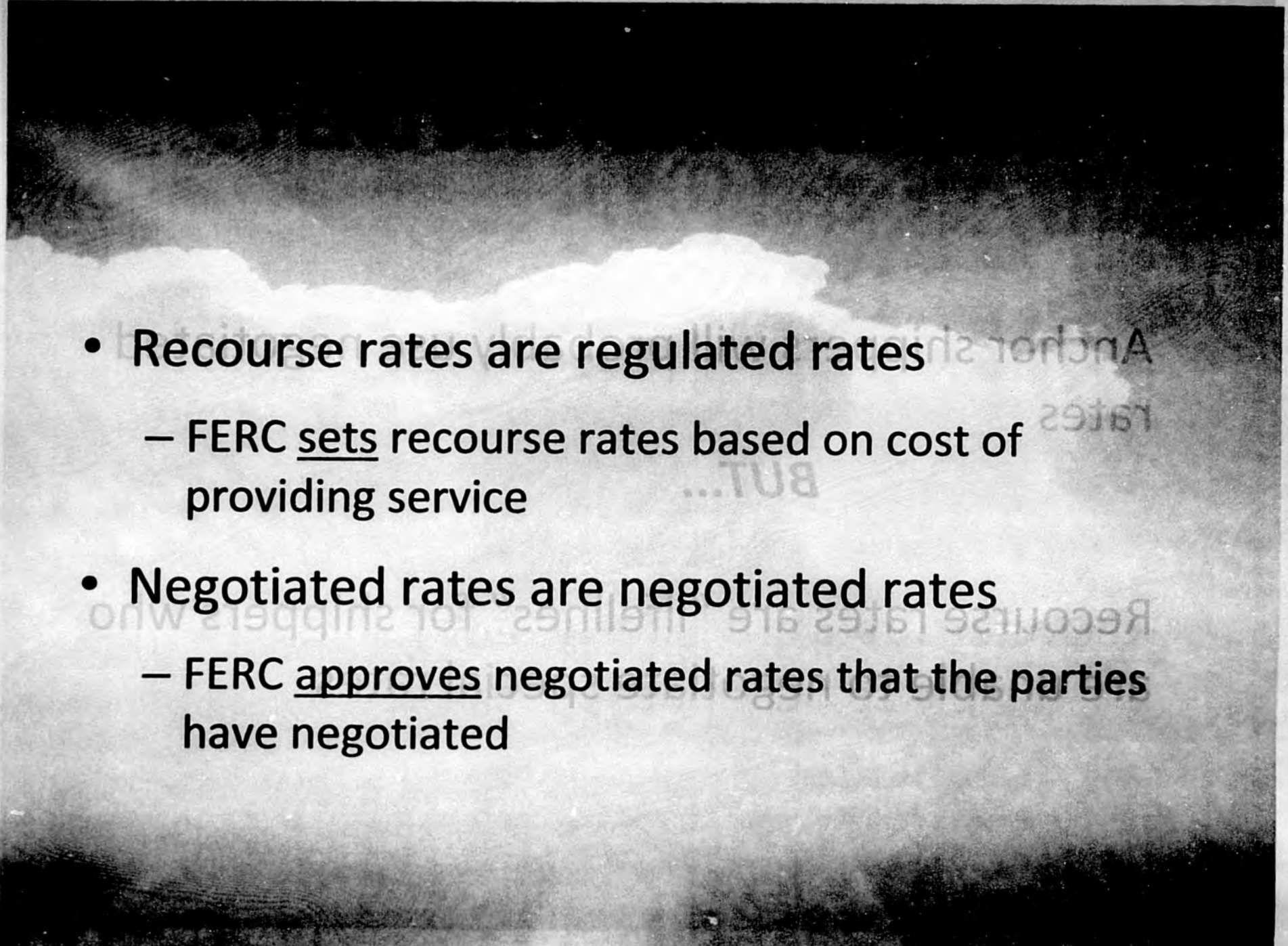
- 1) after a opportunity for an evidentiary hearing; and
- 2) Provided FERC finds:
 - No “rate subsidy.”
 - No “adverse effect” on financial or economic “viability” of the pipeline.
 - No “adverse effect” on “overall operations”.
 - Adequate downstream capacity exists or will exist.
 - Expansion will not diminish the “contract rights of existing shippers to previously subscribed certificated capacity.”

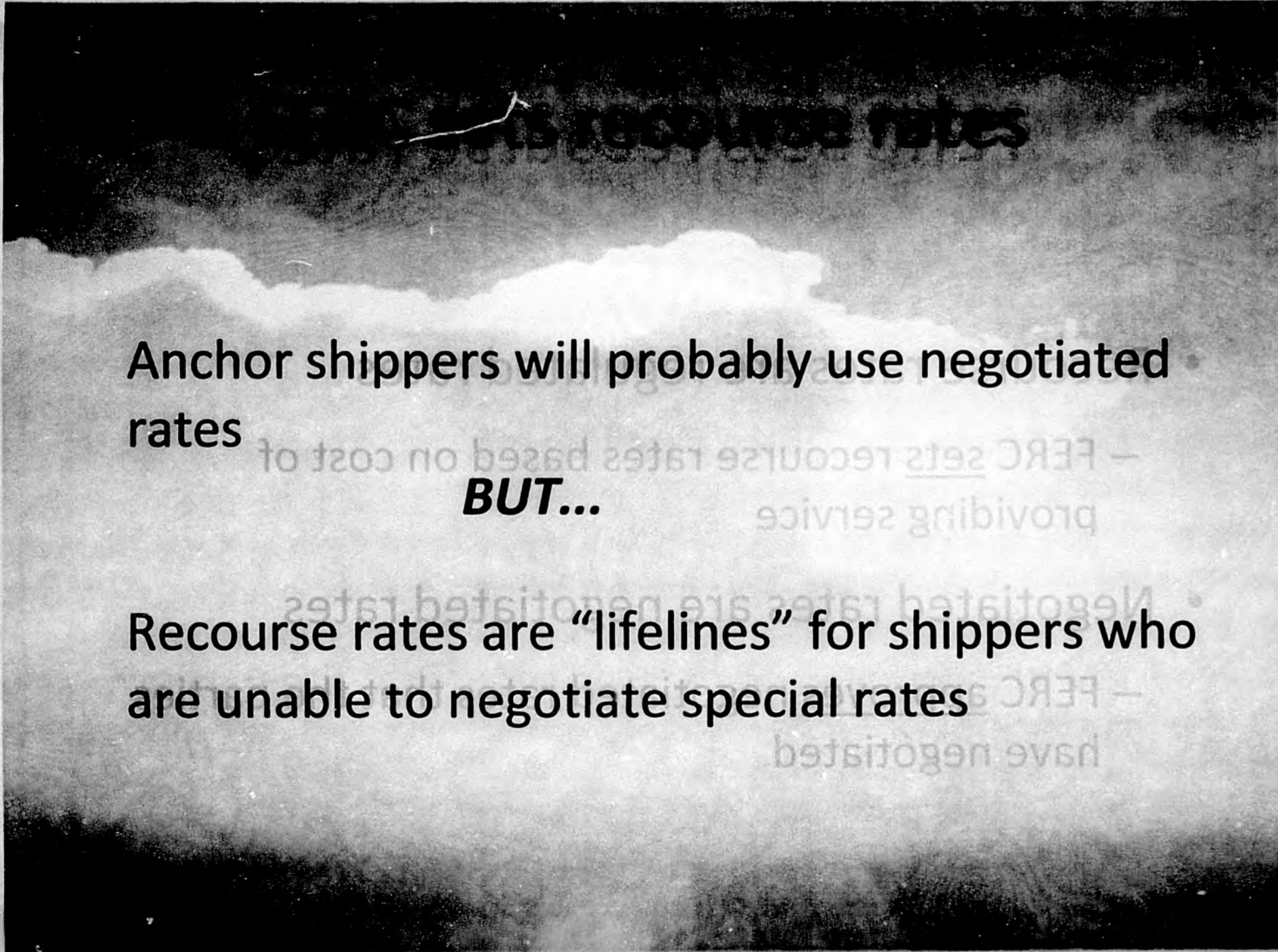
- Each of these requirements is an invitation to litigation— **which means delay.**
 - (Note *ExxonMobil v. FERC* appeal took 2 ½ years from Order 2005 to conclusion—with no evidentiary hearing and no appeal to the Supreme Court)
- Statute compelling investment of new capital has not been tested in court— **which means uncertainty.**
- Unlikely that an explorer is going to invest millions to prove-up and develop resources if the ability to get gas into the pipeline is in doubt.

FERC won't bail Alaska out

AGIA's requirements regarding expansions and
TC Alaska's commitments to expand provide
real value to the State.

- Test market every two years
- Expand in reasonable engineering increments
 - On commercially reasonable terms
 - Using rolled-in rates

- 
- Recourse rates are regulated rates
 - FERC sets recourse rates based on cost of providing service
 - Negotiated rates are negotiated rates
 - FERC approves negotiated rates that the parties have negotiated



Anchor shippers will probably use negotiated rates

BUT...

Recourse rates are “lifelines” for shippers who are unable to negotiate special rates

Capital structure underlying recourse rates matters!

- 50/50 debt/equity = \$5.90 tariff
- 70/30 debt/equity = \$4.90 tariff

- (Findings and Determination, Appendix G-1, Figure 5-52)

AGIA requires at least 70% debt.

FERC sets recourse rates

FERC policy is to use capital structure of the regulated company if it issues its own debt

unless

“[it] is so far outside the range of other equity ratios approved by the Commission ... that it is unreasonable.”

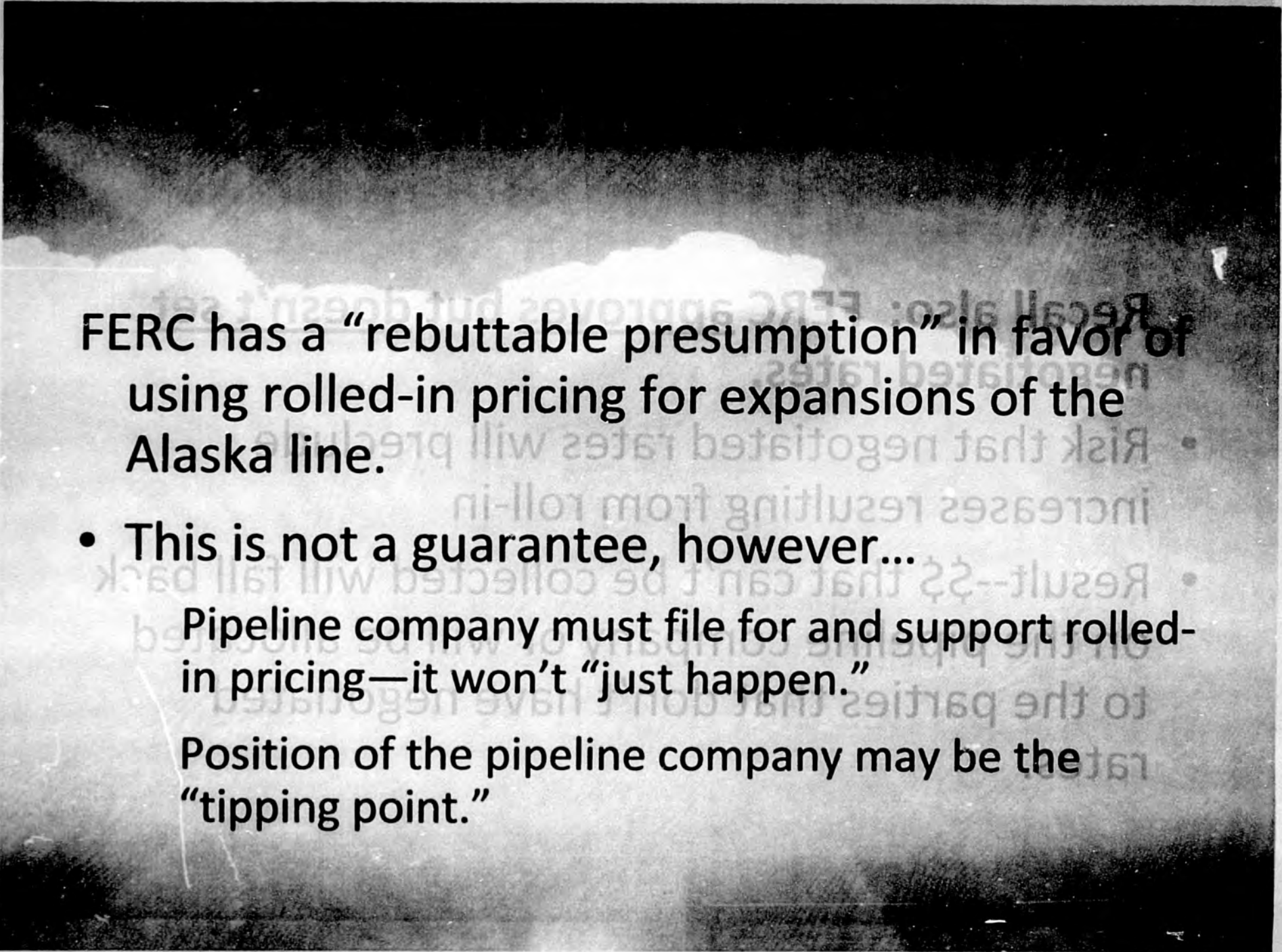
- (FERC Opinion No. 414-A, 84 FERC 61,084 (1998))

Case	% Equity	Citation
Williams Natural Gas Co.	64%	77 FERC ¶61,277 (1996)
Panhandle Eastern Pipe Line Co.	59%	74 FERC ¶61,109 (1996)
Panhandle Eastern Pipe Line Co.	61%	71 FERC ¶61,228 (1995)
Northwest Pipeline Corp.	55%	71 FERC ¶61,253 (1995)
Transok Inc.	58%	70 FERC ¶61,177 (1995)
Pacific Gas Transmission Co.	68%	62 FERC ¶61,109 (1993)
Midwestern Gas Transmission Co.	77%	31 FERC ¶61,317 (1985)
Entrega Gas Pipeline, Inc	65%	117 FERC ¶ 61,319 (2006)
Rockies Express Pipeline, LLC	55%	116 FERC ¶61,272 (2006)
Nautilus Pipeline Co., LLC	50%	78 FERC ¶61,325 (1997)

Average = 61% Range: 55% - 77%

AGIA's requirements and TC Alaska's commitments to use 70/30 debt/equity provides certainty that low tariffs are achieved—**certainty that cannot be achieved by relying on FERC and its policies and precedents.**

Average = 61% Range: 55% - 77%



FERC has a “rebuttable presumption” in favor of using rolled-in pricing for expansions of the Alaska line.

- This is not a guarantee, however...

Pipeline company must file for and support rolled-in pricing—it won’t “just happen.”

Position of the pipeline company may be the “tipping point.”

and Rolled-in Rates

Recall also: FERC approves but doesn't set negotiated rates.

- Risk that negotiated rates will preclude increases resulting from roll-in
- Result--\$\$ that can't be collected will fall back on the pipeline company or will be allocated to the parties that don't have negotiated rates.

AGIA prohibits the Licensee from entering into negotiated rate contracts that "would preclude [the licensee] from collecting, from any shipper, including a shipper with a negotiated rate agreement the rolled-in rates that are required to be proposed and supported by [the licensee]."

- (AS 43.90.130(7)(e))

CONCLUSION

On issues that are vital to the State's interest in a vibrant, expandable pipeline with low tariffs the State should take charge of its own destiny rather than rely on Federal regulators.

Sophisticated producers do so--through negotiated rates.

Alaska should do so--through the AGIA "must haves."

AGIA

The Alaska Gasline Inducement Act

**Producer Incentives to Expand
Pipeline for Third-Party Shippers**

**Allan Van Fleet
Greenberg Traurig LLP**

Producers May Conflict with Interests as Pipeline Owners

...to deny the fruits of their monopoly
to nonowner shippers, the [producer-
owned] pipeline would have to deny pipeline
access to nonowner shippers. . . . The analysis
above should make it clear that producer-
ownership of the pipeline creates incentives to
deny or impede such future capacity expansion."

Report of the Attorney General to Congress
Transmitted to The Alaska Gas Transportation Act
1989.

~~Expanded~~ Gas Development Agreement History

Draft SGDA contract included the 10
ANGPA requirements for expansion and
~~added~~ 20 more conditions

Explorers objected that they were better
off with no contract expansion terms

Draft LLC agreement provided that
pipeline board representatives owed
fiduciary duties not to the pipeline, but to
producers that appointed them.

AGIA History

Phillips alternative proposal
for expansion less often and at
lower cost to new shippers than AGIA

features

proposal makes no expansion
commitments

June 8, 2008 — 3:45
Sunday

Hoste presented by Teleconf
Day 6 - 3rd Sp Session AGIA License

Legal Issues Affecting Producer Participation

Spencer Hosie
Hosie McArthur LLP

Allan Van Fleet
Greenberg Traurig LLP

U.S. Commodities Futures Trading Commission

is investigating possible fraud in trading of crude oil futures contracts

ConocoPhillips has been subpoenaed – not charged with any wrongdoing

is concerned generally with particular order transactions, rather than wholesale holding product from the market

COMPETITION LAW 360

ConocoPhillips Subpoenaed By CFTC In Oil

By Elaine Chow, Portfolio Media, New York
(June 3, 2008)--Oil giant ConocoPhillips Co. revealed on Monday that it was subpoenaed in December by the U.S. Commodity Futures Trading Commission as part of the agency's ongoing investigation into possible price manipulation in the crude oil market.