# HB 3001
# SB 3001
# 7/10/08
# SPECIAL SESSION DOCUMENTS

# Mediation Presentation

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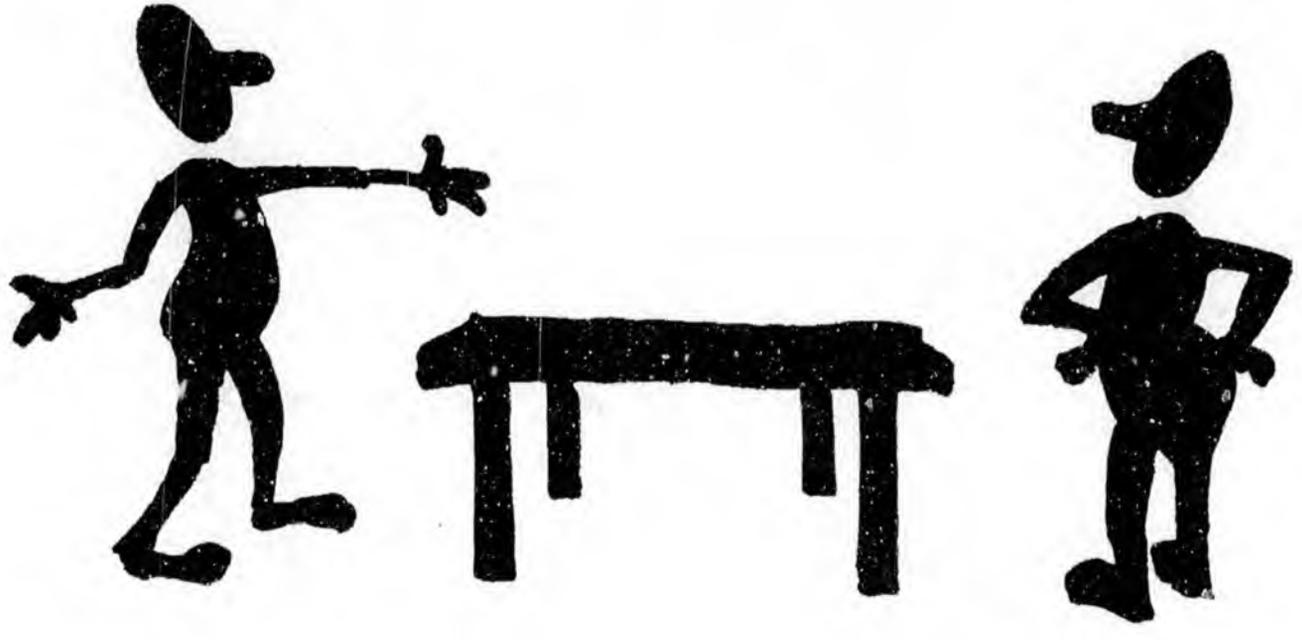
*Senior Associate, CBI*

***Juneau, Alaska***

***July 2008***


**Consensus Building Institute**

# Negotiation



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# Litigation


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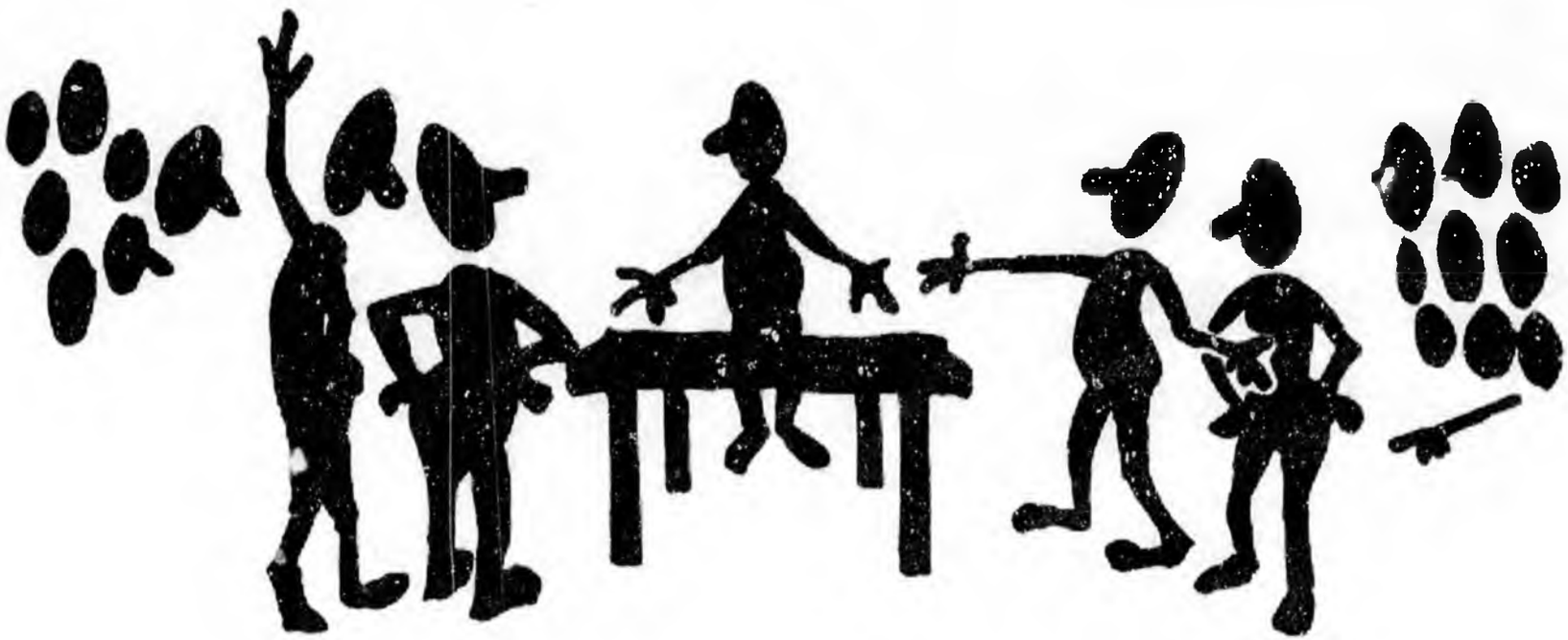
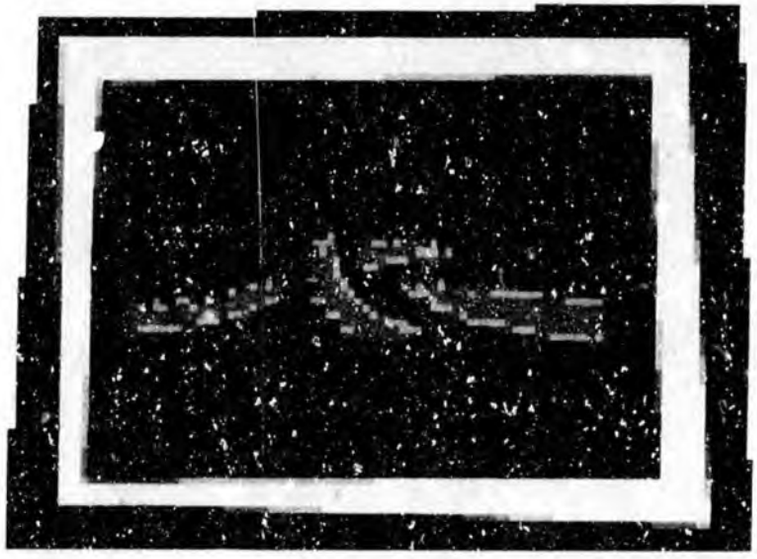
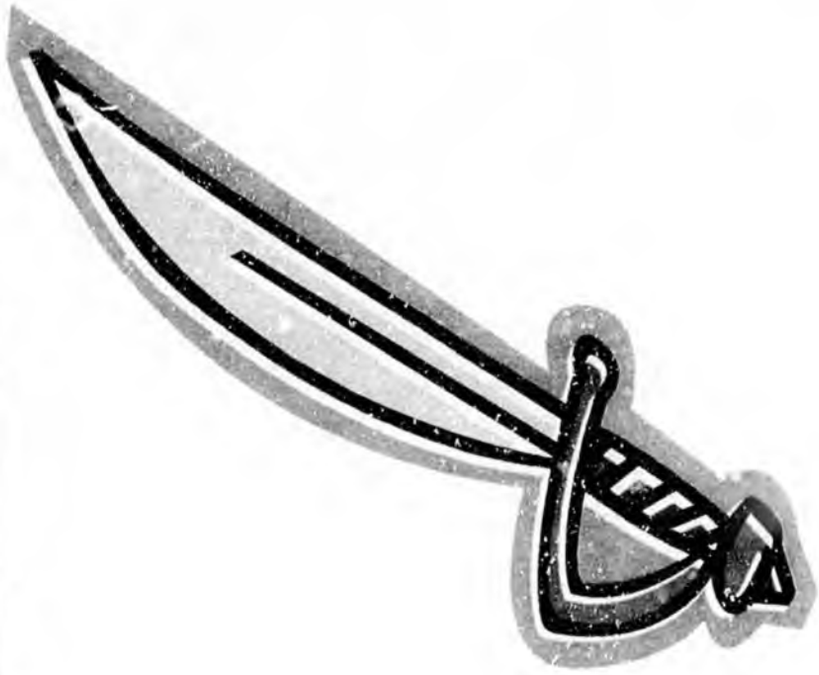
# Mediation



# Problem-Solving Paradigm





# Problem-Solving Paradigm

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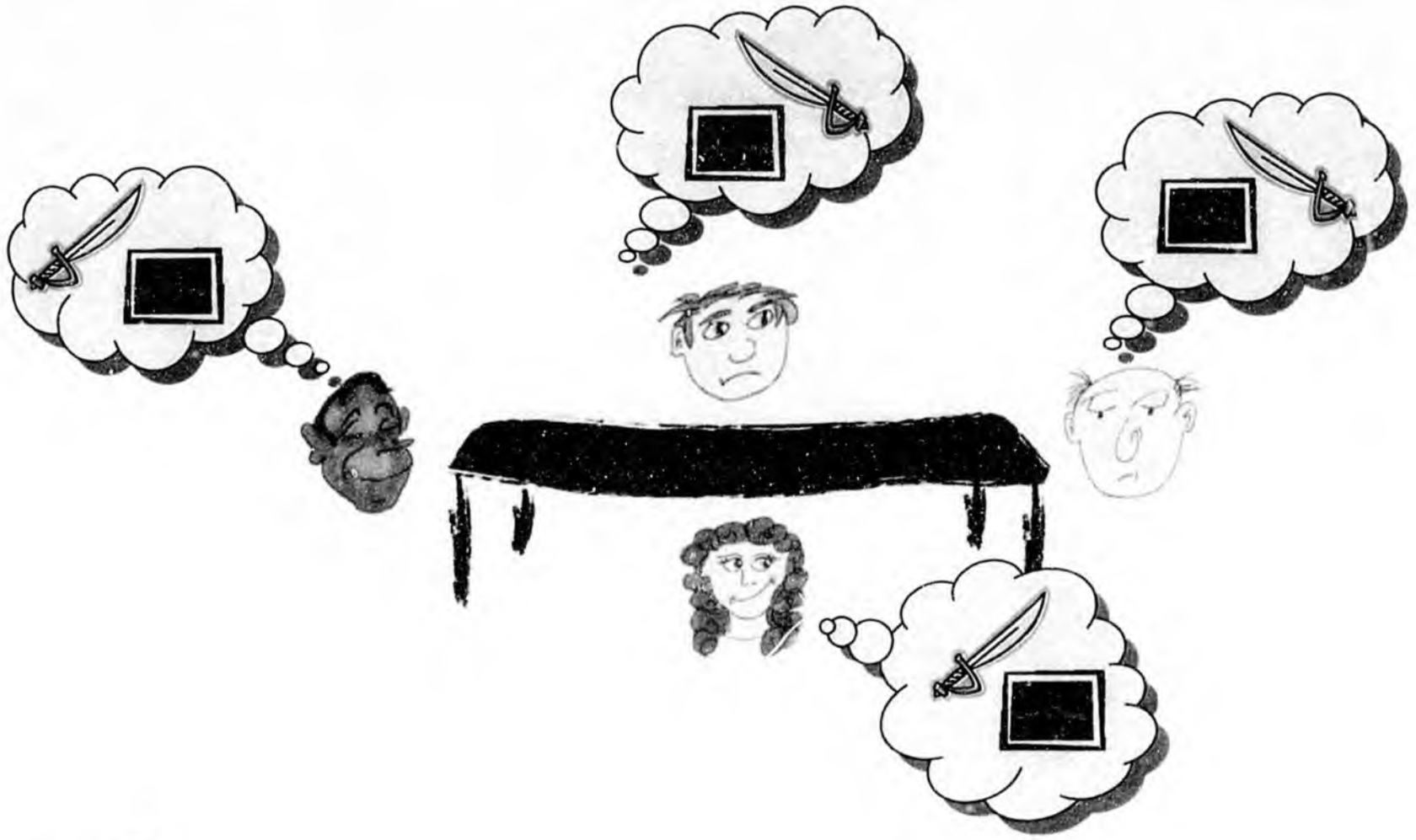

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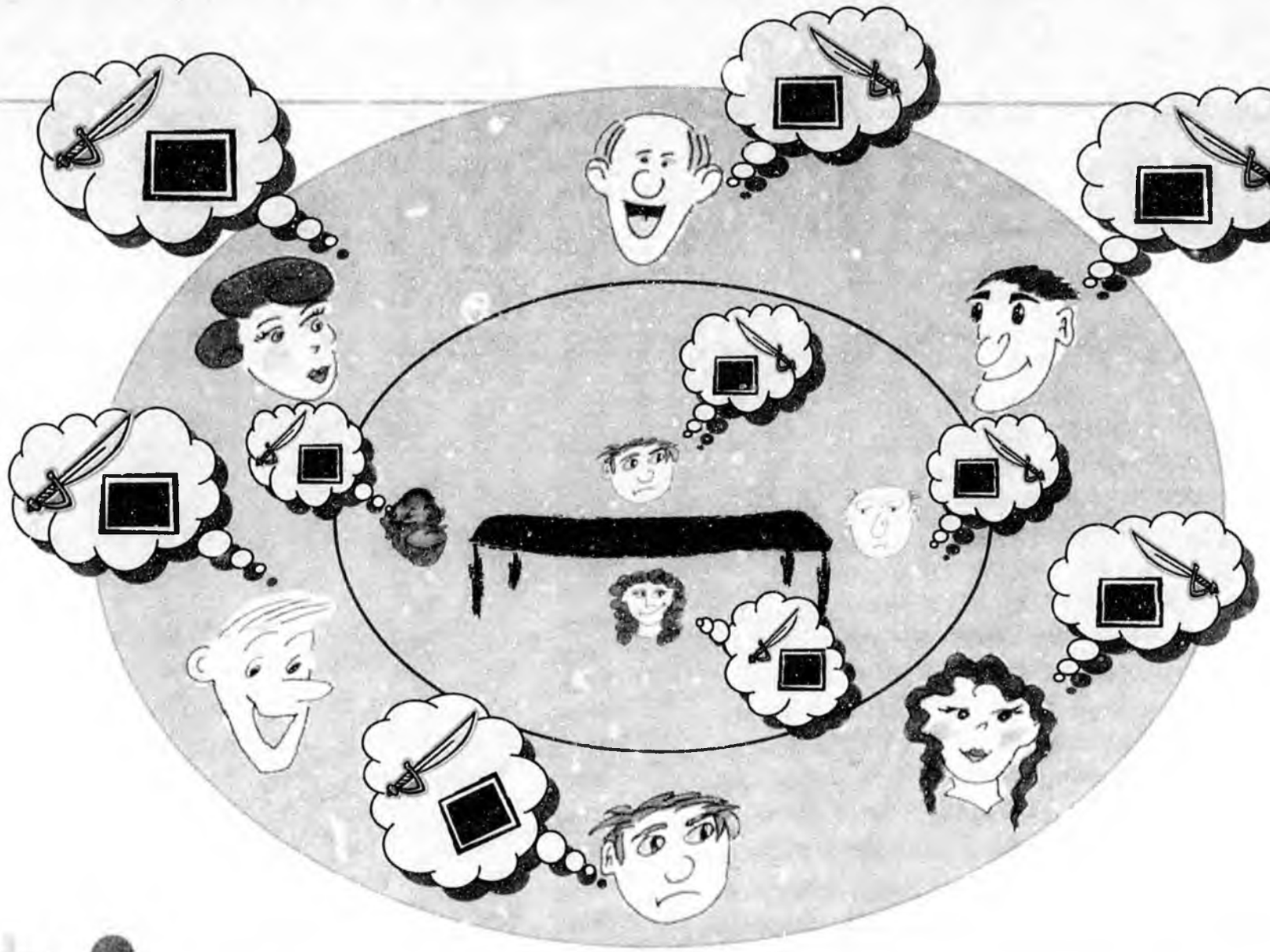

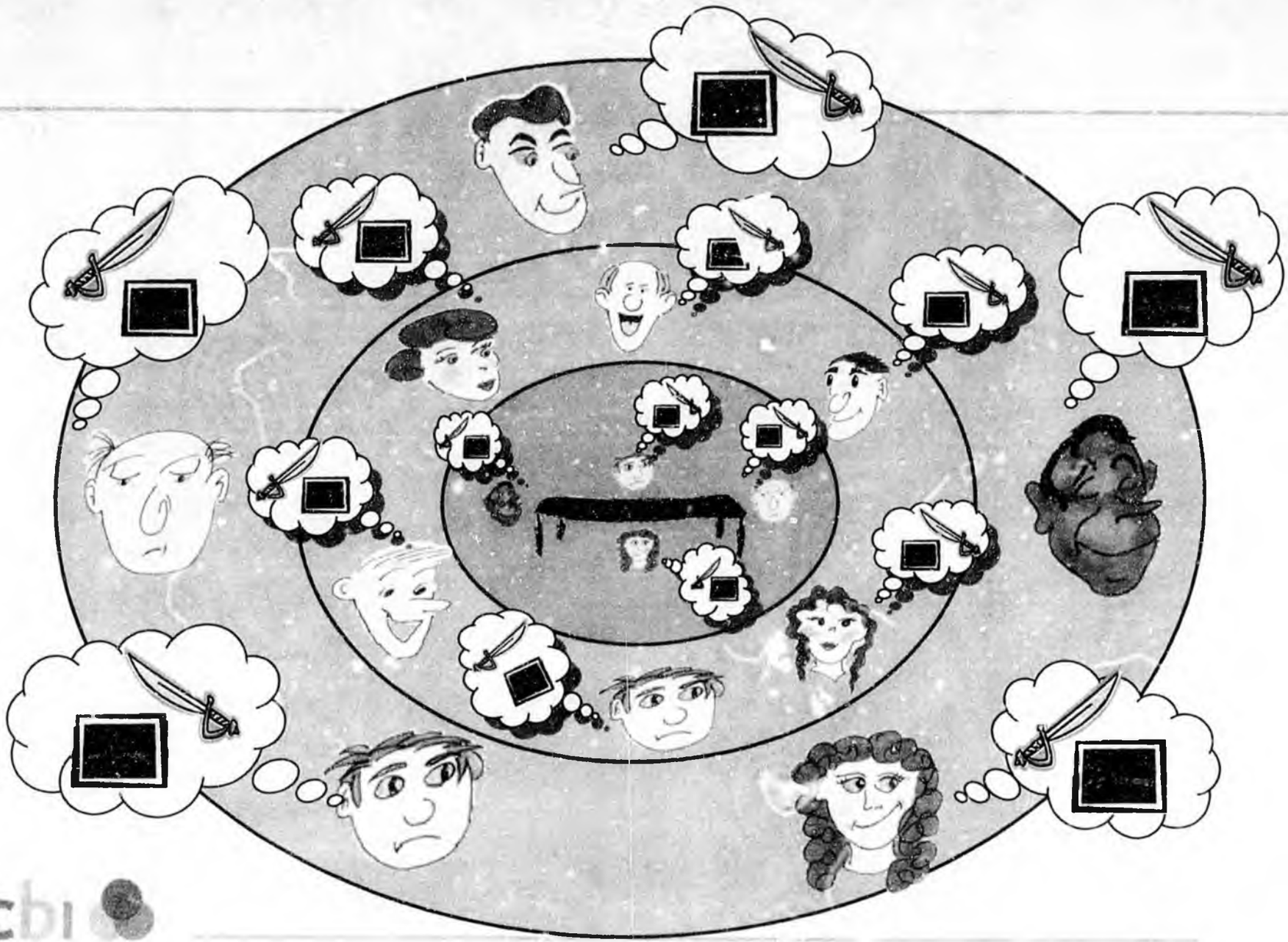

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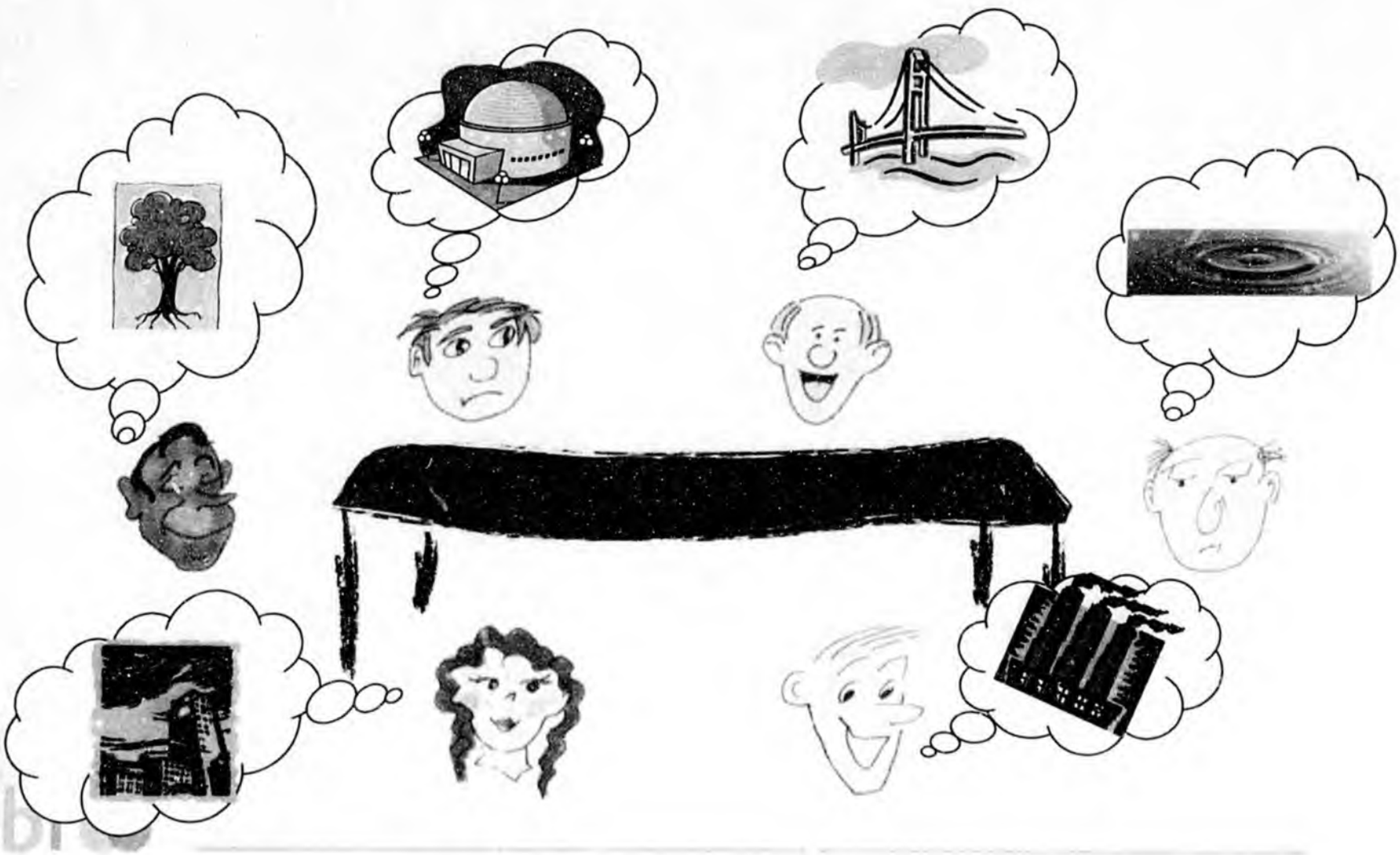
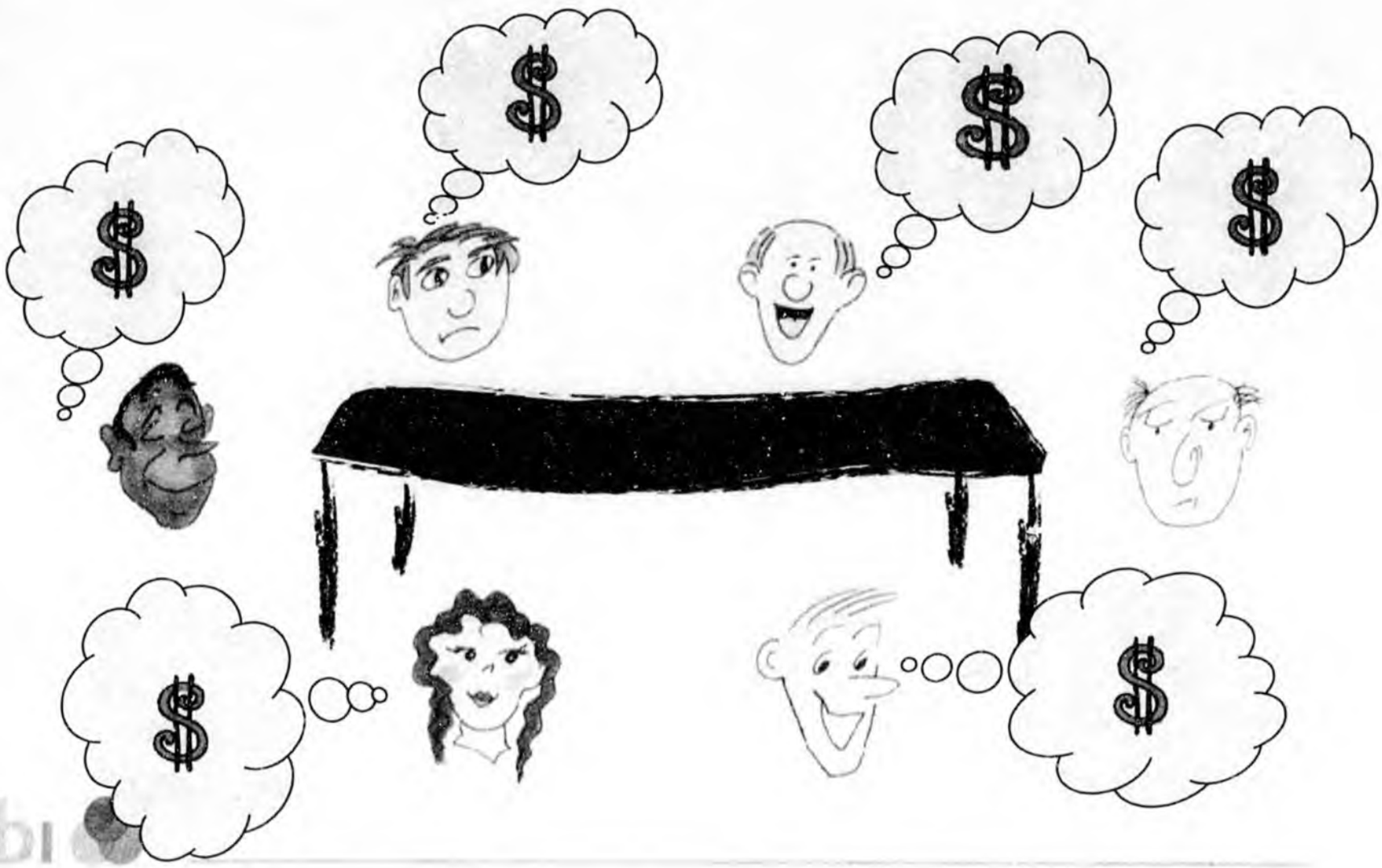
# Consensus-Building Model

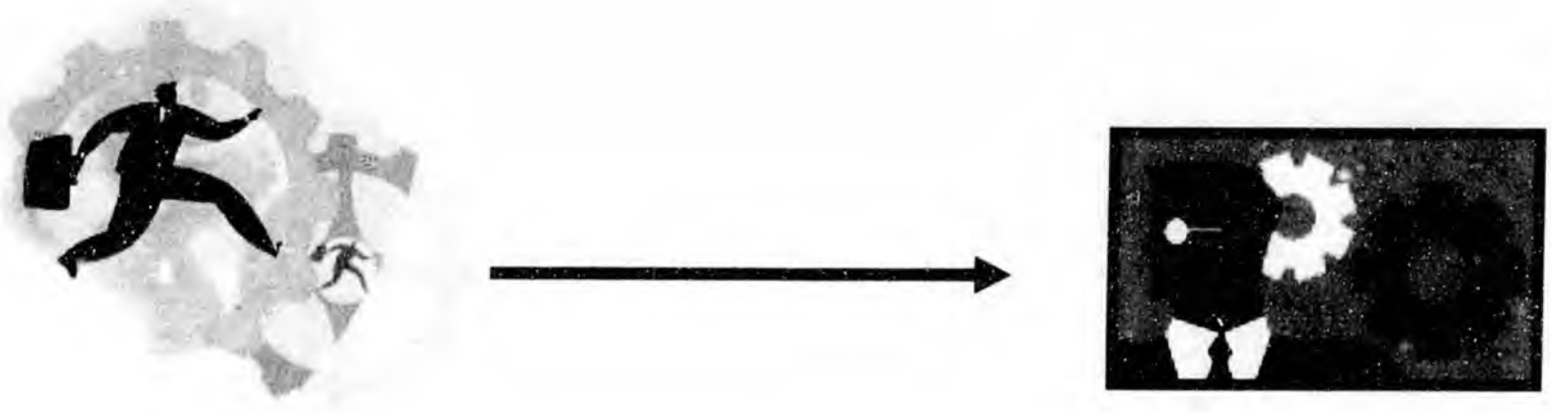


# Consensus-Building Model



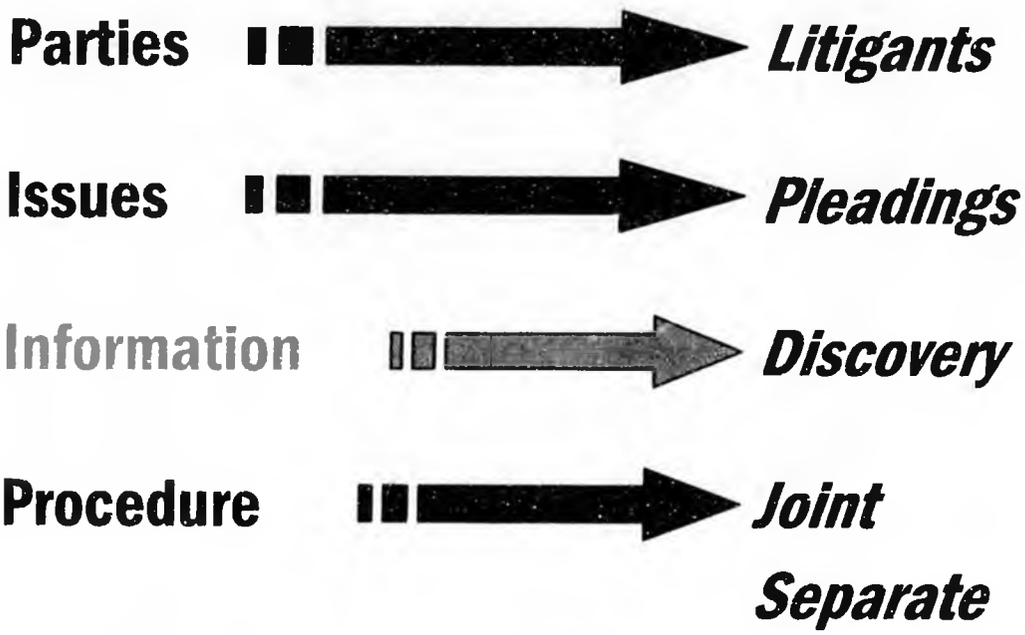
# Strategy Paradigm

**HOW to get from HERE to THERE in TIME with the available RESOURCES**



# Civil Litigation

*Standard Mediation Model*

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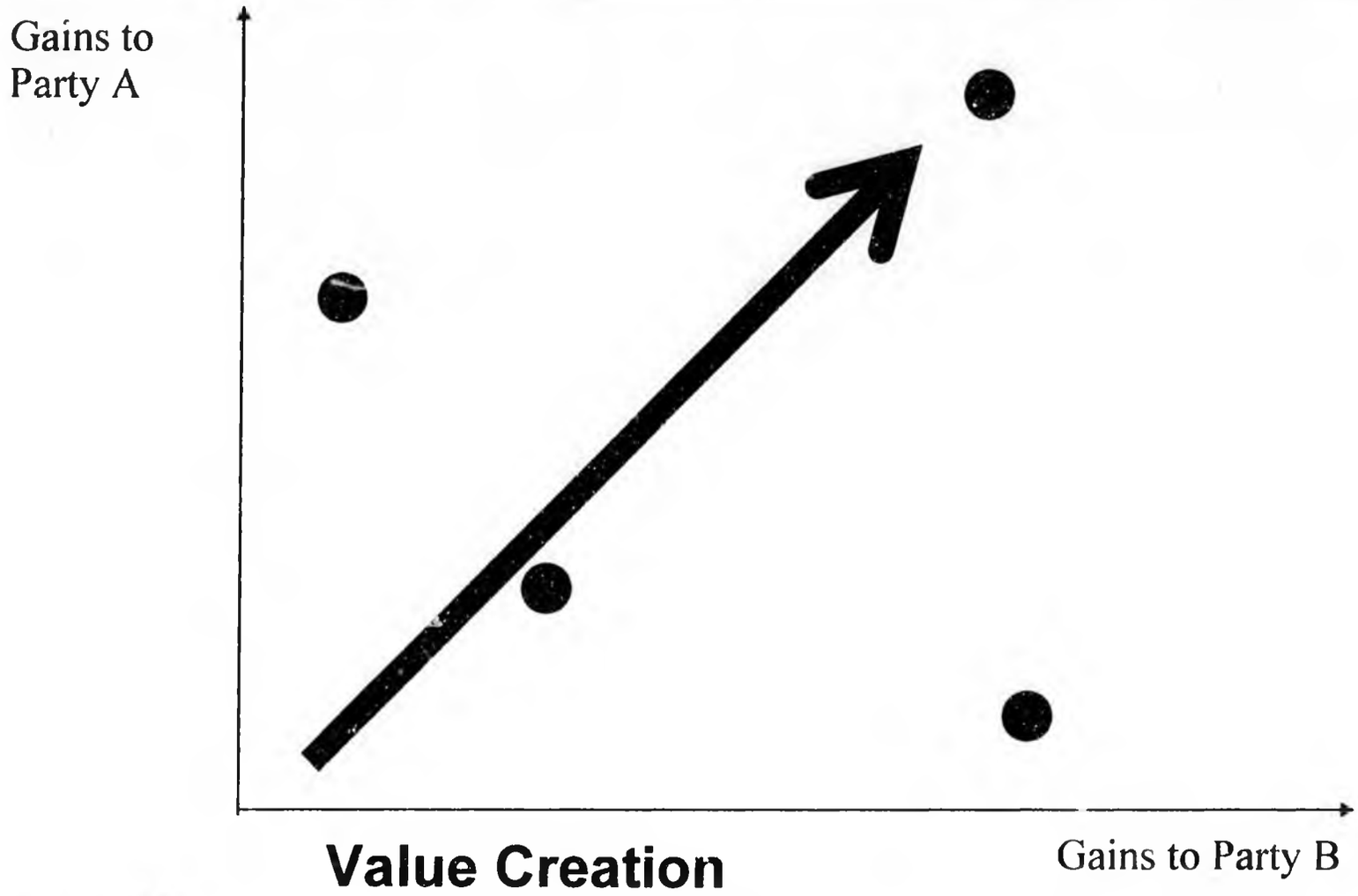
# Mediation Variables

- Mediation Paradigm
  - Consensus building
  - Problem solving
- Mediation Process
  - Parties
  - Issues
  - Information
  - Procedure

# Mediation Variables

- Mediation Style
  - Facilitative/elective
  - Evaluative/directive
  - Empathetic
  - Assertive
- Persuasion
- Economic
  - Interests and relative values
  - Joint gains
  - Differences orientation

# Mediation Variables



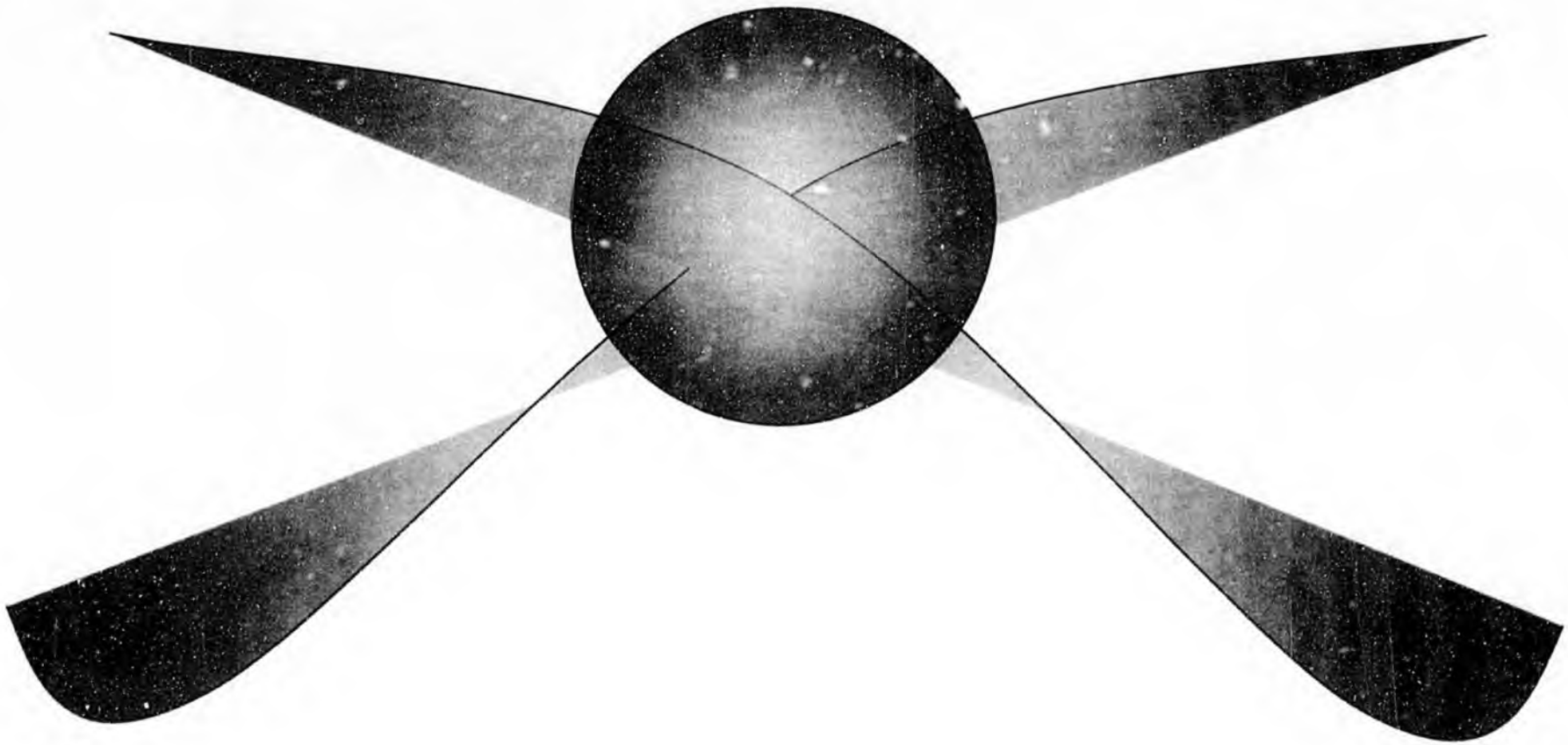
# Mediation Variables

- Psychological/Cultural
  - Tendencies
  - Communication
- Bargaining
  - Strategic opportunistic
  - Deliberative
  - Narrative

# Mediation Variables

- Institutional
  - Incentives
- Rhetorical
  - Ethos
  - Pathos
  - Logos

# Zone of Agreement



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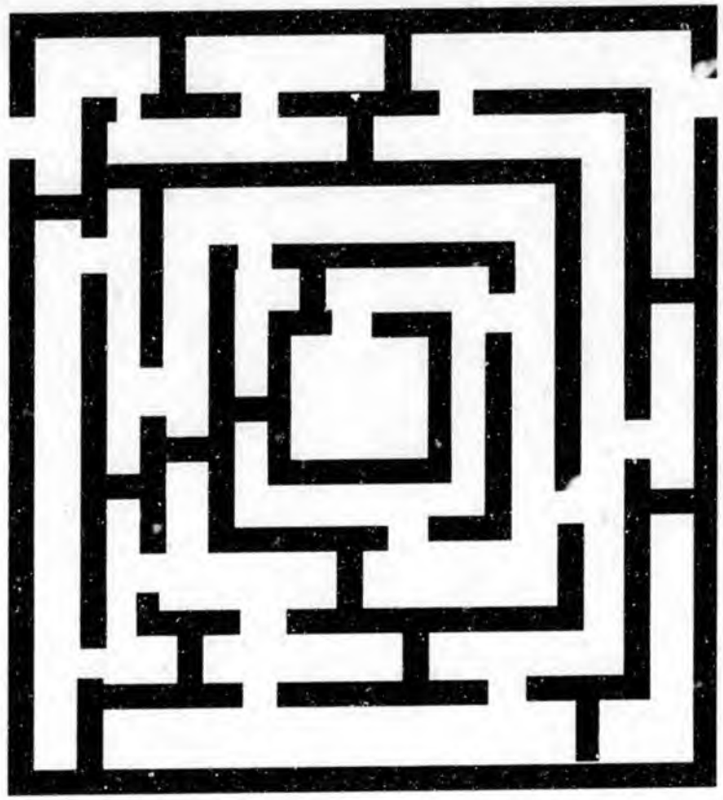
# Reverse Induction



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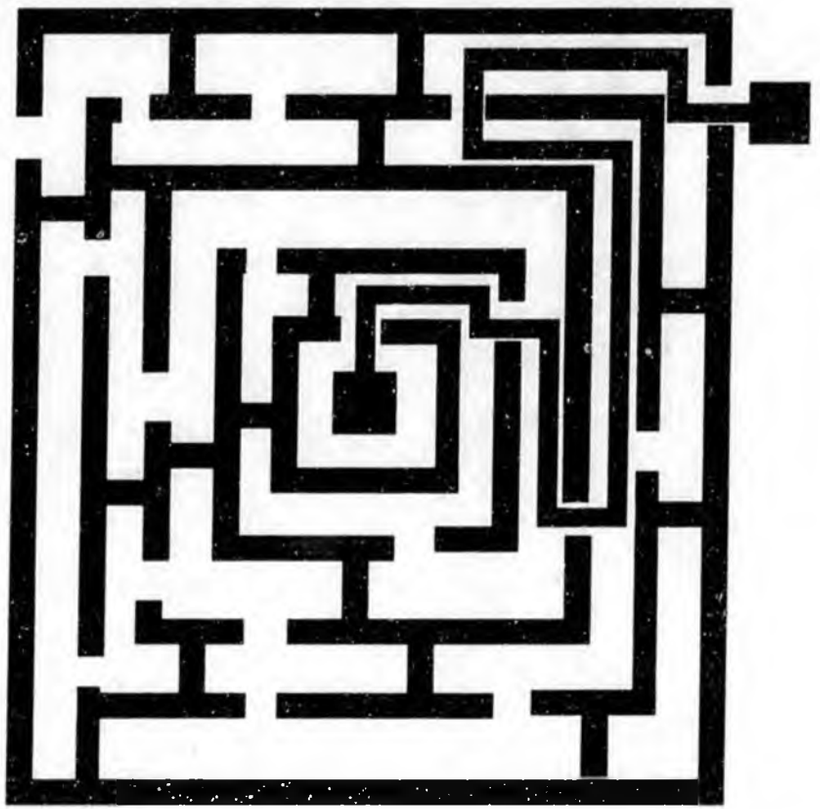
# Reverse Induction



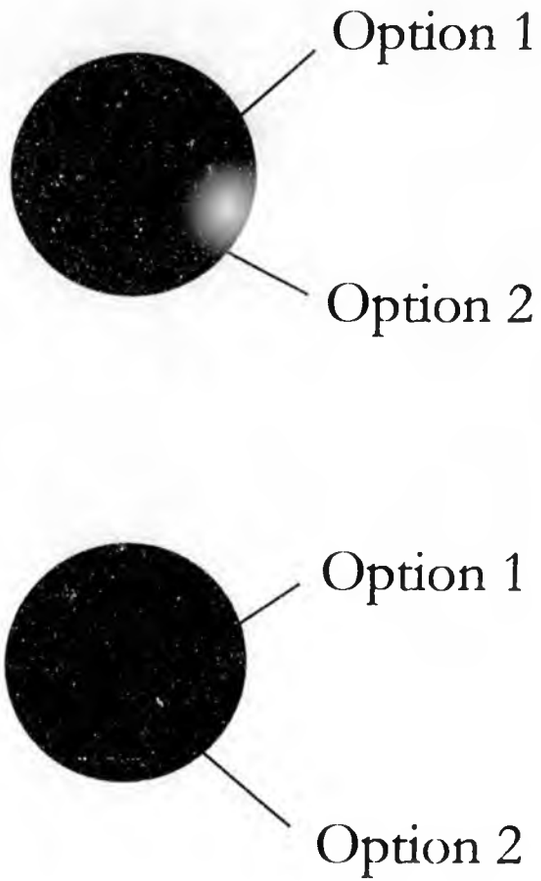
# Dialectic

THESIS

ANTITHESIS

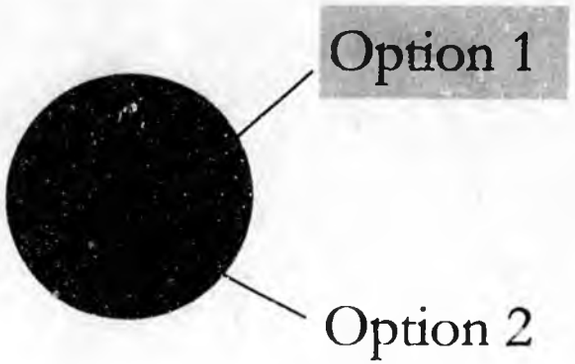
SYNTHESIS

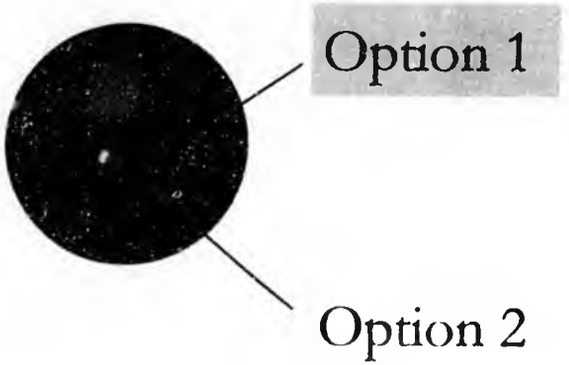
# Mediation




*Zone of Agreement*

# Mediation





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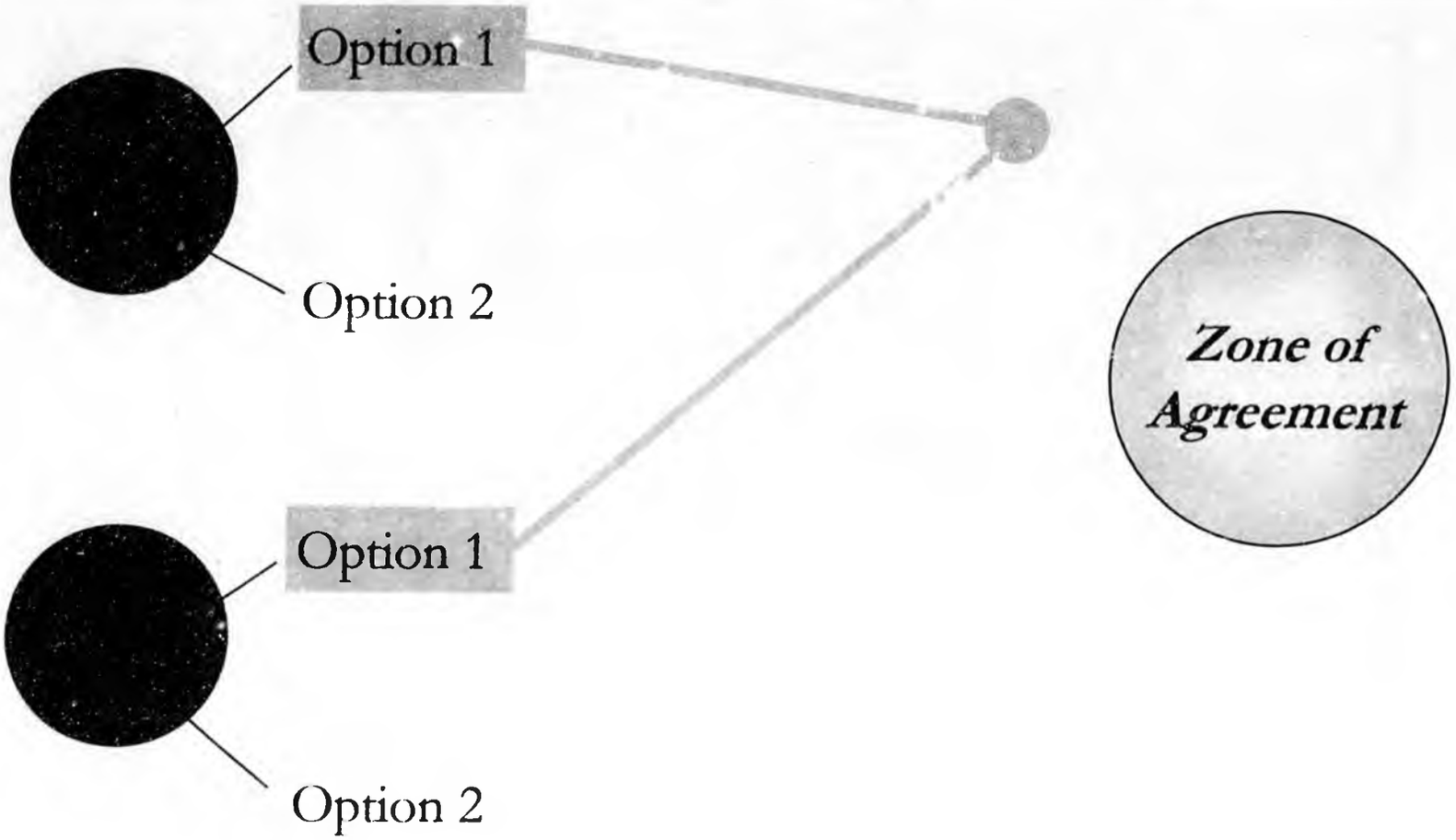
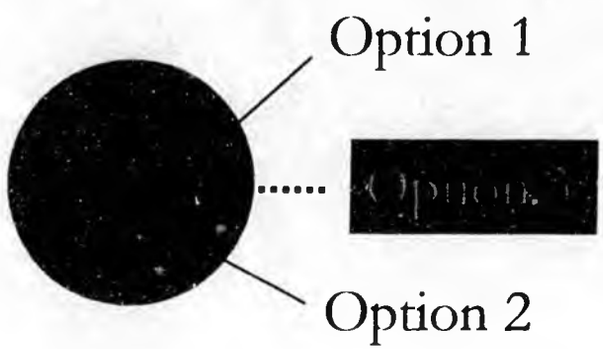
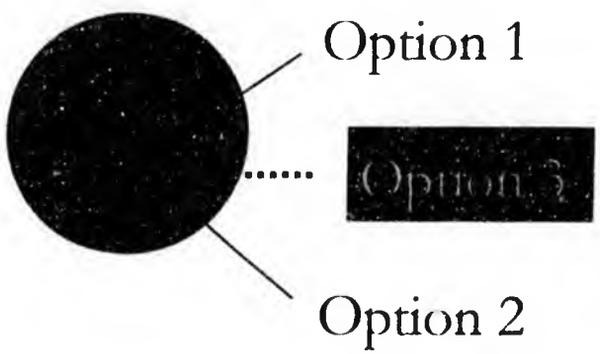
# Mediation



# Mediation – Dialectic





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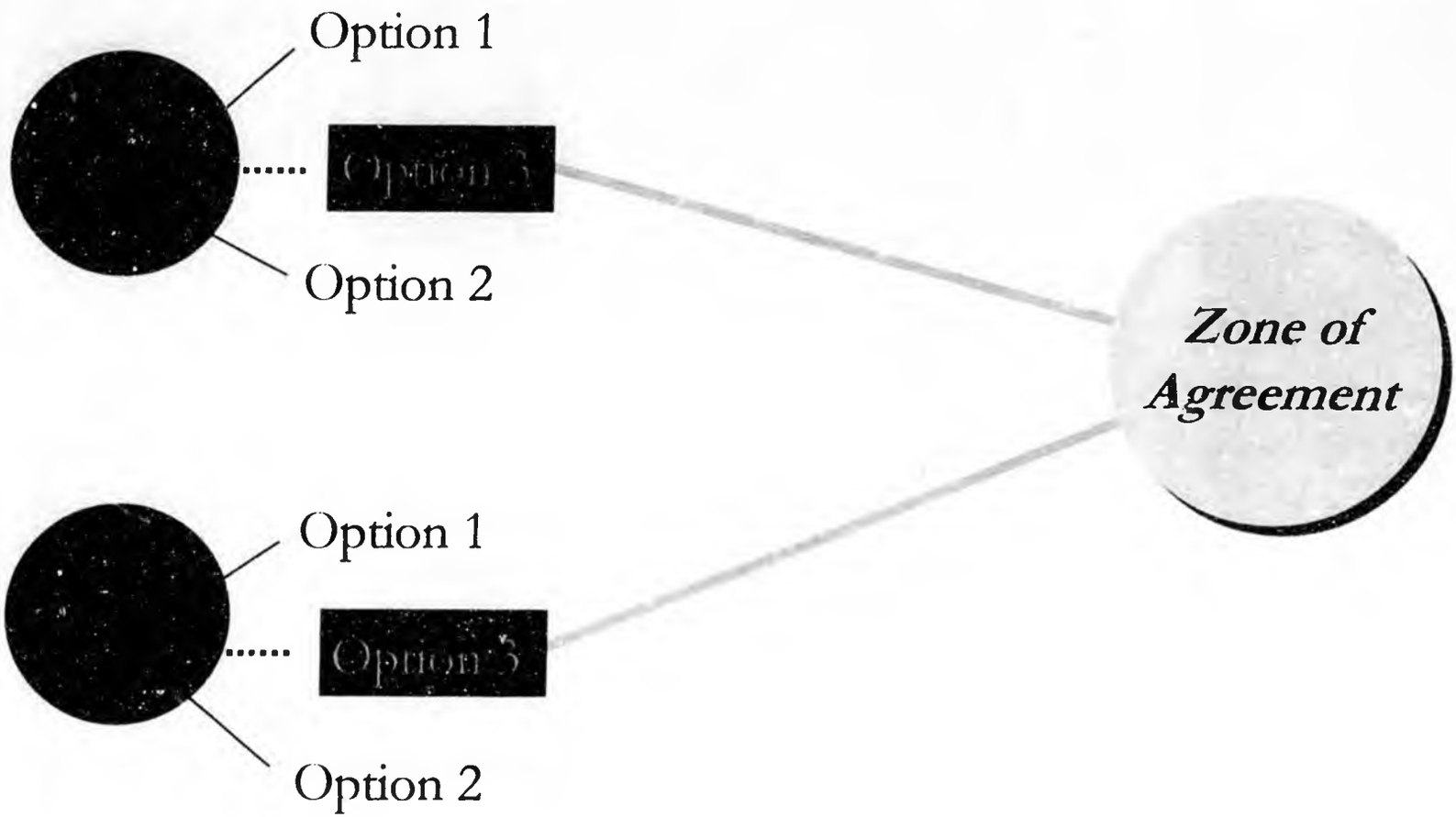
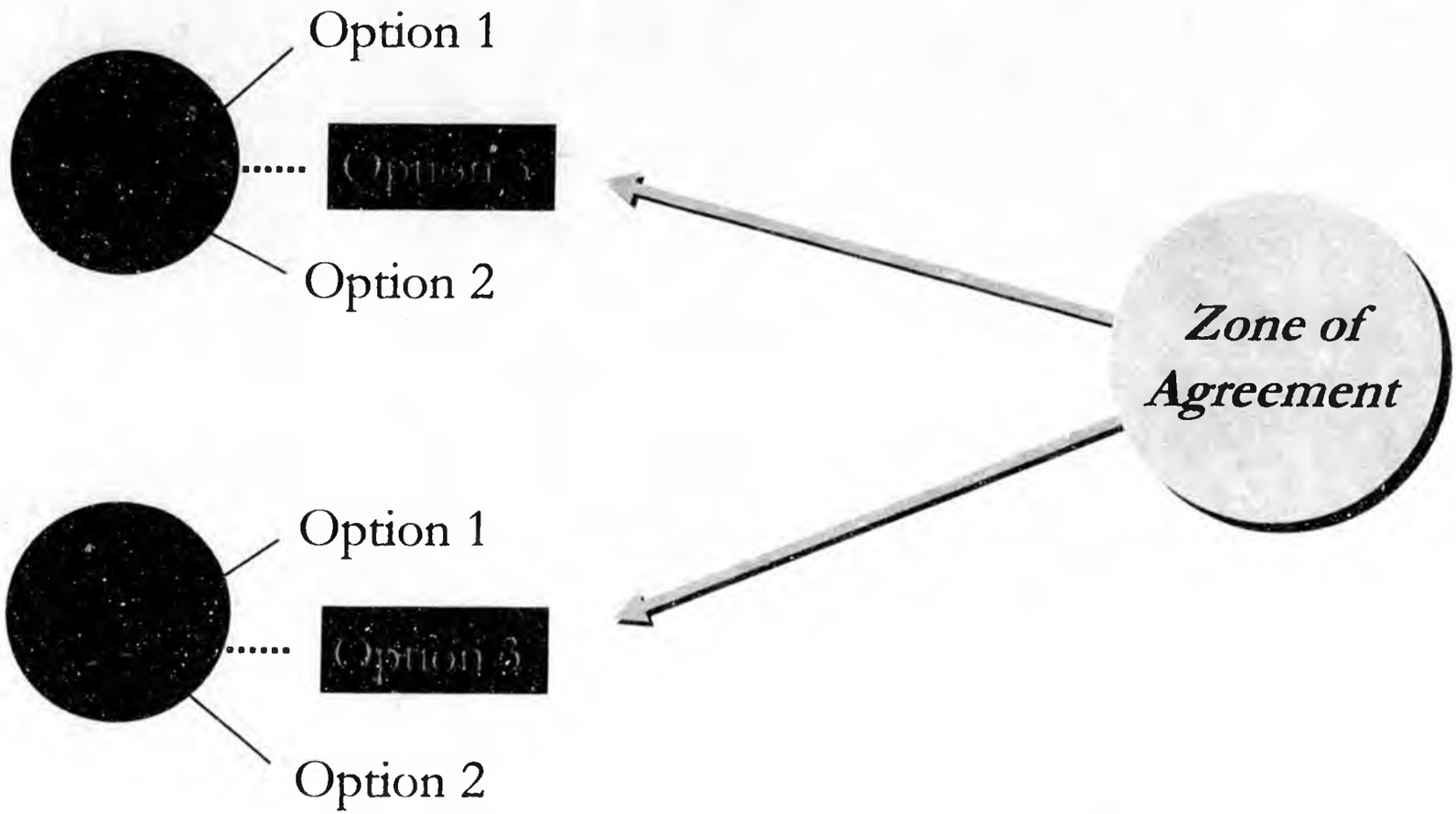
# Mediation – Dialectic



# Mediation Strategy –

## Reverse Induction/Dialectic



# Mediation Strategy

- Understand parties' strategies
- Determine any possible zones of agreement
- Develop possible zones of agreement
- Develop a path to a zone of agreement
- Utilize mediation variables
- Update path as developments occur

# Decisions

Problem

Process

Enterprise Narrative

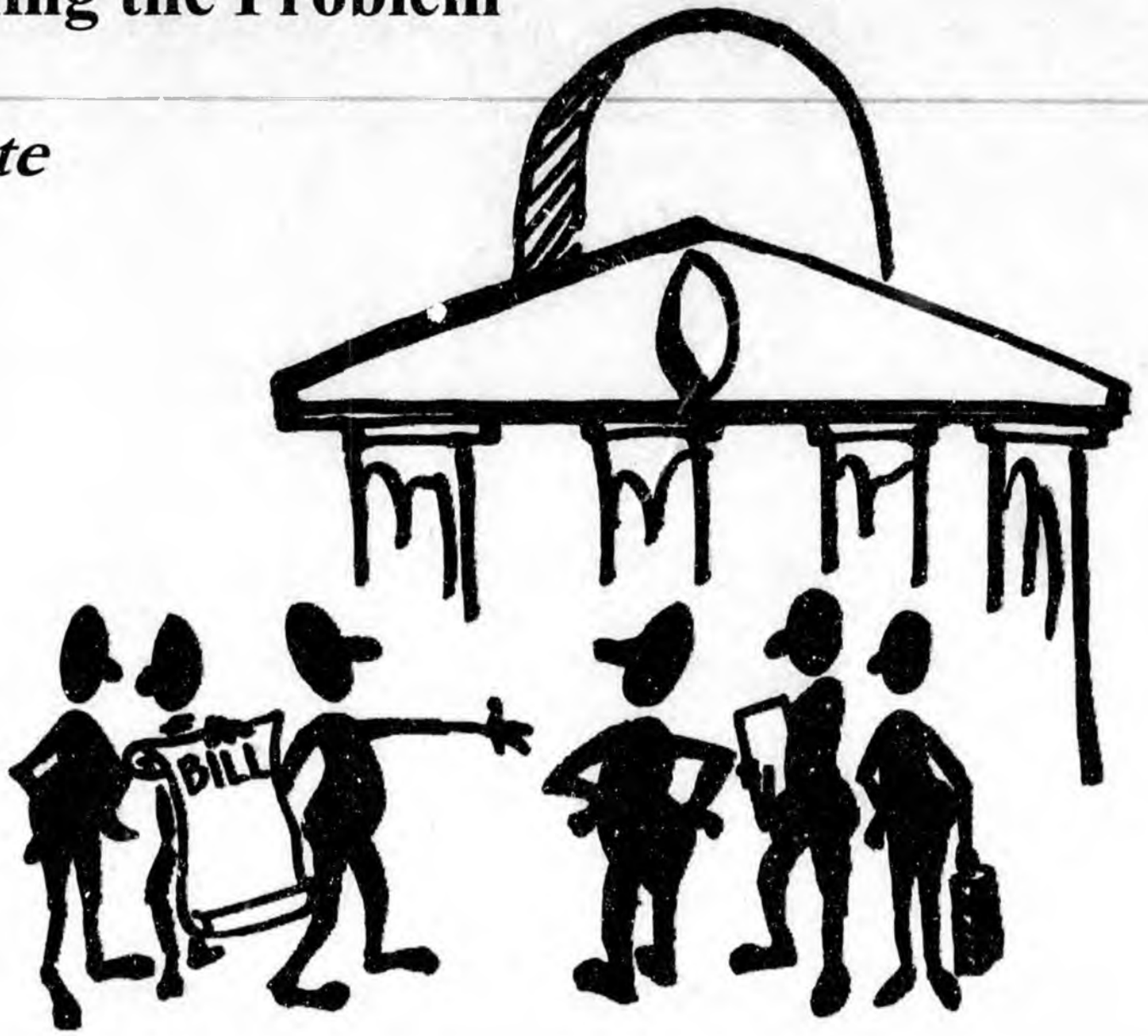
Consensus Building Institute

# Defining the Problem

Consensus Building Institute

# Defining the Problem

*Statute*

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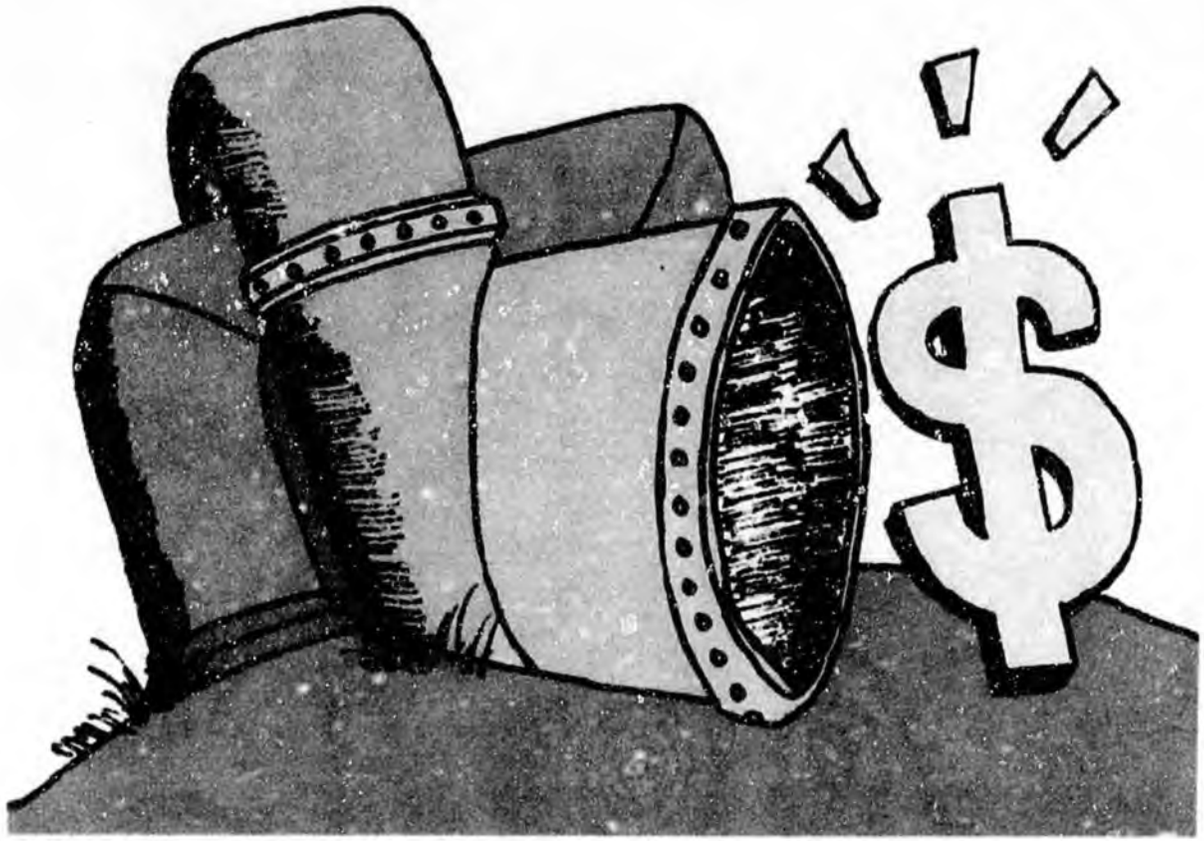
# Defining the Problem

## *Ownership, Tariff, and Tax*

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# Defining the Problem

## *Entire State*


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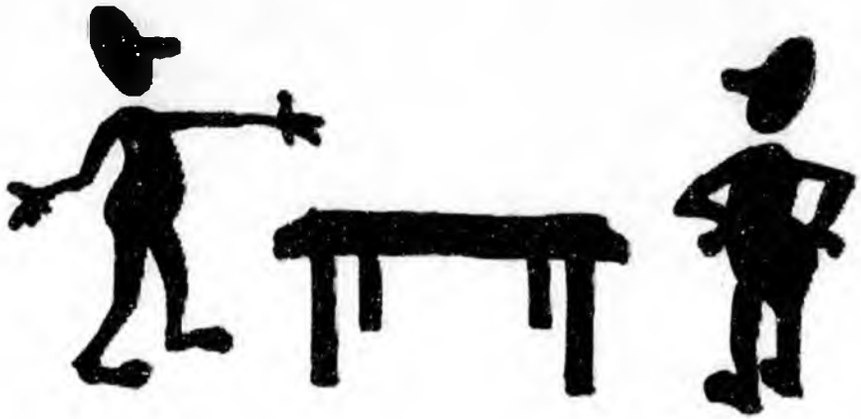
# Defining the Process

Consensus Building Institute

# Defining the Process

*Negotiation*



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# Defining the Process

*Litigation*


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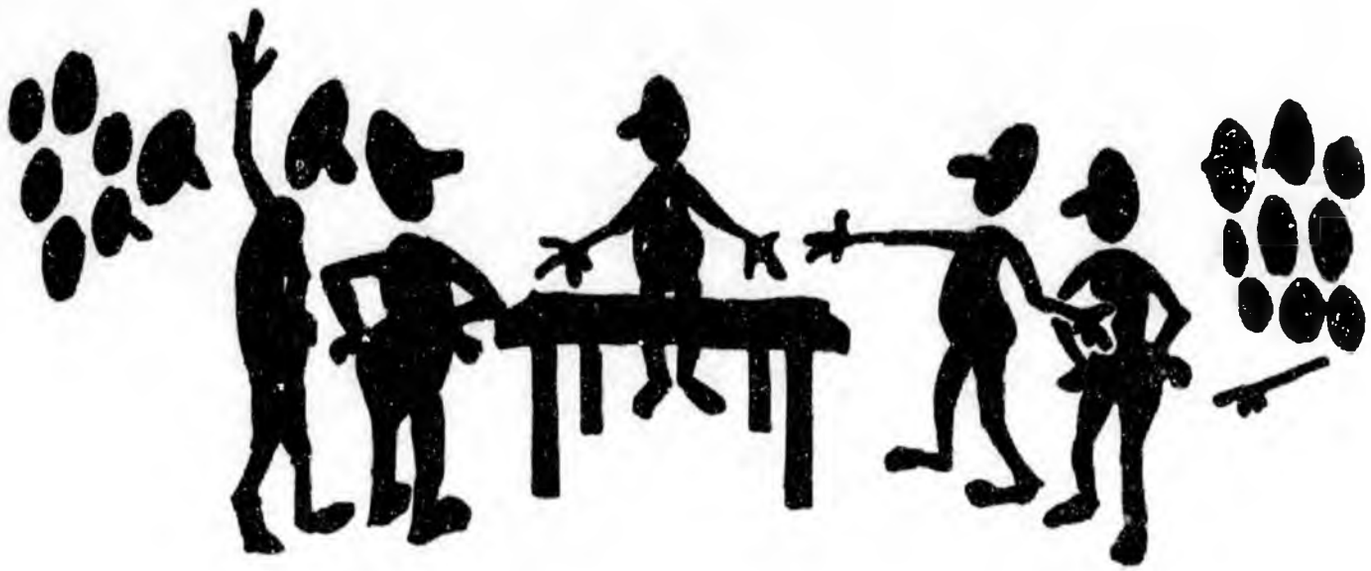
# Defining the Process

*Mediation*



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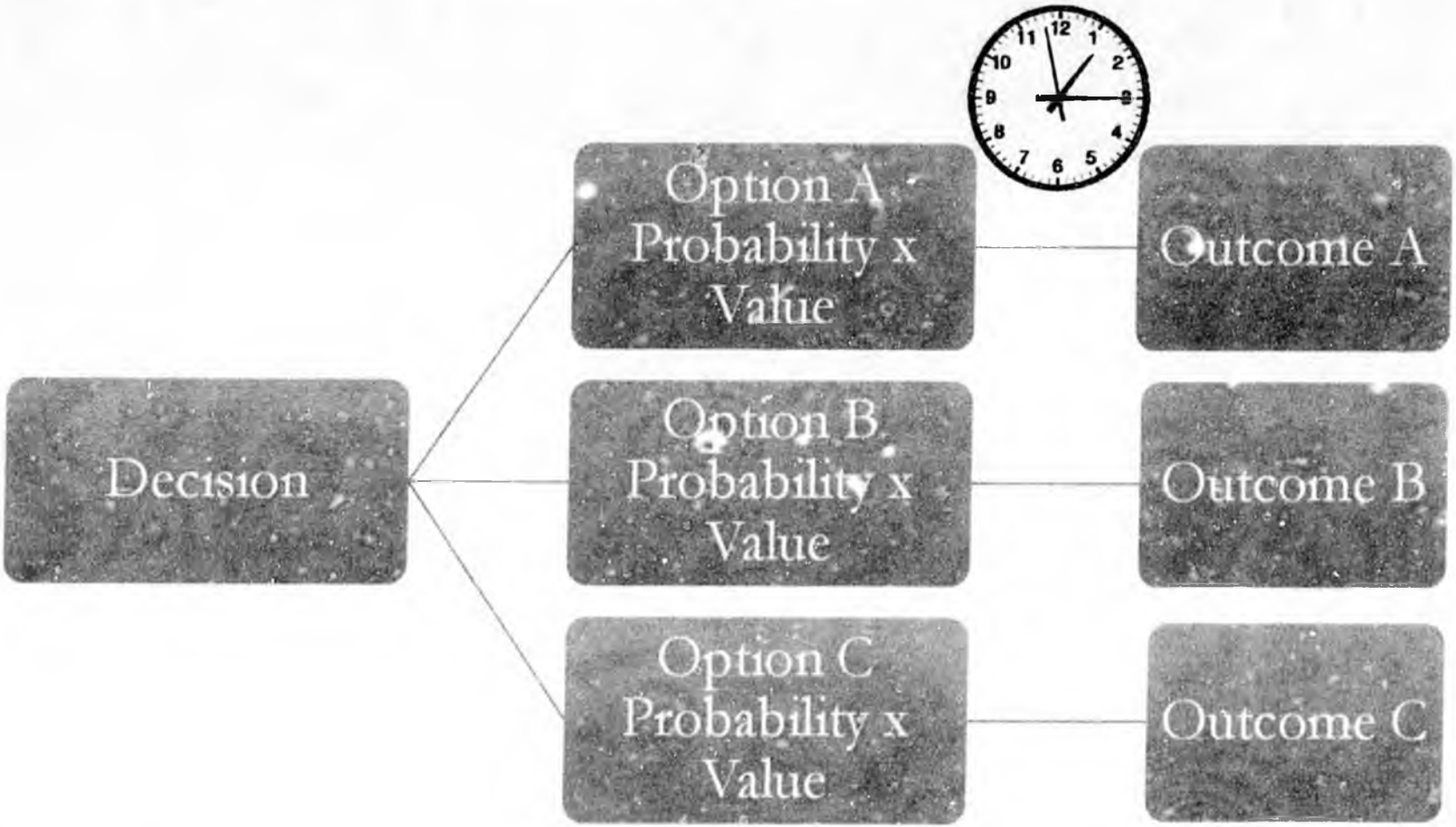
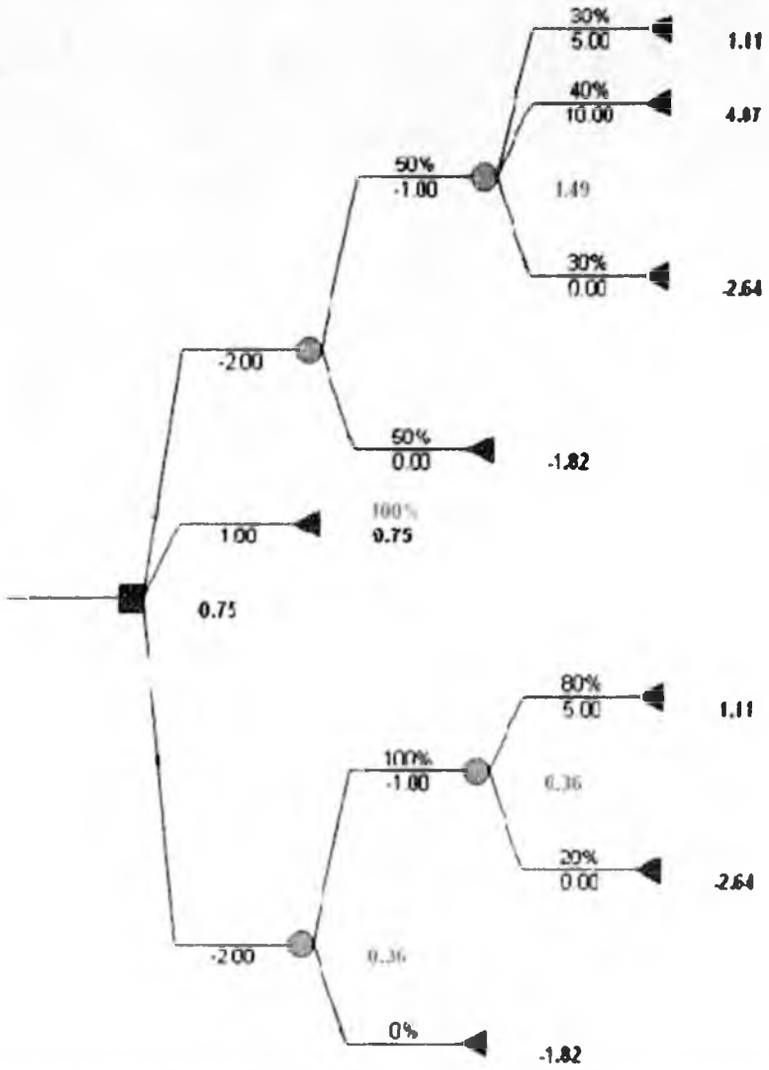
# Decision Tree



# Complex Decision Tree

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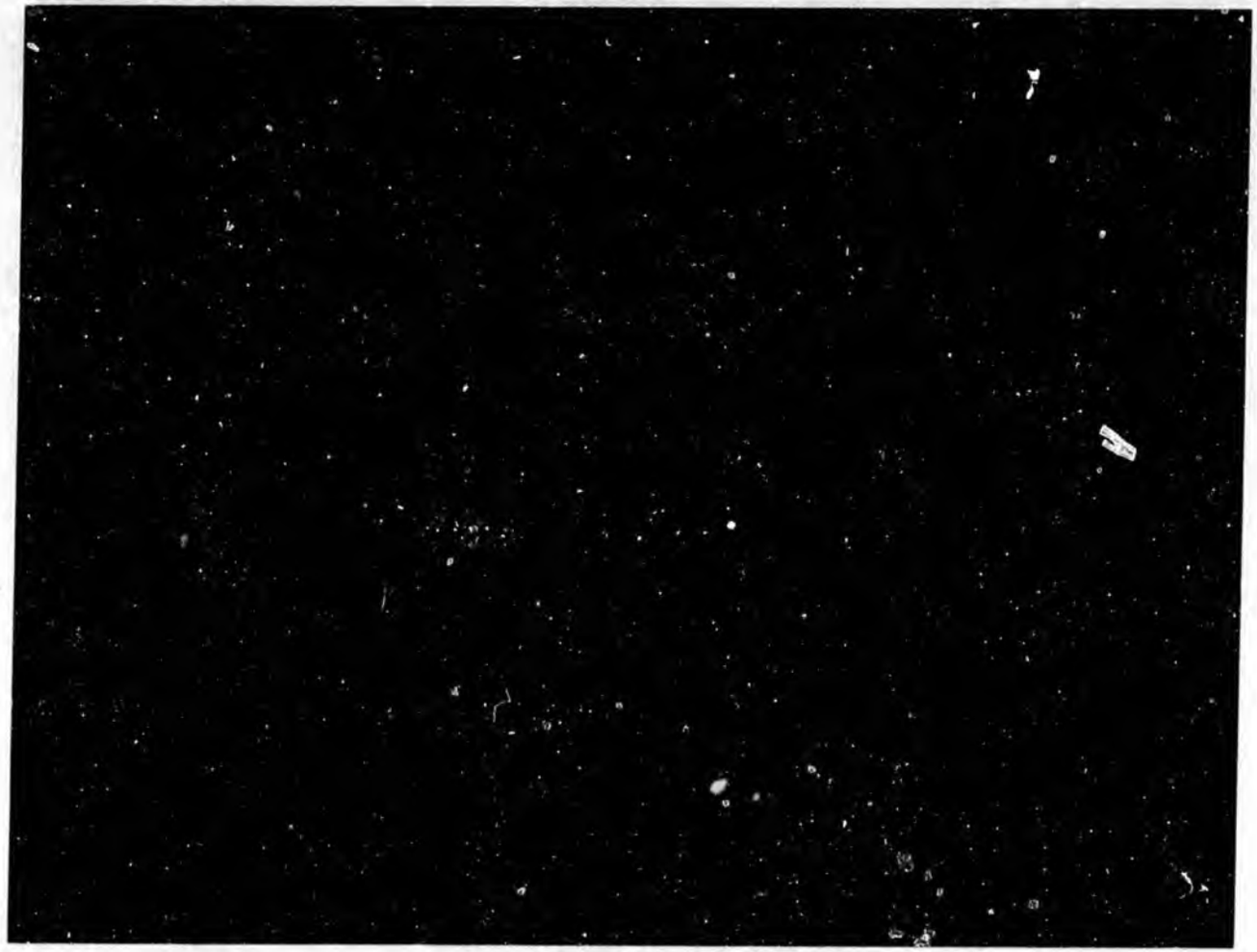
# Defining the Enterprise Narrative

Consensus Building Institute

# Defining the Enterprise Narrative

*Chess*



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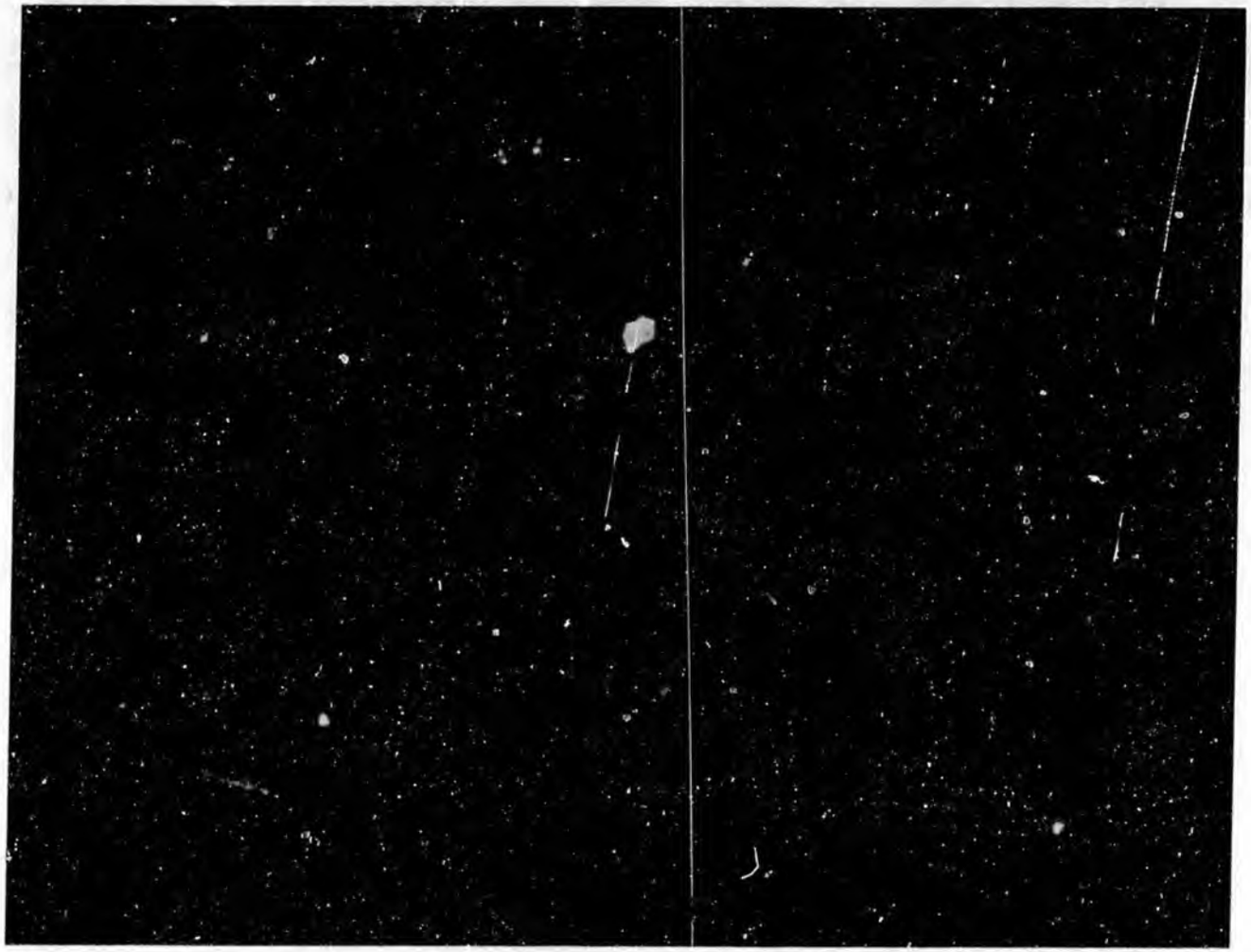
# Defining the Enterprise Narrative

*Chicken*



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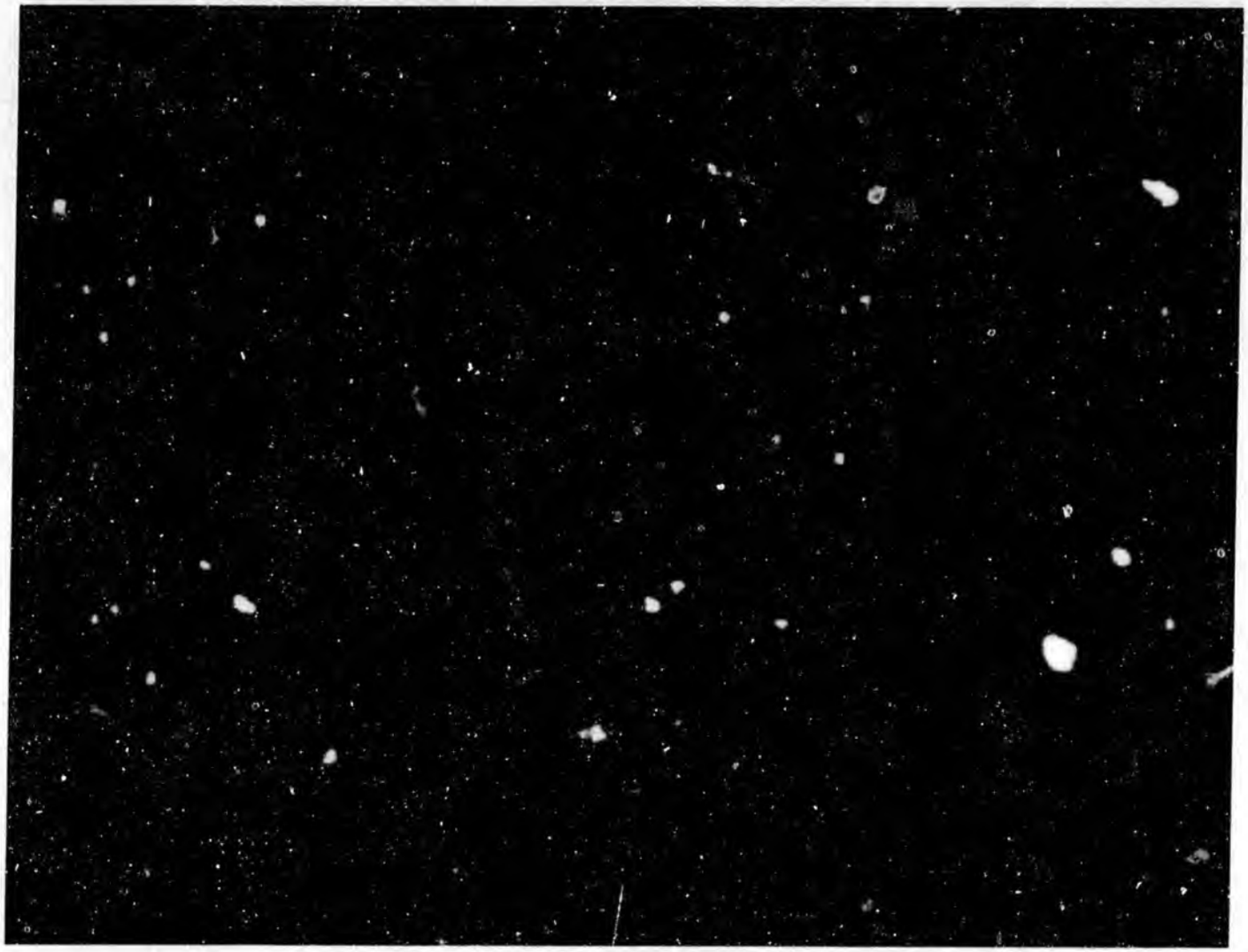
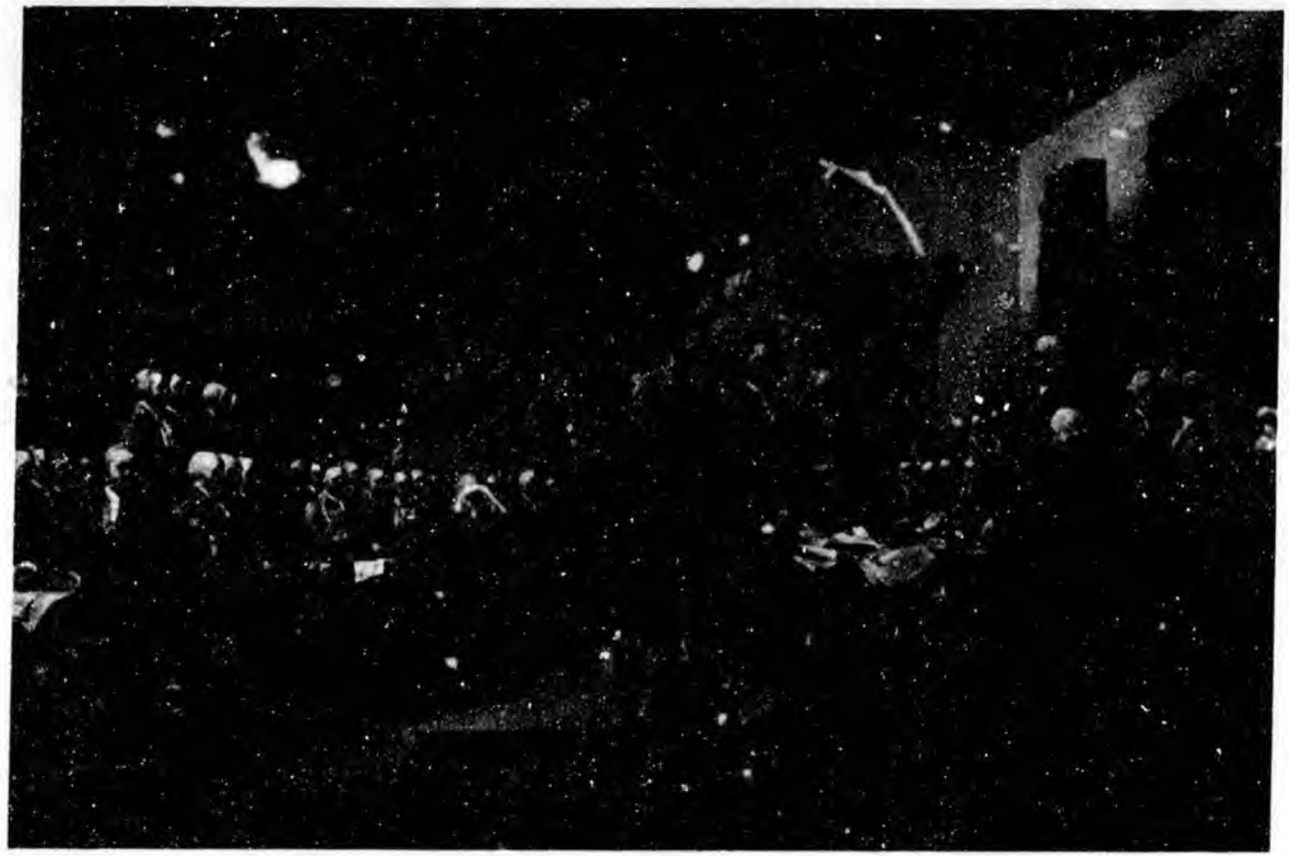
# Defining the Enterprise Narrative

***War***



# Defining the Enterprise Narrative

## *Value Creation*



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# Defining the Enterprise Narrative

## *Value Creation*

# Snake River Basin Adjudication

## Strategic Mediation

- Parties
- Issues
- Procedures
- Information


Parties
US Department Of Justice
Nez Perce Tribal Executive Committee
Native American Rights Fund
Bogus Basin Recreation Association
Lake Reservoir Company
Little Salmon Water Users
Newfoundland Partners
Payette River Water Users
Pioneer Irrigation District
Settlers Irrigation District
Sinclair Oil Corporation
Thousand Springs Ranch
State of Idaho
Black Canyon Irrigation District
Potlatch Corporation


Parties
Idaho Power Company
Amalgamated Sugar Company
Basic American Inc.
Eastern Western Corporation
Konkolville Lumber Company
Lamb Weston
Lewiston Orchards Irrigation
Ore Ida Foods, Inc.
Port of Lewiston
Riverside Independent Water
Shearer Lumber Products
Weyerhaeuser
City of Ashton
City of Bliss
City of Bovill


Parties"
City of Buhl
City of Burley
City of Cascade
City of Challis
City of Chubbuck
City of Cottonwood
City of Council
City of Culdesac
City of Deary
City of Declo
City of Donnelly
City of Eden
City of Elk River
City of Emmett


Parties
City of Fairfield
City of Fruitland
Garden City
City of Glenns Ferry
City of Grandview
City of Grangeville
City of Hailey
City of Heyburn
City of Inkom
City of Julietta
City of Kamiah
City of Kendrick
City of Kooskia
City of Kuna
City of Lapwai

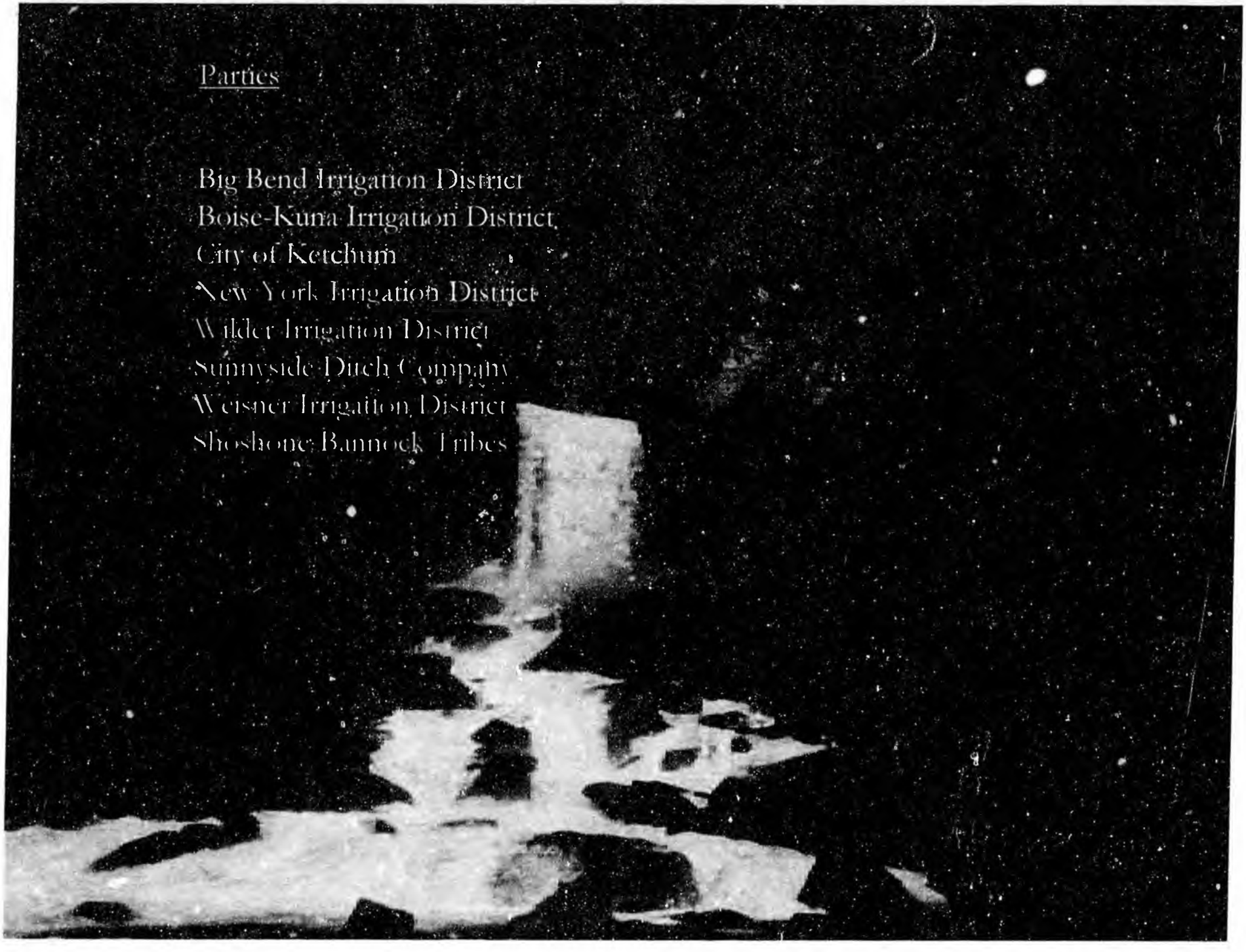

Parties
City of Lewiston
City of Mackay
City of Meridian
City of Middleton
City of Minidoka
City of Mountain Home
City of Mud Lake
City of Nampa
City of New Plymouth
City of Nez Perce
City of Oakley
City of Orofino
City of Parma
City of Paul
City of Payette

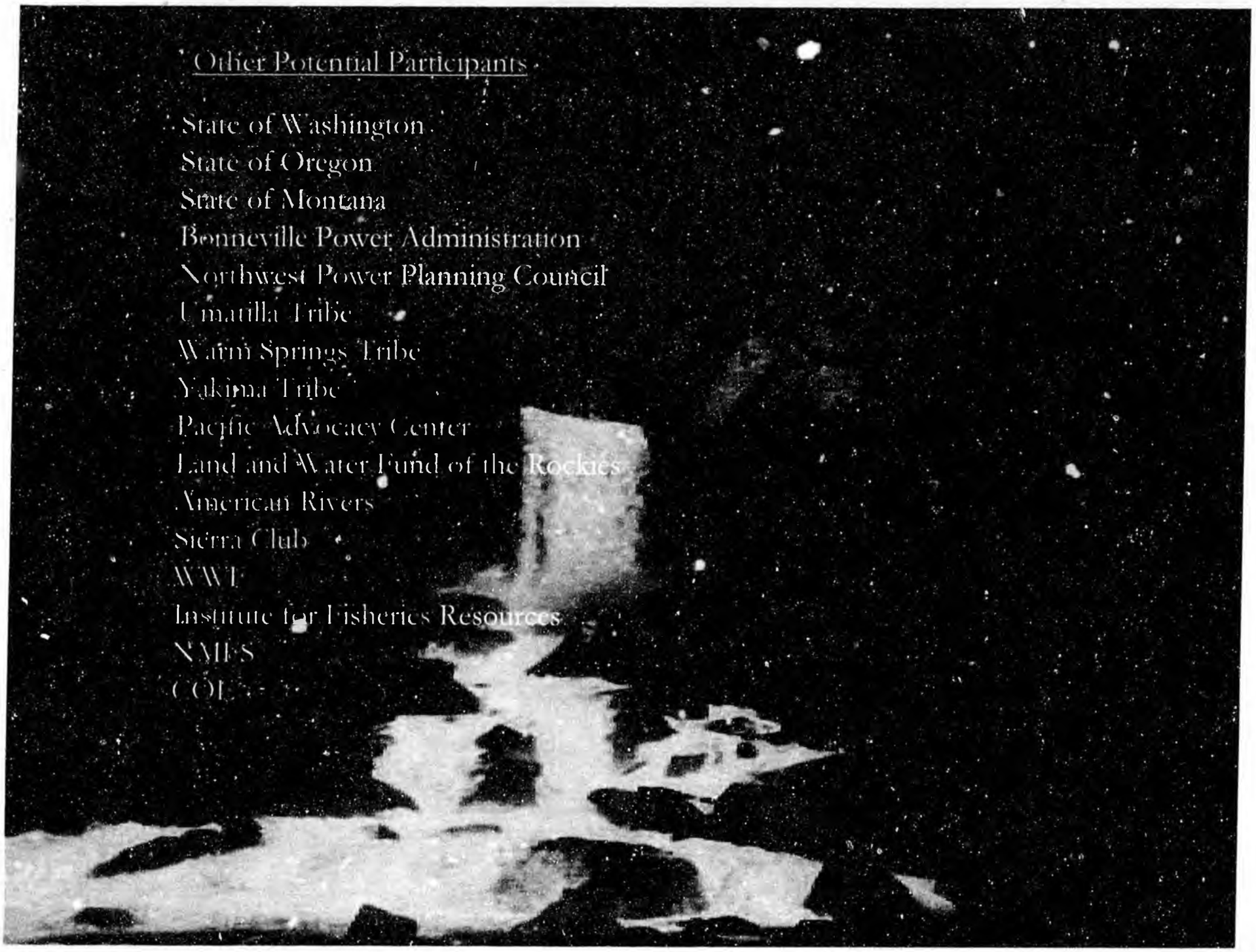

Parties
City of Peck
City of Pierce
City of Pocatello
City of Rigby
City of Ririe
City of Roberts
City of Rupert
Sugar City
City of Salmon
City of St. Anthony
City of Shites
City of Troy
City of Ucon
City of Weiser

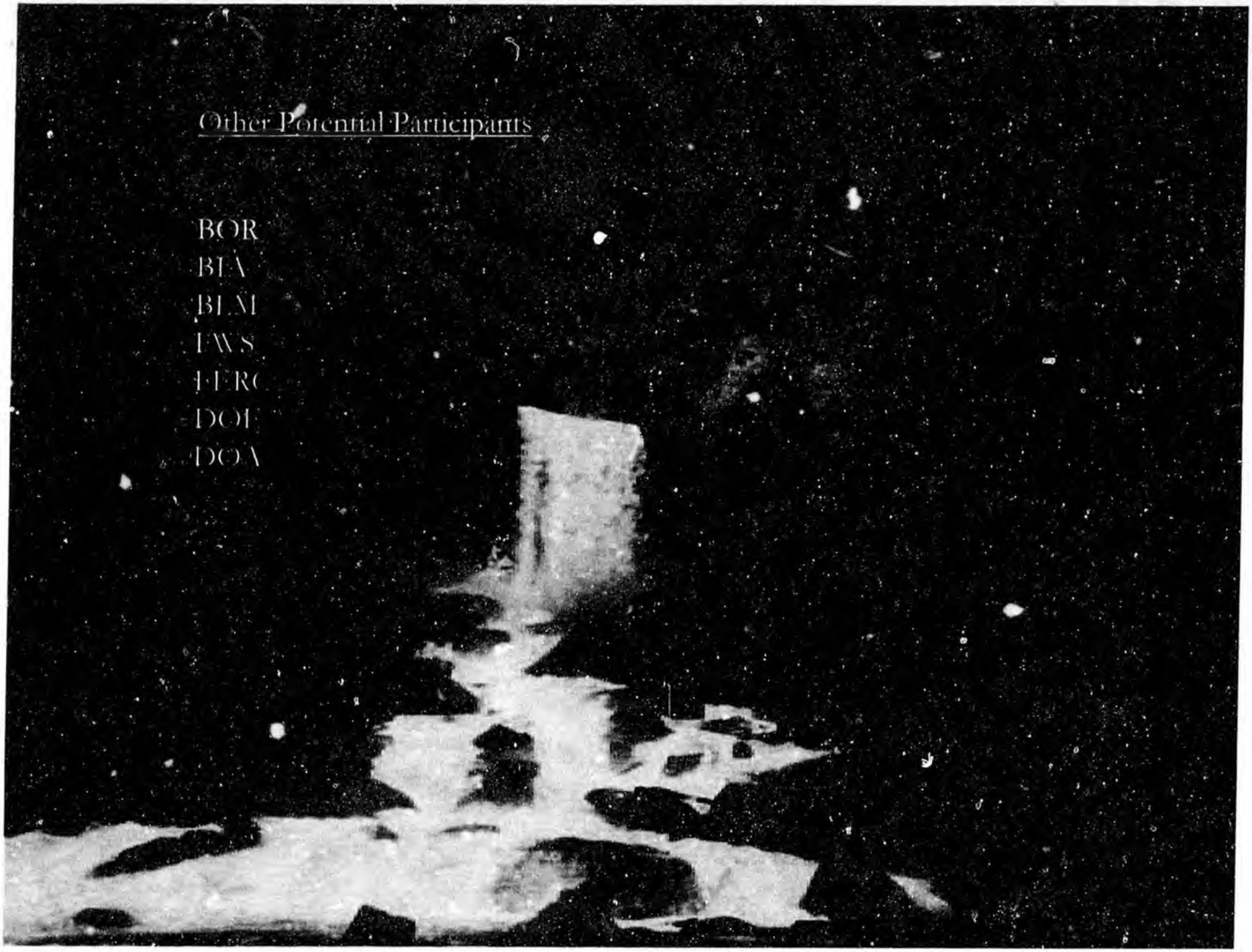

Parties
Allen Noble Farms, Inc.
Allen T. Noble
Jeff Blanksma
C & T Ranches
Cottonwood Canal Company
Farm Development Corporation
Grindstone Butte Mutual Canal co.
G. Patrick Morris
Nampa & Meridian Irrigation District
Sailor Creek Water Company
West End Project
Hecla Mining Company
Boise Cascade Corporation
V & B Irrigation District
Aberdeen-Springfield Canal Co.

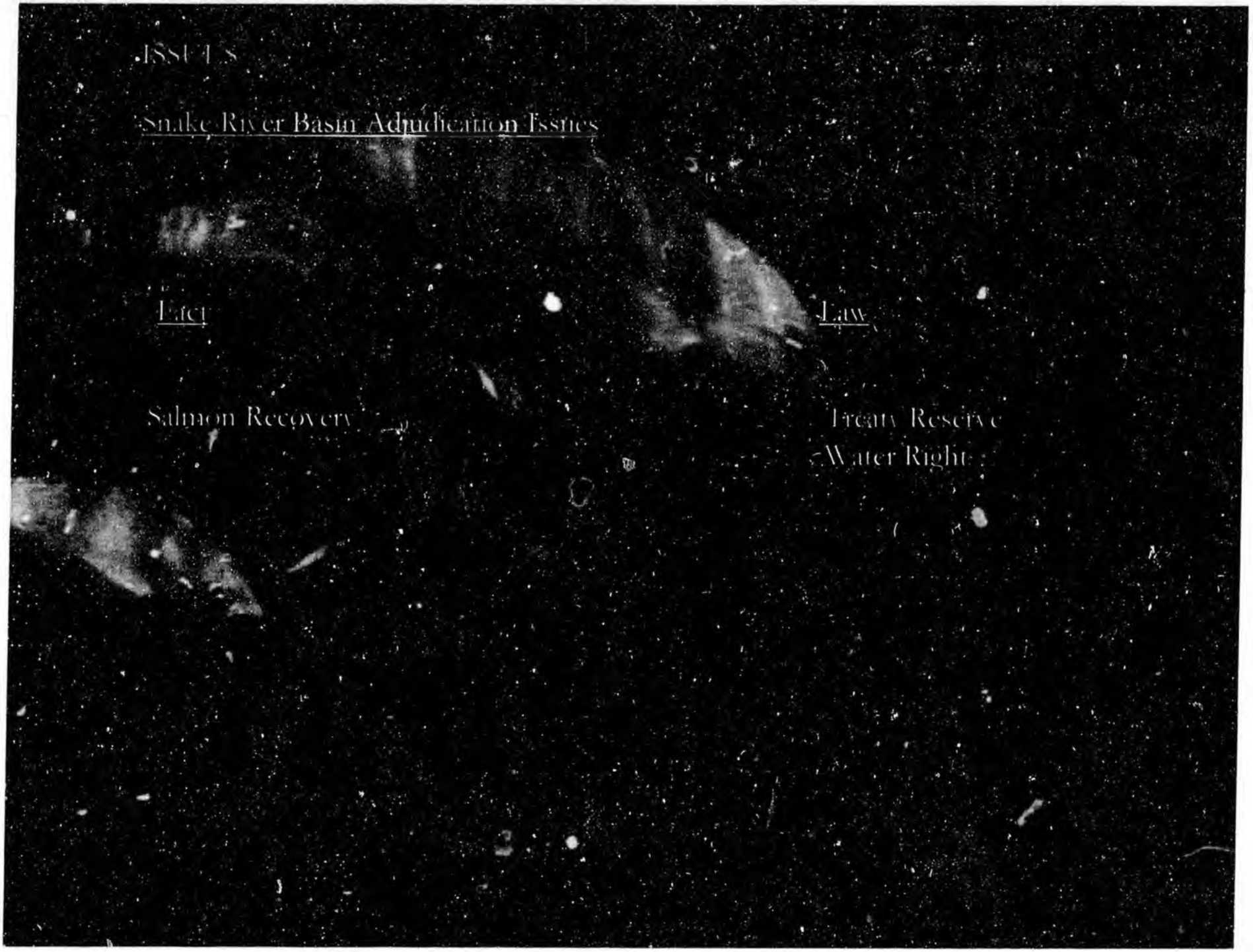

Parties
Burley Irrigation District
Falls Irrigation District
Milner Irrigation District
Twin Falls Canal Company
Farmers Co-op Ditch Company, Ltd.
Burgess Canal & Irrigation
Egen Bench Canal, Inc.
Enterprise Irrigation District
Idaho Irrigation District
New Sweden Irrigation District
North Fremont Canal & Irrigation
Peoples Canal & Irrigation
Progressive Irrigation District
Snake River Valley Irrigation
Minidoka Irrigation District

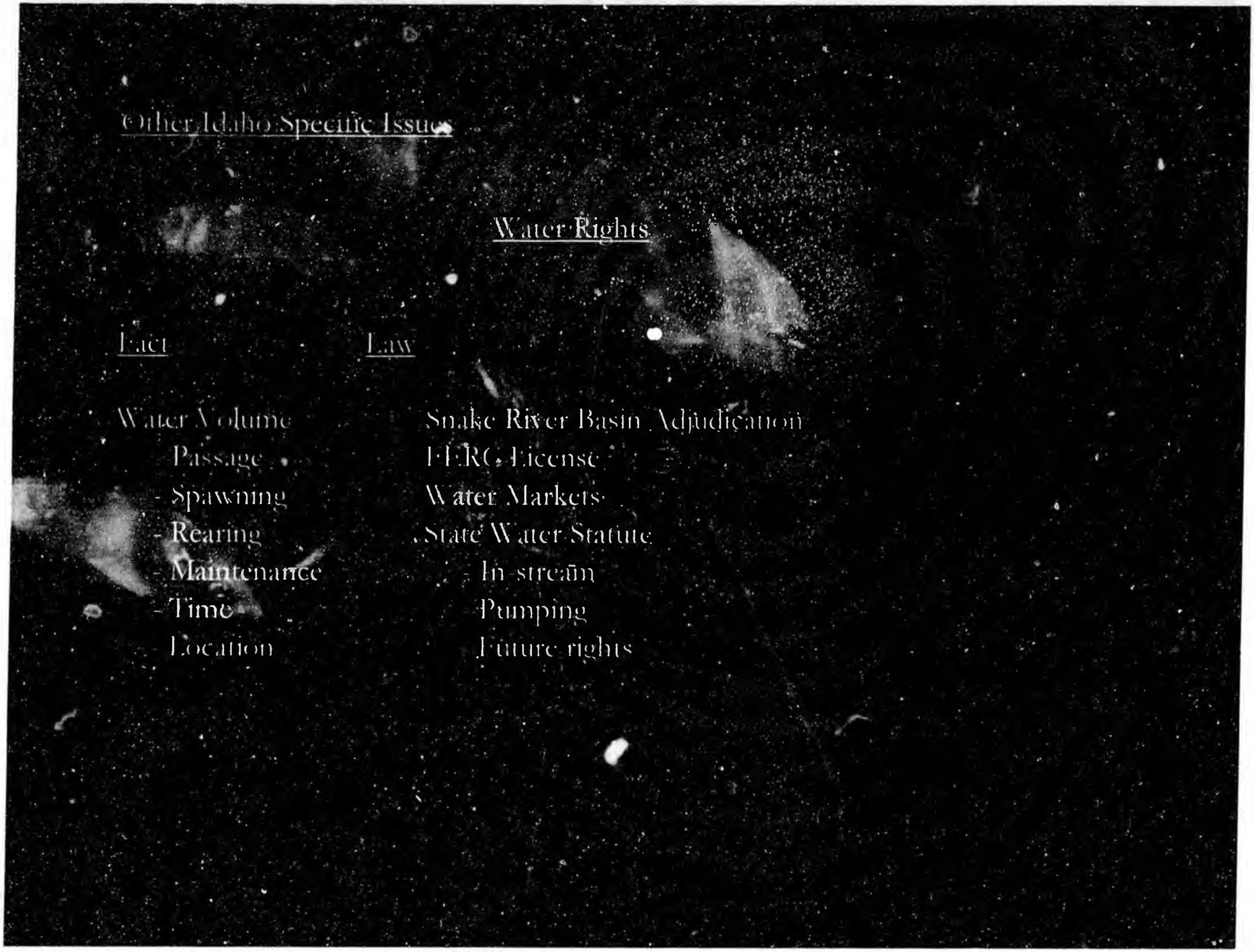

Parties
JR Simplot Company
Agland, Inc.
Agwild, Inc.
Bar U Inc.
Buck Creek Ranch, Inc.
Glen Dale Farms, Inc.
MIL Investment Company
Potato Storage, Inc.
Simplot Cattle Company
Simplot Dairy Products, Inc.
Simplot Meat Products, Inc.
SSI Food Services, Inc.
SSI Foods, Inc.
Sunnyslope Orchards
TM Ranch Company

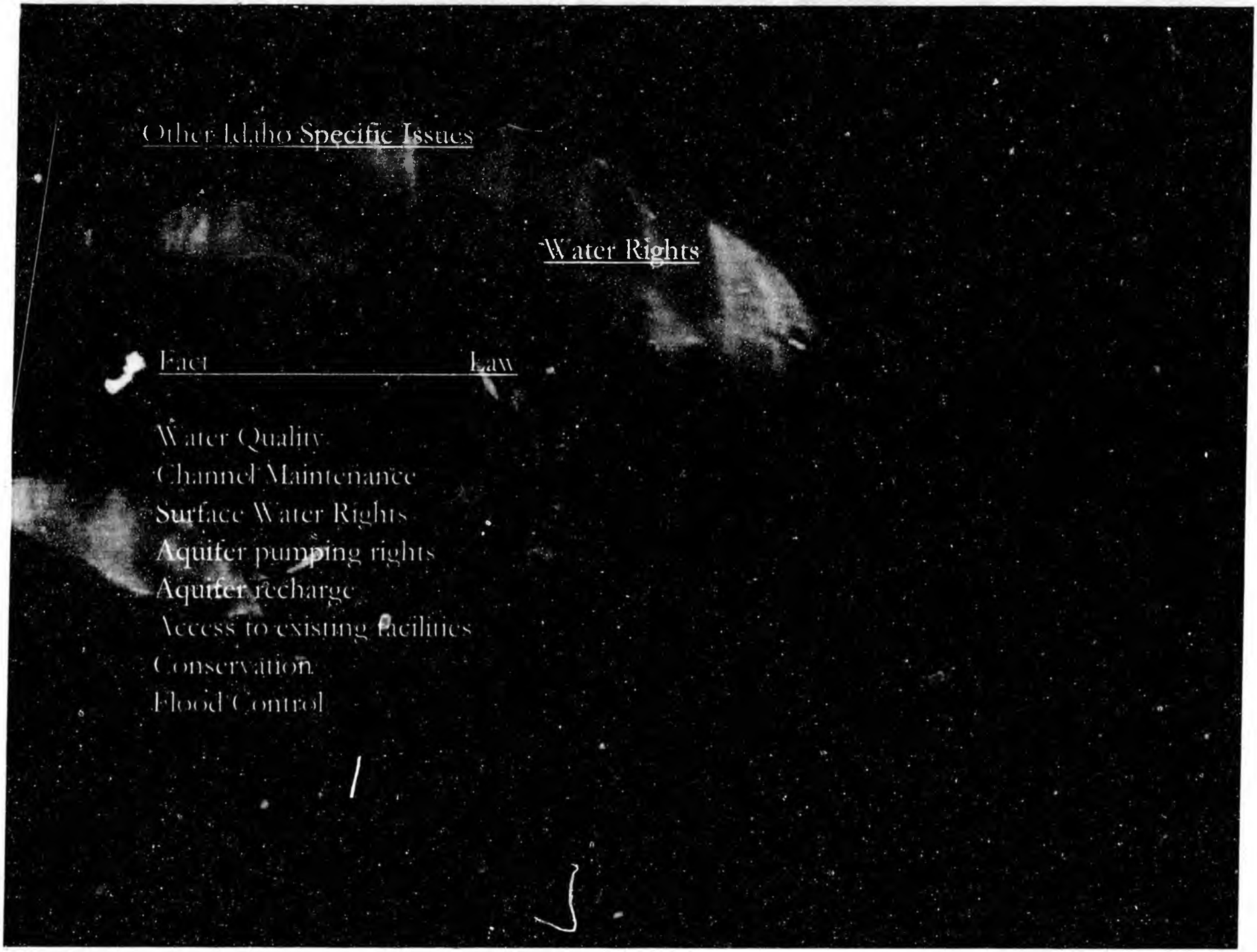

Parties
Big Bend Irrigation District
Boise-Kuna Irrigation District
City of Ketchum
New York Irrigation District
Wilder Irrigation District
Sunnyside Ditch Company
Weisner Irrigation District
Shoshone-Bannock Tribes


Other Potential Participants
State of Washington
State of Oregon
State of Montana
Bonneville Power Administration
Northwest Power Planning Council
Umatilla Tribe
Warm Springs Tribe
Yakima Tribe
Pacific Advocacy Center
Land and Water Fund of the Rockies
American Rivers
Sierra Club
WWF
Institute for Fisheries Resources
NMFS
COE


Other Potential Participants
BOR
BEA
BLAM
EWS
HERO
DOE
DOA


ISSUES
Snake River Basin Adjudication Issues
Fact
Law
Salmon Recovery
Treaty Reserve
Water Right

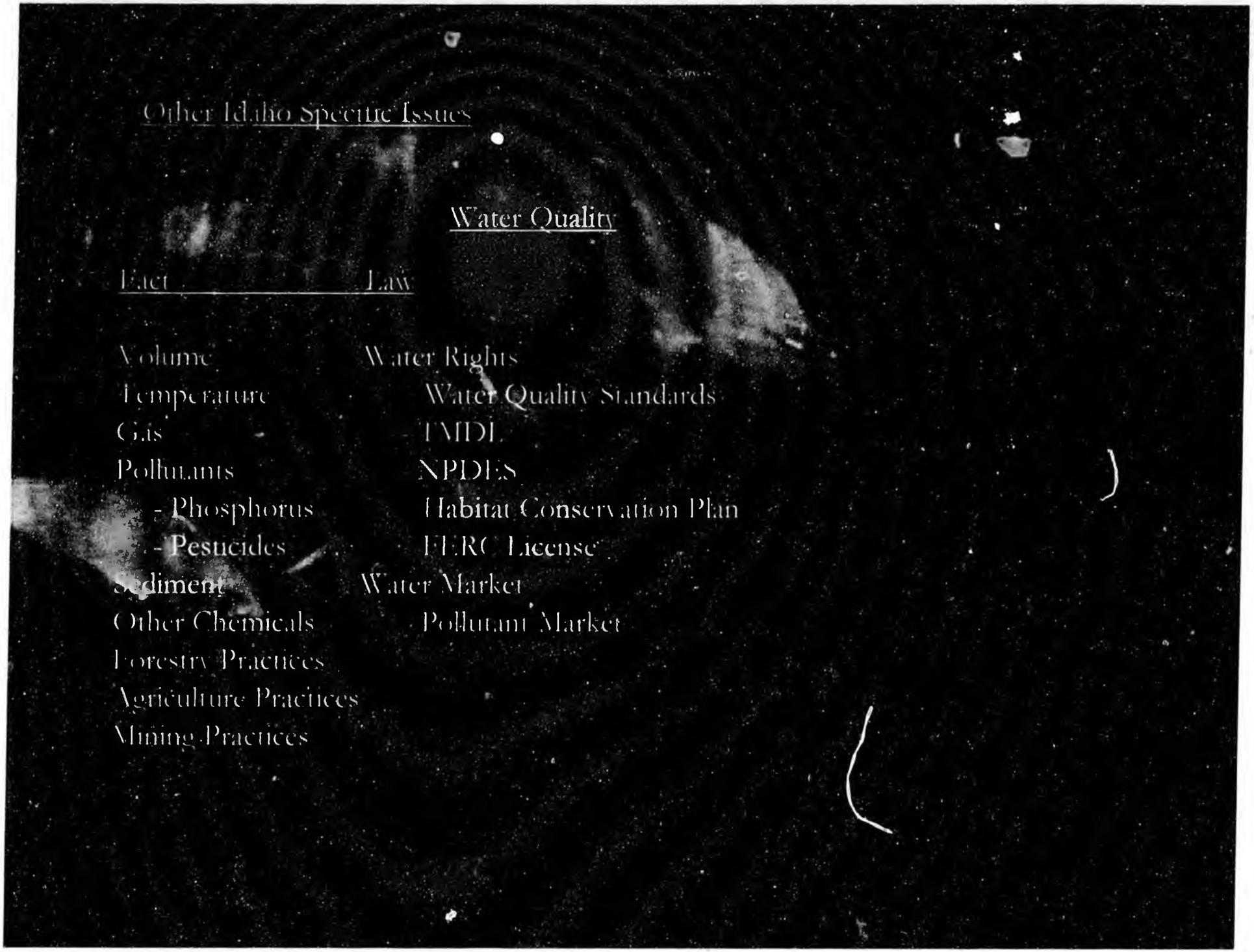

Other Idaho Specific Issues
Water Rights
Fact
Law
Water Volume
Passage
- Spawning
- Rearing
- Maintenance
- Time
Location
Snake River Basin Adjudication
FERC License
Water Markets
State Water Statute
- In-stream
Pumping
Future rights

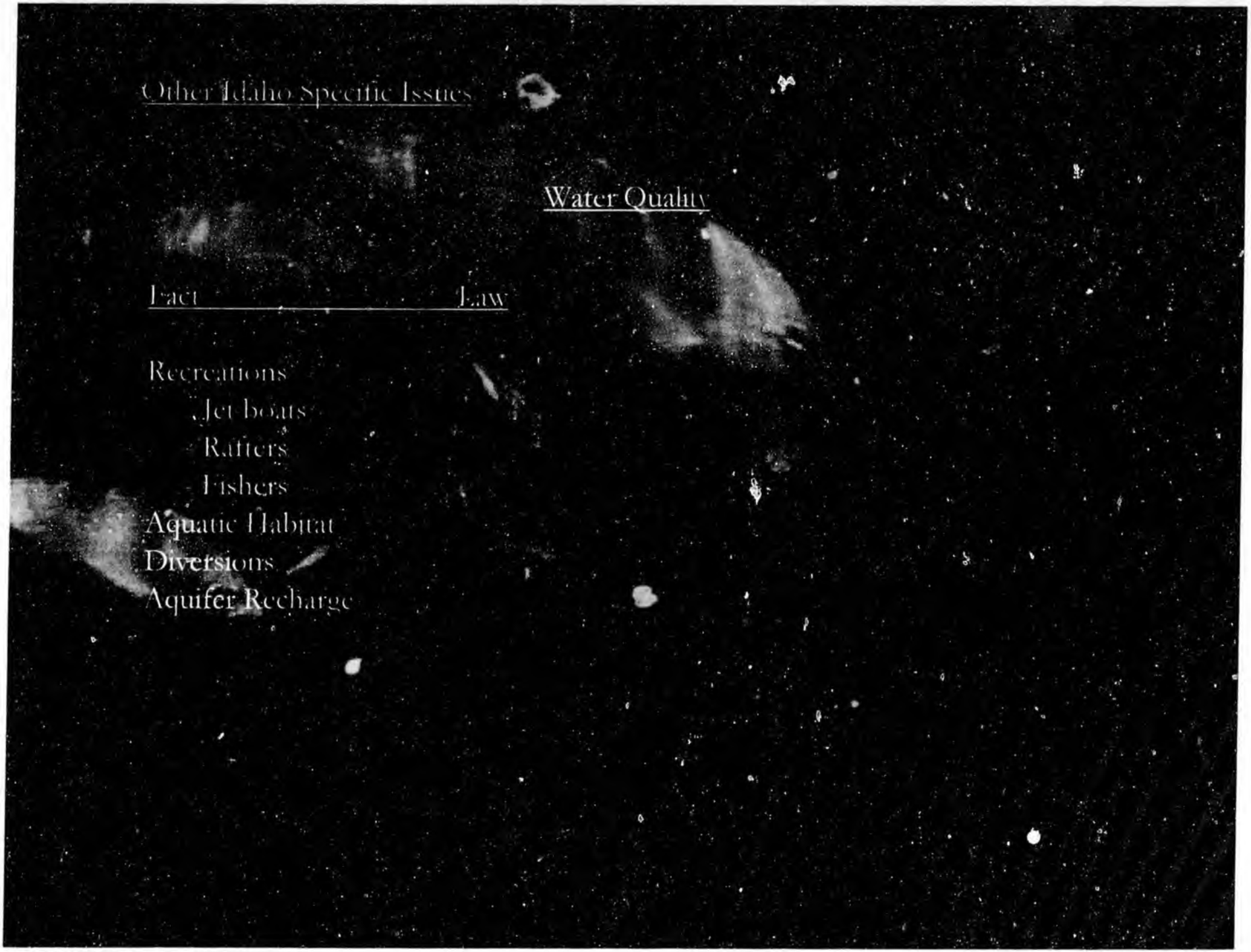

Other Idaho Specific Issues
Water Rights
Fact
Law
Water Quality
Channel Maintenance
Surface Water Rights
Aquifer pumping rights
Aquifer recharge
Access to existing facilities
Conservation
Flood Control

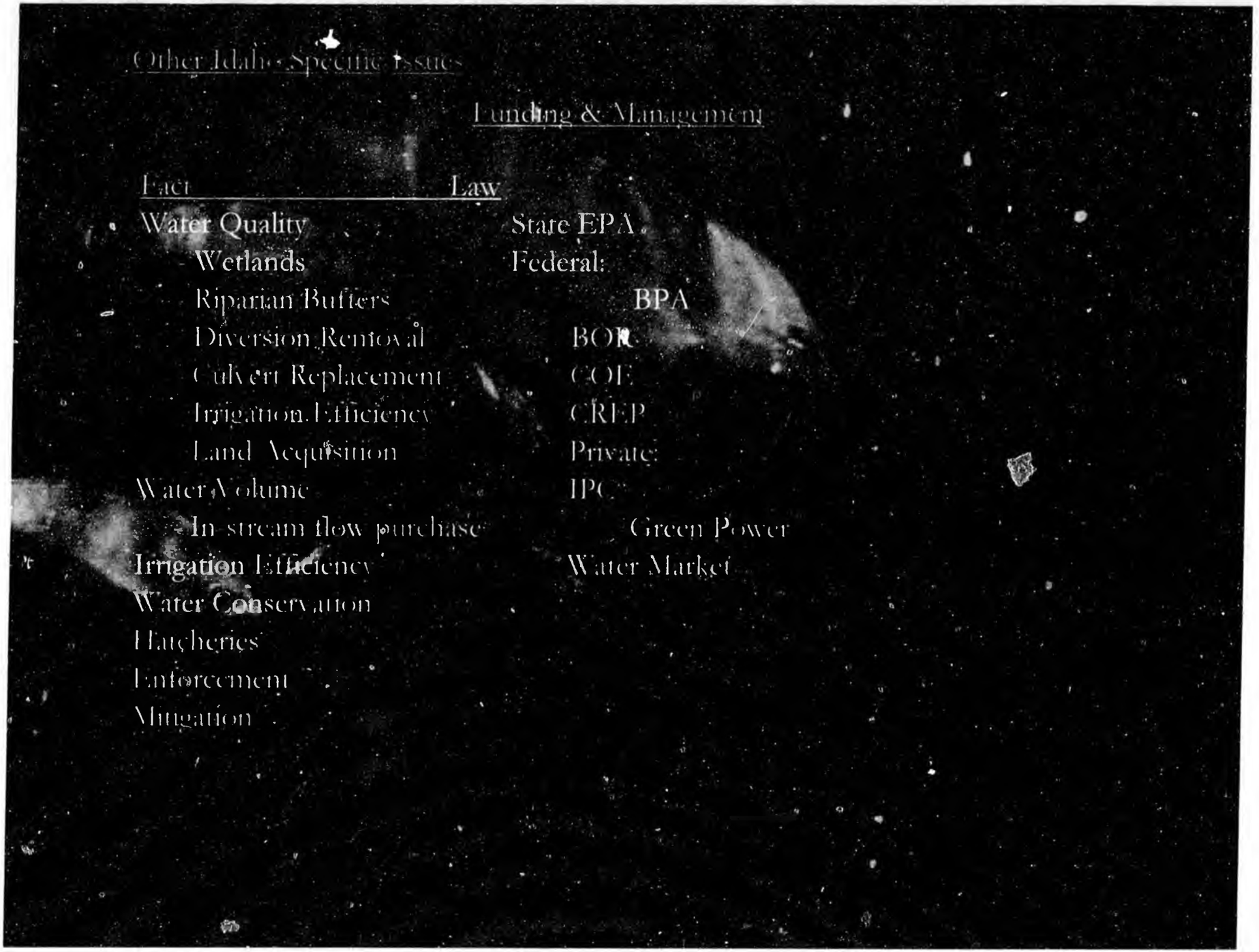
Other Idaho Specific Issues

## Endangered Species

| Fact | Law |
| --- | --- |
| Water Volume | Habitat Conservation Plan |
| Water Temperature | Water Rights |
| Other Water Quality | Water Quality Standards |
| Water Passage | - TMDL |
| - Diversions | - NPDES |
| - Culverts | ESA |
| Recreation Practices | - Sec. 7 |
| Mining Practices | Sec. 4(d) |
| Timber Practices | Species Harvest Rules |
| Agricultural Practices | |
| Hatcheries | |

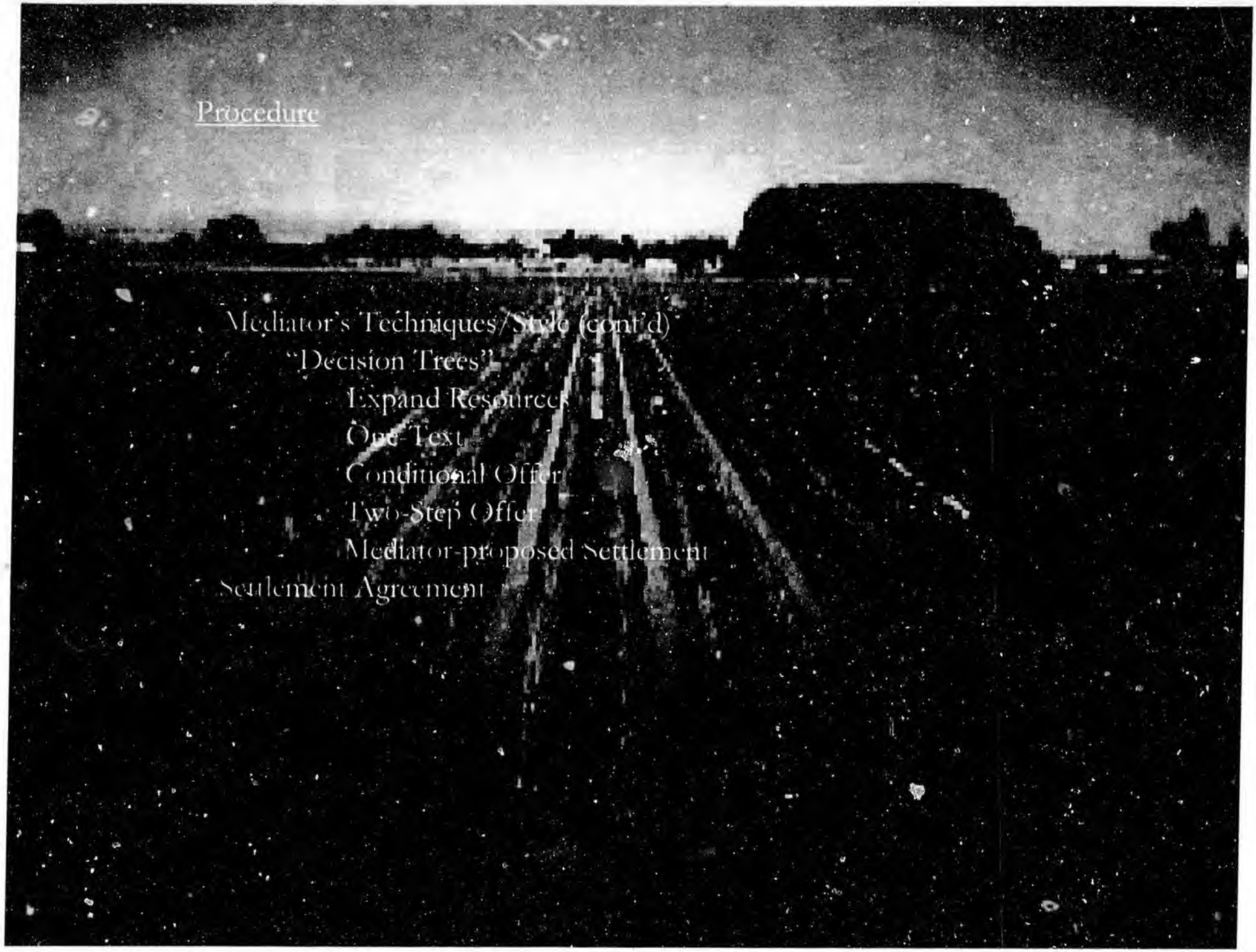

Other Idaho Specific Issues
Water Quality
Fact
Law
Volume
Temperature
Gas
Pollutants
- Phosphorus
- Pesticides
Sediment
Other Chemicals
Forestry Practices
Agriculture Practices
Mining Practices
Water Rights
Water Quality Standards
TMDL
NPDES
Habitat Conservation Plan
FERC License
Water Market
Pollutant Market


Other Idaho Specific Issues
Water Quality
Fact
Law
Recreations
Jet boats
Rafters
Fishers
Aquatic Habitat
Diversions
Aquifer Recharge


Other Idaho Specific Issues
Funding & Management
Fact
Law
Water Quality
Wetlands
Riparian Buffers
Diversion Removal
Culvert Replacement
Irrigation Efficiency
Land Acquisition
Water Volume
In stream flow purchase
Irrigation Efficiency
Water Conservation
Hatcheries
Enforcement
Mitigation
State EPA
Federal:
BPA
BOR
COE
CREP
Private:
IPC
Green Power
Water Market


Non-Idaho Specific Issues
Fact
Law
4 Lower Snake Dams
John Day Reservoir
Commercial Fishing (non-Idaho)
Recreational Fishing (non-Idaho)
Pacific Ocean Conditions
Fish Friendly Turbines
Barging and Other Transportation
Other Columbia River Basin Issues
Other Treaty Rights


Procedure
Preliminary Discussions
Joint Session/Presentations
Private Caucus
Mediator's Techniques/Style
Questioning
Suggestions
Educating
Proposing Solutions
Evaluating Claims
"Agree to Disagree"
"Brainstorming"


Procedure
Mediator's Techniques/Style (cont'd)
"Decision Trees"
Expand Resources
One-Text
Conditional Offer
Two-Step Offer
Mediator-proposed Settlement
Settlement Agreement


Information
Water Rights
Endangered Species
Water Quality
Funding and Management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# Denali – The Alaska Gas Pipeline

- BP and ConocoPhillips have ***joined to start*** "Denali – The Alaska Gas Pipeline"
- Project headquarters in ***Anchorage***
- ***New company*** formed to manage the project in Alaska; joint venture being formed in Canada
- Plan to ***start open season*** before year-end 2010
- Plan to ***spend $600 million*** over 36 months
- Joint project ***team mobilized***
- Field work ***program underway***

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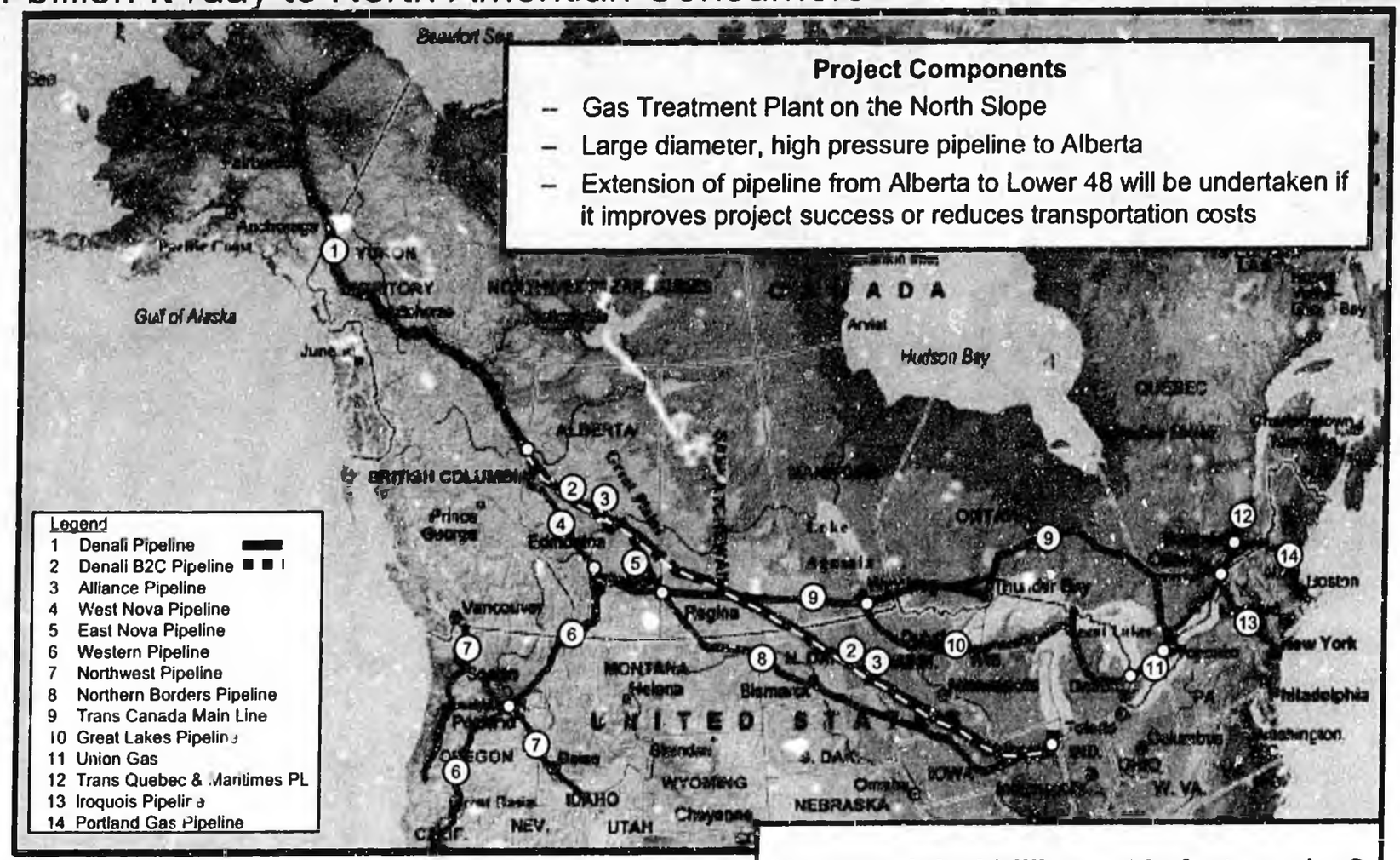
# Denali Project

## 4 billion $ft^3$/day to North American Consumers




**How much is 4 billion cubic feet per day?**
6-8% of US daily consumption

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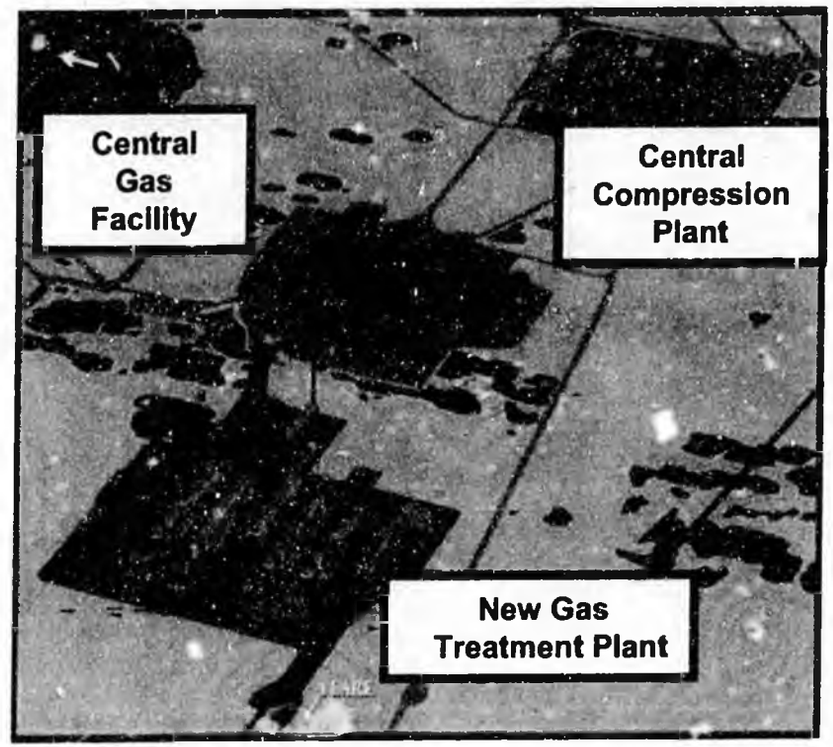
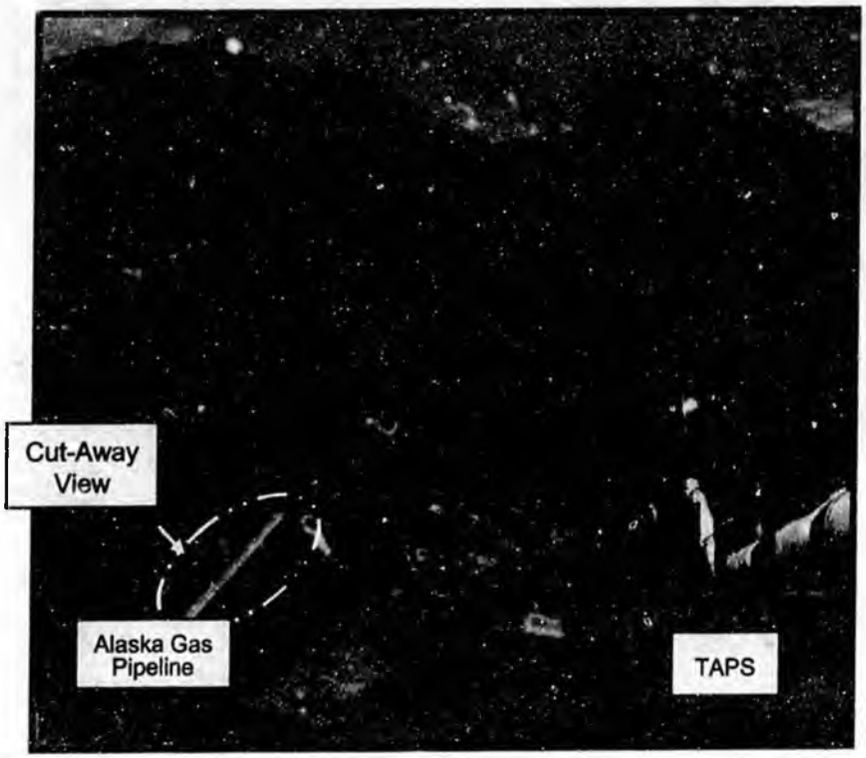
# Gas Treatment Plant

- ***What*** will it do?
  - Remove $CO_2$ and other impurities
    - $CO_2$ to be reinjected, reducing greenhouse gases
  - Dehydrate gas
    - Remove water
  - Compress gas
    - For pipeline pressure
  - Chill gas
    - Maintain permafrost

- ***Where*** will it be?
  - Located near the Prudhoe Bay facilities



# Pipeline




- ***What*** is it?
  - Buried large diameter pipeline
  - Operates at ~ 2,500 psi
  - Compressor stations every 100 to 200 miles at >40,000 hp each
- ***How big*** is it?
  - About 2,000 miles to Alberta
    - ~2-3 million tons of steel
  - Possibly another 1,500 miles to US markets
    - ~2 million tons of steel

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# Near Term Alaskan Programs

- Make available ***$30 million*** to fund
  - Job Training Programs
  - In-State Gas Feasibility
  - Infrastructure Upgrade Studies

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# Job Training

- ***Our goal*** is having a trained workforce for this project
- Owner companies support many ***technical training*** programs
- Committed to ***train local residents*** for this project

Denali's owner companies have demonstrated a long history of local hire, buy, and build. Denali will share that commitment.

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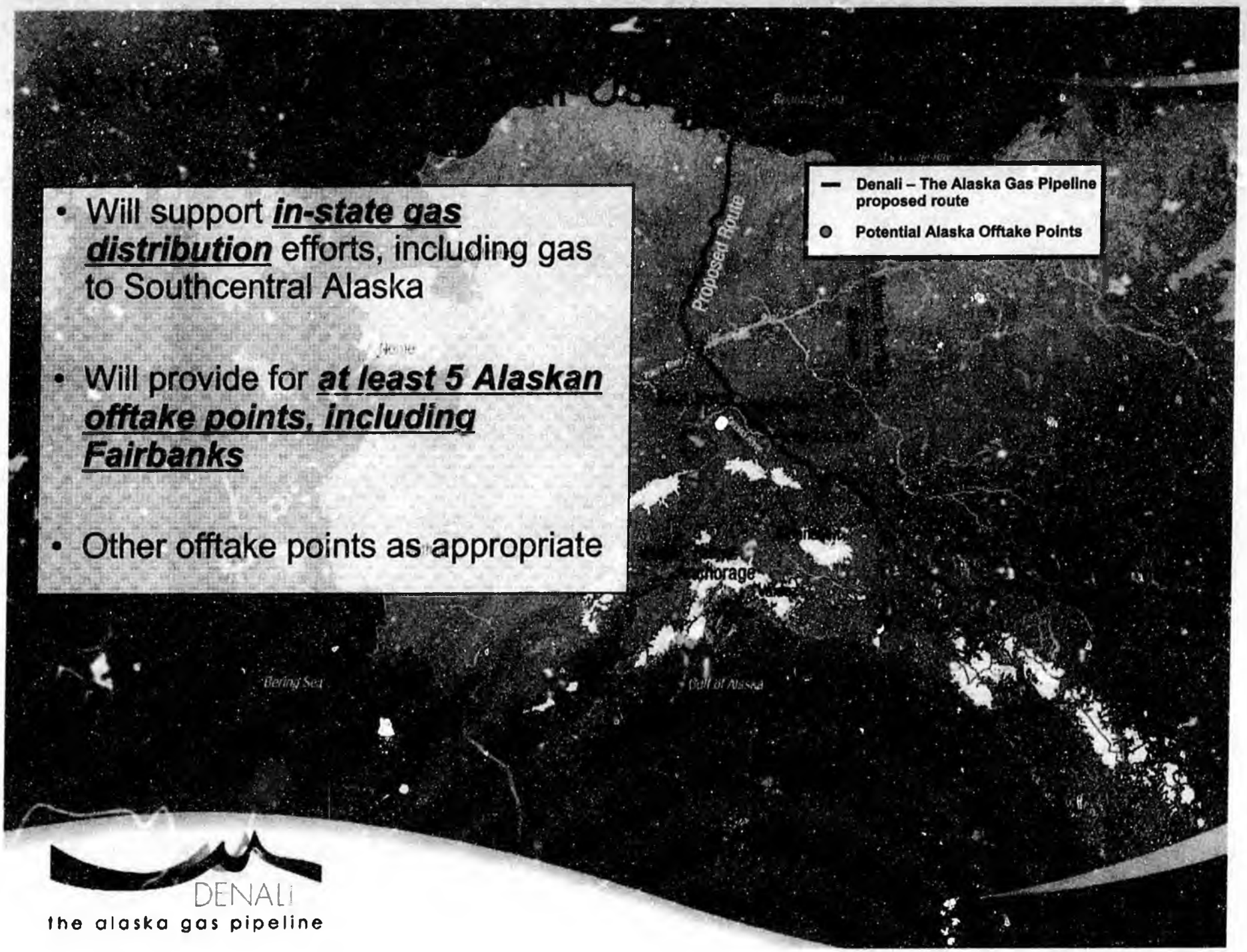


- Will support ***in-state gas distribution*** efforts, including gas to Southcentral Alaska
- Will provide for ***at least 5 Alaskan offtake points, including Fairbanks***
- Other offtake points as appropriate

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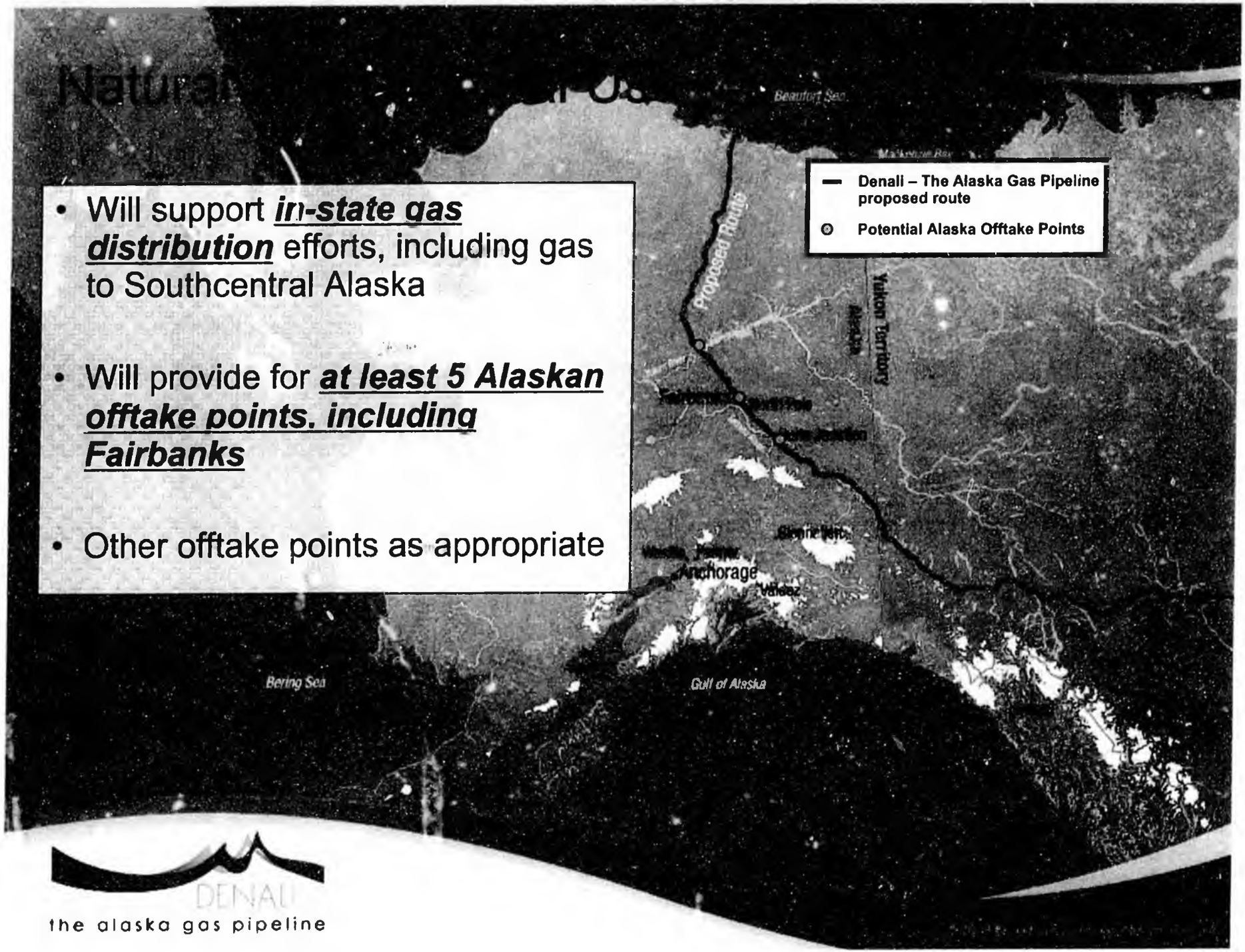
Natural
Beaufort Sea
Proposed Route
Yukon Territory
Alaska
Fairbanks
Anchorage
Valdez
Bering Sea
Gulf of Alaska
Denali – The Alaska Gas Pipeline proposed route
Potential Alaska Offtake Points
• Will support ***in-state gas distribution*** efforts, including gas to Southcentral Alaska
• Will provide for ***at least 5 Alaskan offtake points, including Fairbanks***
• Other offtake points as appropriate
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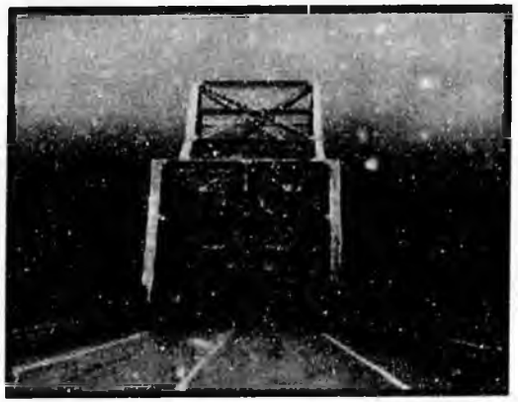
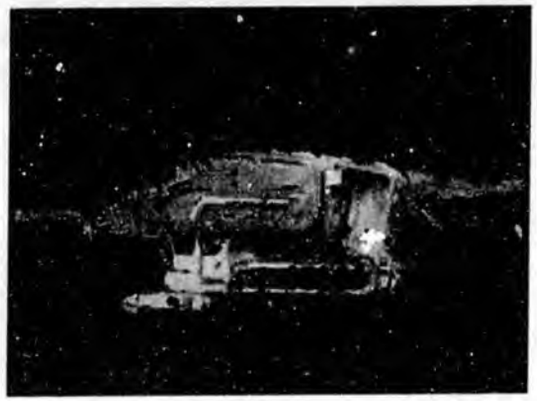
# Infrastructure Upgrade Studies

- Roads
  - e.g. Richardson, Dalton, Haines, Elliot, & Alaska Highways
- Bridges
  - e.g. Steese, Glenn, Parks, Haines Highways
- Ports
  - e.g. Port of Haines





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# Denali Terms of Service

- Denali will be an open access pipeline
- Rates will be distance-sensitive for local use
- Project design will provide for efficient expandability
- Denali plans to solicit customers for interest in expansion every two years
- Flexibility to use existing or new infrastructure out of Alberta

# 2008 Work

## Additional Work

- Perform route optimizations
- Conduct technical studies
- Make environmental assessments
- Prepare cost estimates & schedules
- Plan project execution

## Summer Field Work

- Wetland delineation
- Investigate archeological sites
- Identify previously impacted sites
- Investigate physical characteristics of stream crossing locations
- Collect technical data (geotechnical, hydrology, etc.)
- Perform route reconnaissance
- Shoot ortho-photography for alternative routes & logistics planning

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# Who's Working with Denali right now?

## $40 million to be spent on Summer Field Work.

P | N | D
ENGINEERS, INC.

Era
HELICOPTERS LLC
a SEACOR company

RESEARCH, INC.

Air Logistics
A Bristow Company

ABR environmental research & services

DOYON UNIVERSAL SERVICES

SECURITY AVIATION

CH2MHILL

Tanana Chiefs Conference

NATURAL RESOURCE GROUP

Resource Data, Inc.

Baker

Hawk
CONSULTANTS LLC

JCTI
James C. Townes, Inc.

"from Barra to Barrow"
Chumis Cultural Resources

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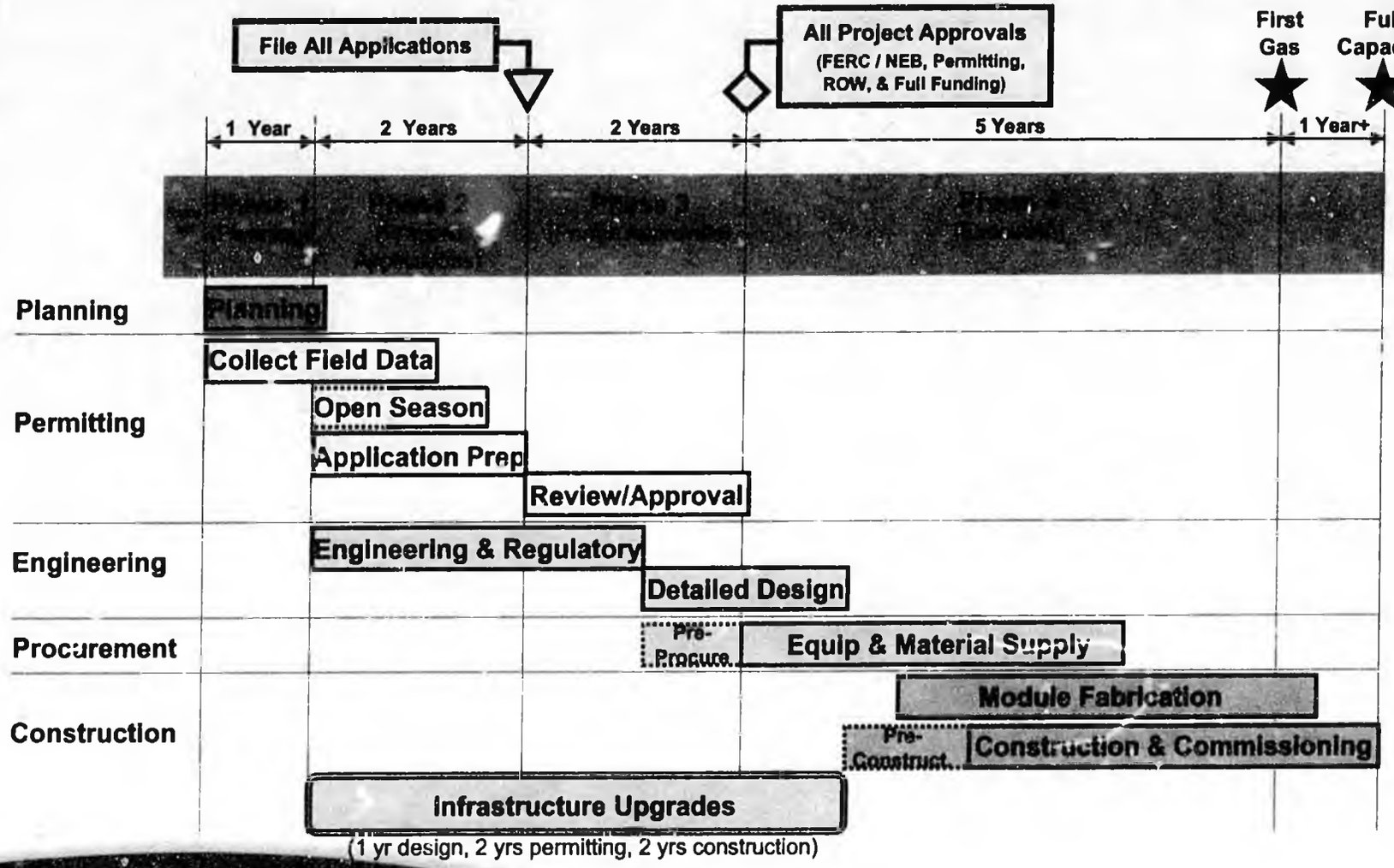
# Success Case Project Timeline




(1 yr design, 2 yrs permitting, 2 yrs construction)

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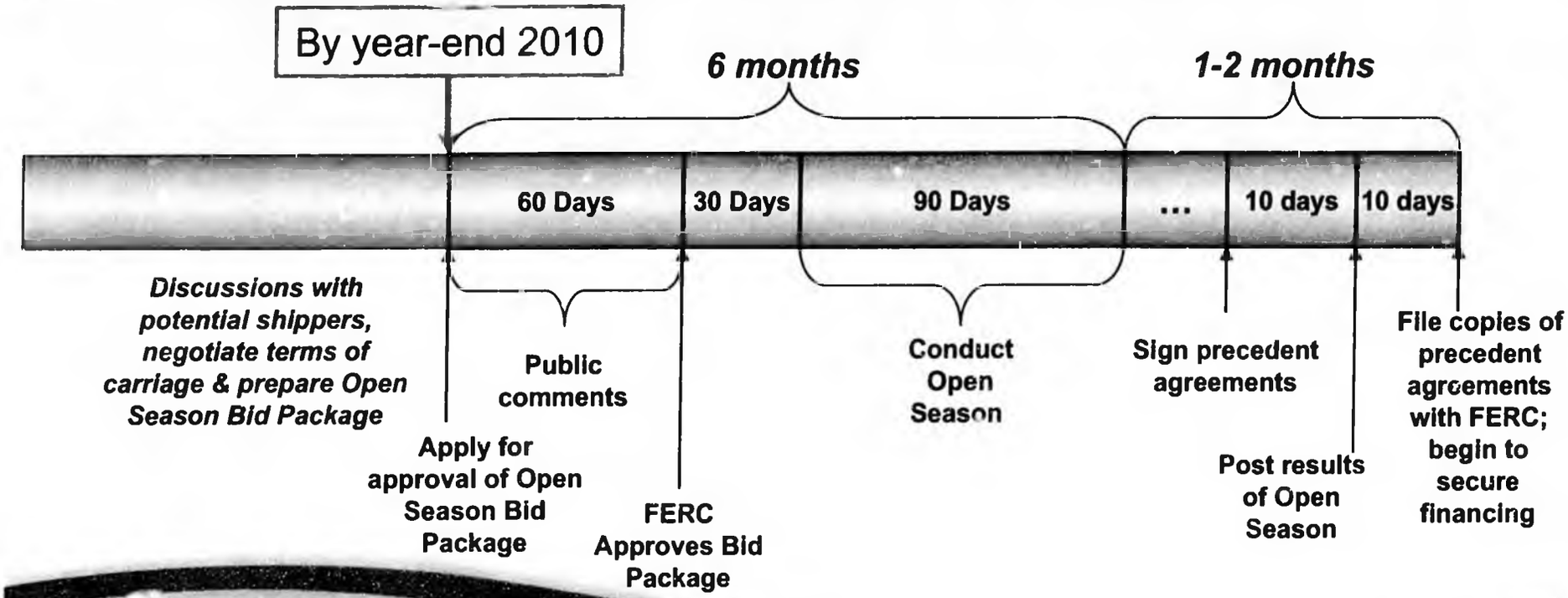
# Open Season

- Formal process regulated by the FERC in the US (NEB in Canada)
- Pipeline company seeks customers to make long-term firm transportation commitments to the project
- These contracts obligate customer to pay costs whether or not they ship or even own gas
- These contracts give banks the necessary confidence to lend money to the pipeline company

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# BP & ConocoPhillips:
## Technical and Financial Strength

- Combined Pipeline experience
  - More than ***50,000 miles*** of oil & gas pipelines
- Solid technical capabilities
  - ***Proven leaders*** in pipeline technology development
  - Proven track record in the ***arctic***
  - Proven ability to deliver challenging ***world-class projects***
- Strong balance sheets
  - ***More than $300 billion*** of combined market capitalization
  - Provide ***financial strength*** to support construction

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# Denali Progress Continues . . .

- April 8 – Denali announced
- May 1 – Alaska summer field work permit applications filed
- May 27 – Alaska field crews mobilized
- May 31 – More than 20,000 person-hours worked
- June 12 – Denali president announced
- June 16 – FERC pre-filing request submitted
- June 19 - Tok field office opening
- June 25 – FERC approves pre-filing request

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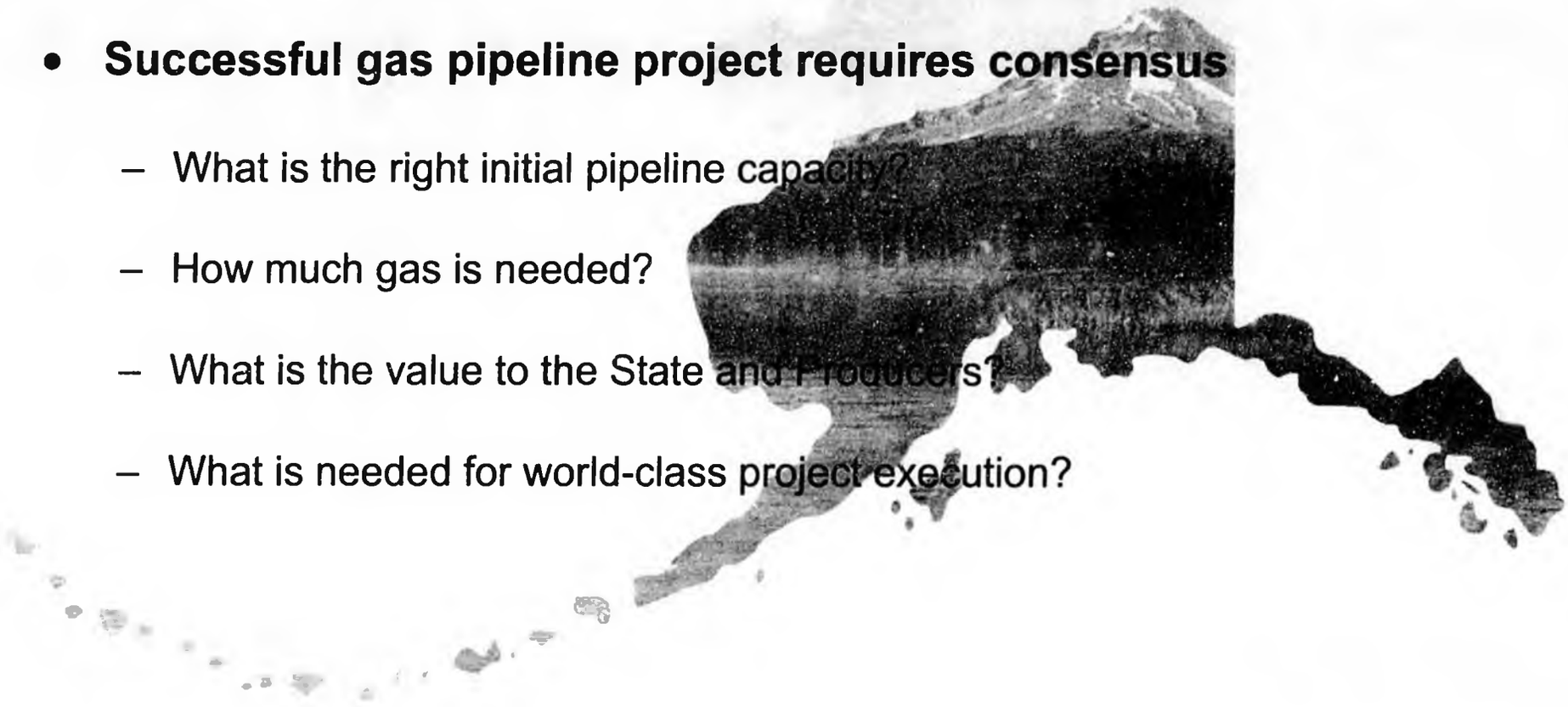
the alaska gas pipeline

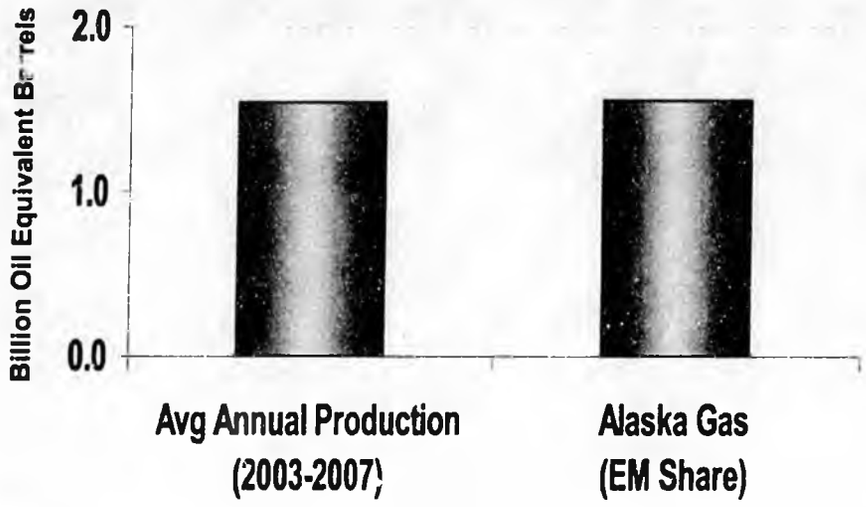
# *ExxonMobil Committed and Ready to Work*

- **Committed to the development of Alaska's gas resources**
- **Ready to work with the State, TransCanada, ConocoPhillips, BP**
- **Successful gas pipeline project requires consensus**
  - What is the right initial pipeline capacity?
  - How much gas is needed?
  - What is the value to the State and Producers?
  - What is needed for world-class project execution?



# *Motivated to Develop Alaska Gas*

**ALASKA GAS RESERVES ADDITION**




## ACTIVITIES

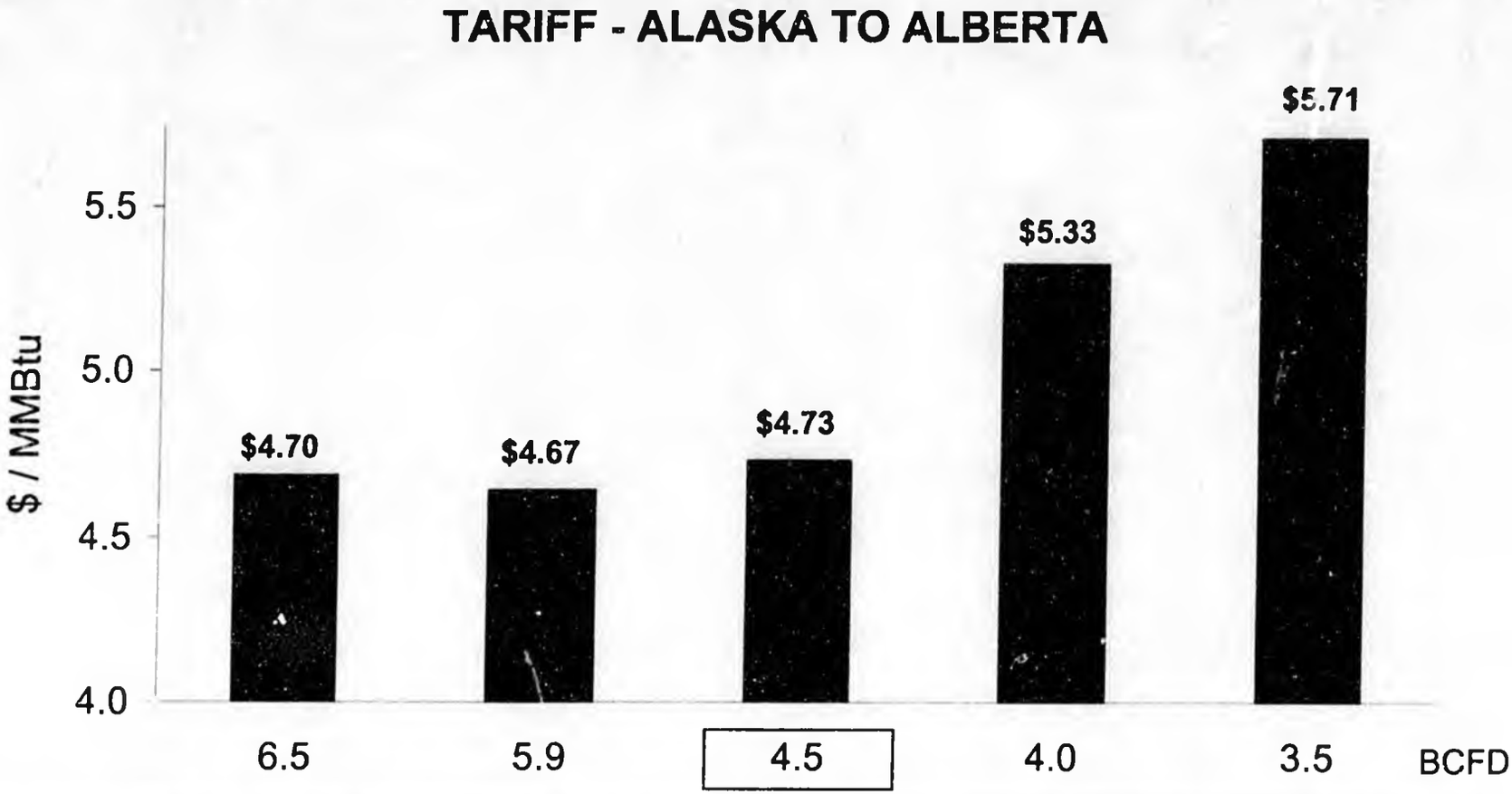
- 2001-02: Producer Pipeline Study
- 2003-06: SGDA Application / Contract
- 2007-08: AGIA Engagement
- 2008: Commitment to Develop PTU; Fairbanks Natural Gas Sale

## *IMPACTS*

- ***Proved reserves – Replaces a full year of our worldwide production***
- ***Production – Doubles our U.S. gas production***

***KEY MEASURES OF COMPANY SUCCESS AND SHAREHOLDER VALUE***

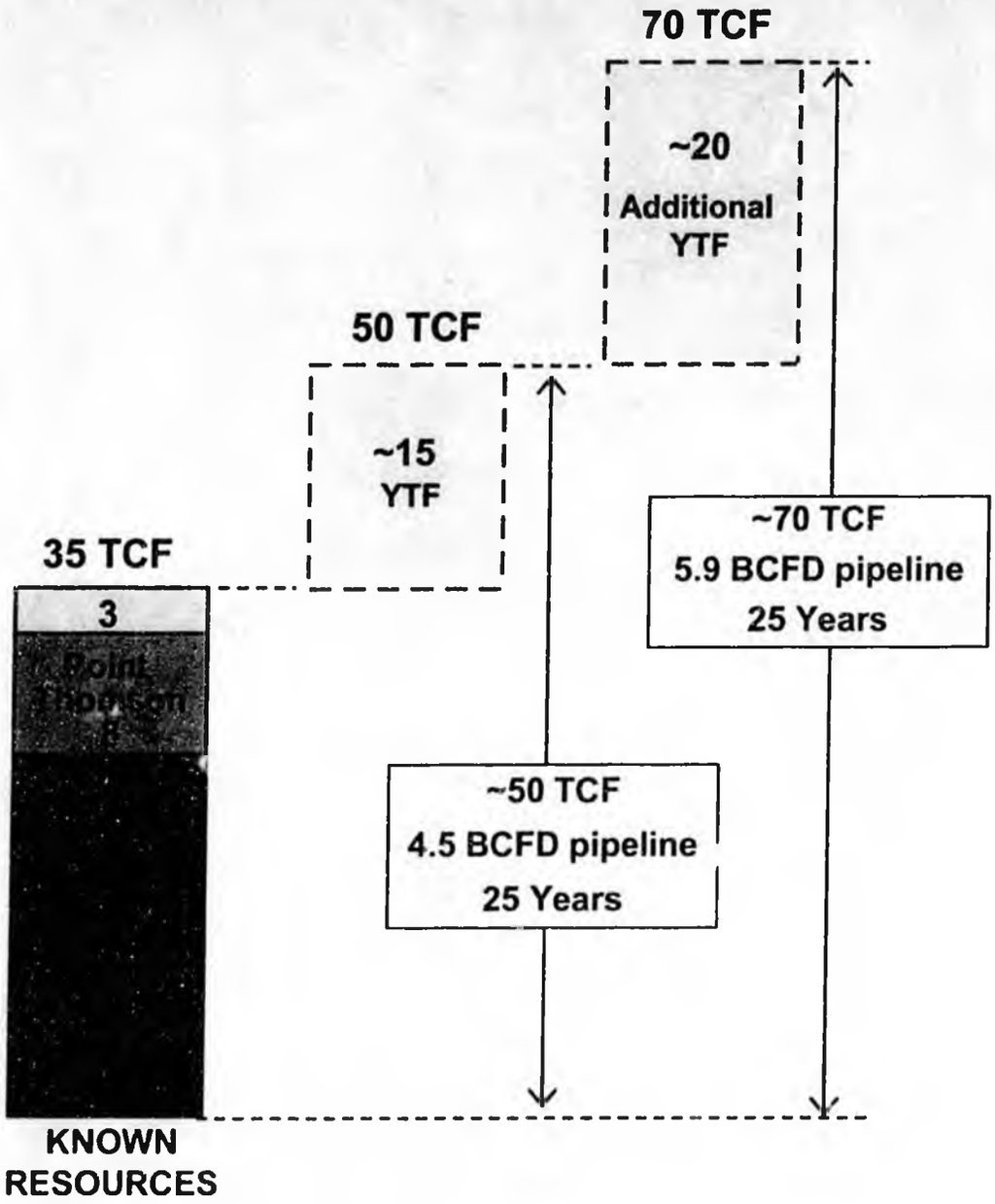
# 4.5 BCFD Balances Tariff, Revenue and Resources




| | | | | |
|---|---|---|---|---|
| **Impact to State** | | **$66.1** | **$60.7** | **$51.6** |
| **($NPV_5$ – Billions)** | | | **-$5.4** | **-$14.5** |

**Source: Black and Veatch**

# Critical Elements – Point Thomson / Open Access

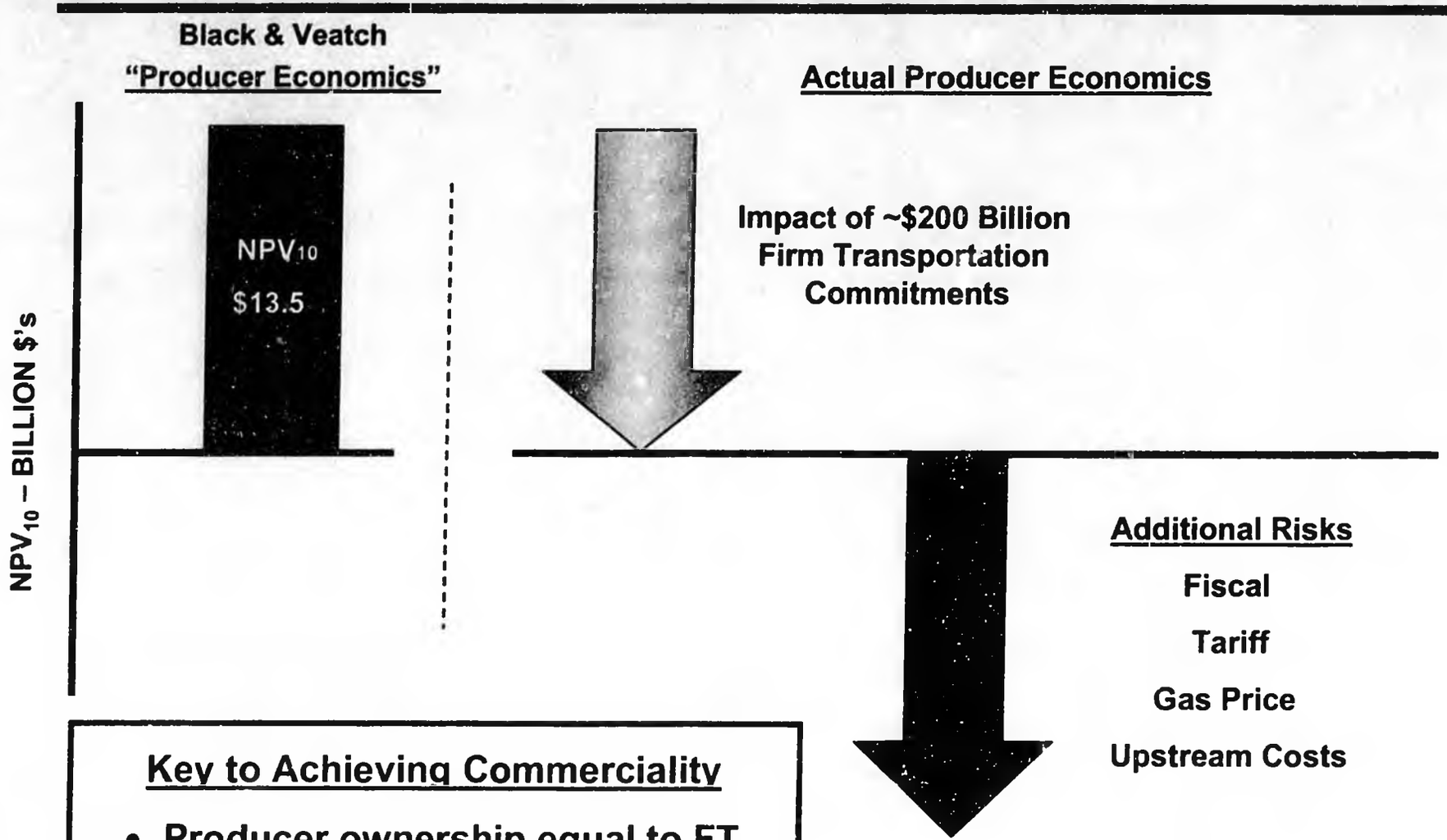



- If PTU not available:
  - Increases tariff
  - Threatens FT / financing
  - Increases reliance on YTF
- Open access
  - Significant capacity for YTF gas
  - Additional capacity available to explorers through low cost expansions
  - U.S. and Canadian regulations ensure open access
  - Open to discuss further assurances with State

YTF – Yet-to-Find

TCF – Trillion Cubic Feet

# FT Commitments – Real Risk and Cost to Producers

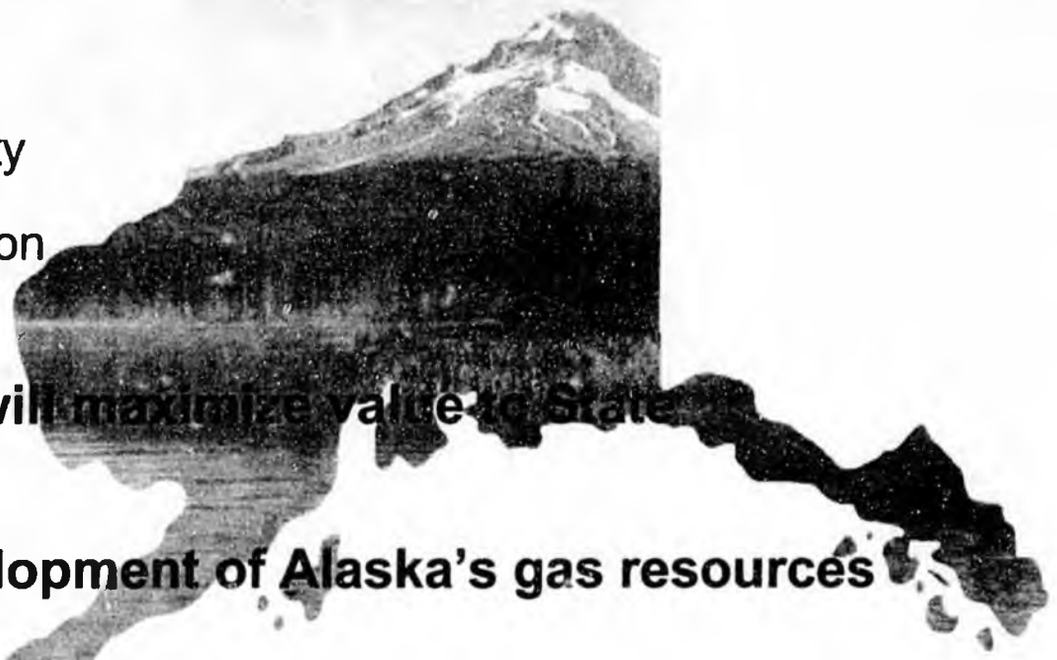



**Key to Achieving Commerciality**

- Producer ownership equal to FT
- Fiscal and tariff predictability
- World-class project execution

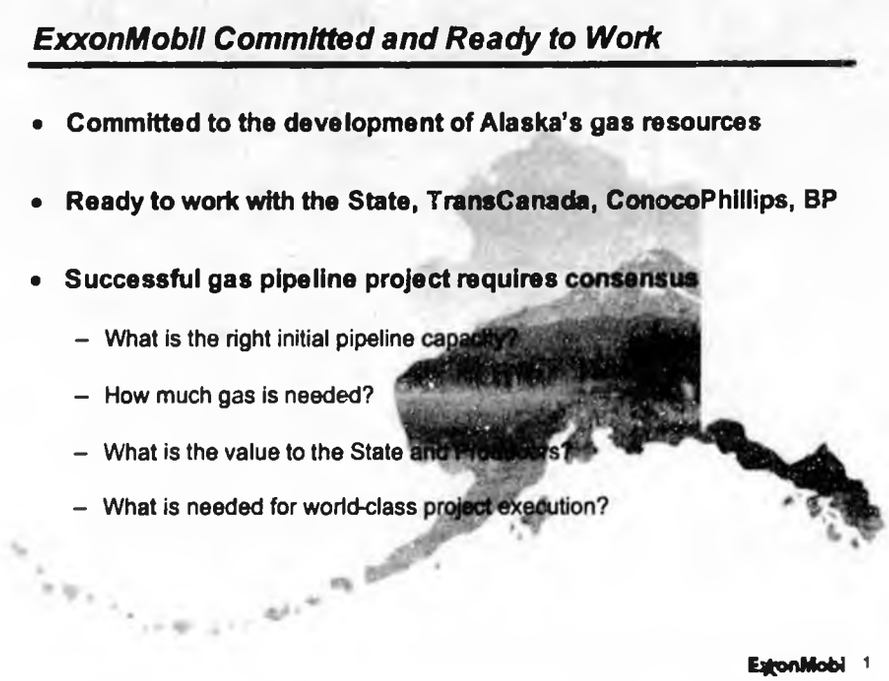
## *Key Take-Aways*

- **Successful gas pipeline project requires:**
  - 4.5 BCFD initial gas sales with low cost expansions
  - Point Thomson gas available
  - Ownership equal to FT
  - Fiscal and tariff predictability
  - World-class project execution



- **Agreement on the above will maximize value to State**
- **EM committed to the development of Alaska's gas resources**
- **EM ready to work with the State, TransCanada, ConocoPhillips, BP**

**Slide 1 – ExxonMobil Committed and Ready to Work**




- Good afternoon. My name is Marty Massey. I am the U.S. Joint Interest Manager for ExxonMobil, a position I've held since November 2001, and I am responsible for ExxonMobil's development of gas resources in Alaska.

- First, I want to thank you for the opportunity to speak with you today and address questions that I am sure you have.

- I recognize you are going through a very thorough process to decide how best to deliver a pipeline for the State. I know that you have a tough decision to make.

- We have taken an active interest in your deliberations and it is clear your focus is on doing what is in the best interest of Alaska.

- I also know you have questions about whether or not we are really on board to make this project happen. I hear questions like, "Where is ExxonMobil?" and "Do they really want to advance a project?" Today, my intention is to demonstrate that we are

committed to the timely development of Alaska's gas resources and we want to be part of the solution.

- I understand you are frustrated that more progress has not been made, but you also recognize how important this project is to the future of the State – we recognize that as well.

- I want to offer to you that we are ready to work with the Administration, TransCanada, ConocoPhillips and BP to advance this project.

- We were invited to testify and share our observations from review of the State's consultant's work on the TransCanada application. In particular, I plan to cover what we believe will be necessary to make this pipeline project a success by addressing four key questions:
  - "What is the right initial pipeline capacity?"
  - "How much gas is needed?"
  - "What is the value to the State and the Producers?" and
  - "What is needed to ensure world-class project execution?"

- Before getting into the details, I would like to introduce four folks with me today that are part of our Alaska Gas team. With your permission, I may call on them to help me with a question or two.

  **Jim Brown** – works in our Worldwide Gas Marketing Company; Jim just wants to sell Alaska gas

  **Mark Nelson** – works in our Commercial group; Mark has been working Alaska for nearly 15 years, and many of you know him.

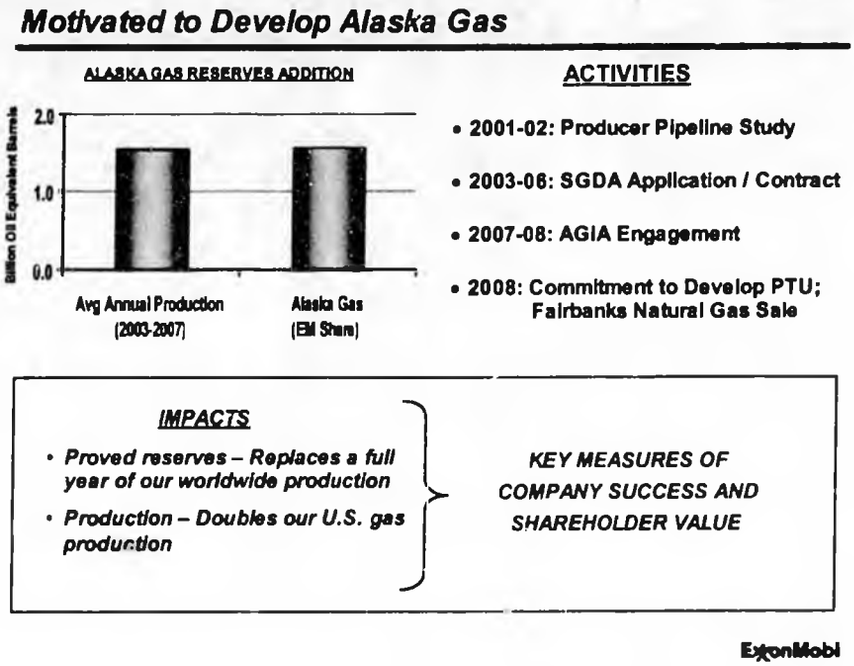
  **Norman Kreutter** – one of our senior Treasurer's; Norman has completed numerous financings and ensures we properly value this project.

  **Jim Morse** – is our commercial attorney; I know we all have to have one; Jim has completed many deals around the world leading to successful projects.

We will be here over the next few days and will make ourselves available to address any topic you would like to discuss.

- Let's begin by looking at why this project is so important to us.

**Slide 2 – Motivated to Develop Alaska Gas**




ExxonMobil has been in Alaska for over 50 years and has been a key player in Alaska's oil industry development. We hold the largest working interest at Prudhoe Bay (36.4%) and are the largest lease holder of discovered North Slope Gas.

ExxonMobil is in the business of developing oil and gas resources. That is what we do and we have proven throughout the world that we can do it well.

Development of Alaska's gas resources is extremely important to our company. Let me describe why.

If I could draw your attention to the bar chart, an Alaska gas pipeline project would allow us to add over one and a half billion oil equivalent barrels of proved reserves, which is more than our production has averaged over the past 5 years.

In addition, this project has the potential to double our current U.S. gas production. Reserves and production are key measures of any oil company's success and shareholder value.

With our size, only the very large projects can impact our performance in any significant way. The Alaska gas pipeline project would have a clear, positive impact on our worldwide results, and would be seen as a significant enhancement to our performance.

We've been working hard to develop that gas ever since Prudhoe Bay was discovered. We've now invested more than $180 million looking for a way to bring Alaska gas to market including early pipeline studies and the LNG and gas-to-liquid technology studies.

I'll tell you our activities have picked up significantly in this decade as natural gas prices started to climb. For example, prior to 2000 gas prices were in the range of $2/MMBTU. During 2001/2002, a $125 million gas pipeline study was performed by ExxonMobil, ConocoPhillips and BP. Following the study, we submitted a Stranded Gas Development Act application which led to the Stranded Gas contract.

Since the development of the Alaska Gas Inducement Act, we've provided testimony and engaged in the public comment process. The good news is that we are aligned with the Administration's recent determination that a gas pipeline project to North American markets will result in the best value for the State and the Producers.

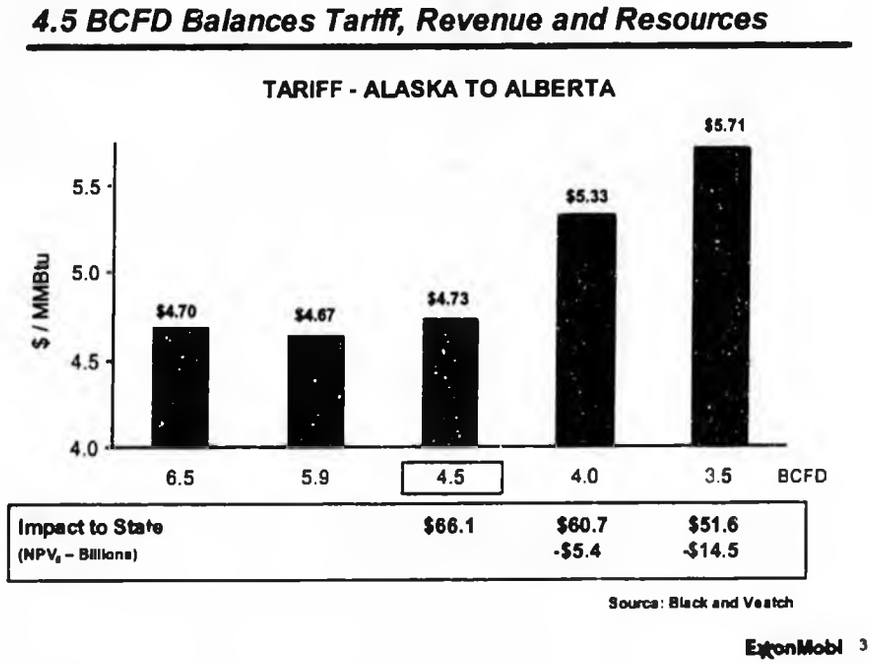
Earlier this year, we made a commitment to put Point Thomson Unit on production, which will provide valuable information to remove any doubt on how best to produce the hydrocarbons at Point Thomson, including the major gas resource.

We are pursuing a large-scale gas pipeline project and continue to pursue smaller volume opportunities when there is a market. For example, I recently had the opportunity to participate in the sale of Prudhoe Bay gas to Fairbanks Natural Gas to

address the energy needs of consumers living in Interior Alaska. If I'm not mistaken, this is the first sale of gas off the North Slope and we're pleased to be a part of it.

We are working very hard to determine the best way to move an Alaska gas pipeline forward. We believe a successful project requires the support of all three major producers and the State of Alaska. We are ready to work with the State, TransCanada, ConocoPhillips and BP to put in place the "necessary ingredients" for a successful gas pipeline project.

**Slide 3 – 4.5 BCFD Balances Tariff, Revenue and Resources**




The Producers' joint effort in 2001 and 2002 determined that a pipeline of around 4.5 BCFD would provide the best chance of achieving a viable project. This determination resulted from a detailed technical evaluation of pipeline hydraulics and cost.

The State's data is consistent with this analysis.

Looking at the chart on the slide, which is based on data provided to the public by the Administration and their consultants (Chapter 3, page 3-57 and Appendix G1, pages 191, 199), we can see that when the pipeline throughput is 4.5 BCFD, the tariff is

$4.73/MMBTU, as shown in the green bar. When the capacity is reduced to 3.5 BCFD, the transportation tariff shoots up from $4.73 to $5.71, which is about a 20% increase.

If the pipeline is expanded to 5.9 BCFD from 4.5 BCFD, the tariff is reduced to $4.67. At 6.5 BCFD, you can see the tariff starts to increase. This cost and hydraulic analysis clearly shows "the sweet spot" for this pipeline is 4.5 BCFD, given the amount of gas available to support a pipeline of that size.

I will address volume of gas available to support the pipeline on my next slide, but before I do that, let's look a little deeper at the impact of these various pipeline sizes.

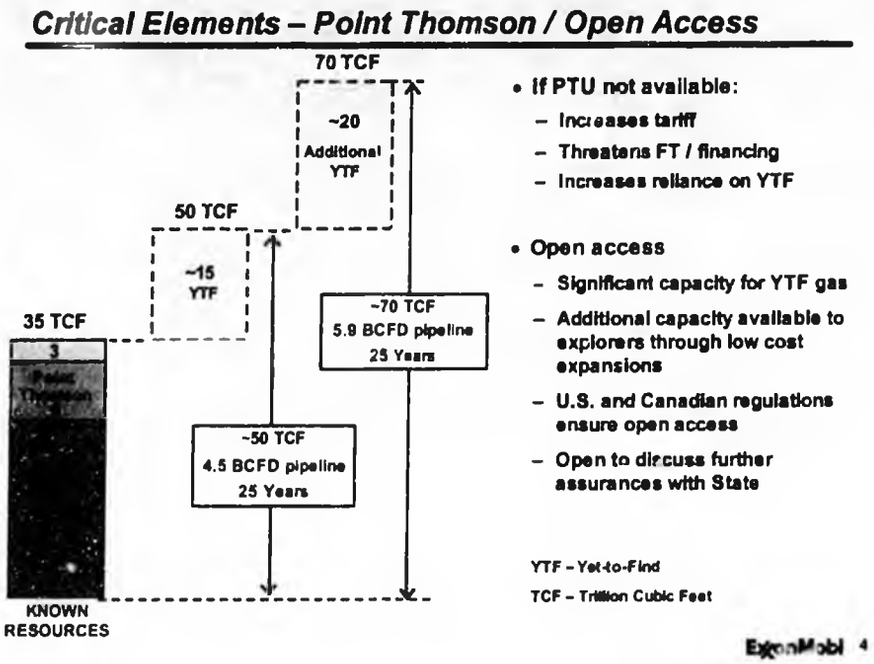
As the slide shows (based on the public information provided by the Administration and their consultants), when you compare the less efficient 3.5 BCFD case to the optimum 4.5 BCFD case, you can see that with the smaller pipeline throughput, the tariff is about $1.00/MMBtu higher. This change results in a significant $14.5 billion reduction in the State $NPV_5$. Even a reduction of 0.5 BCFD to 4.0 BCFD would cost the State over $5 billion ($NPV_5$). Producer profits would also see a similar percentage reduction. That is a huge impact to the State and Producers. So flowing gas at 4.5 BCFD is the right way to go with this project.

We are fortunate the hydraulics and cost analysis show that the pipeline should provide low cost expansions. For example, expanding from 4.5 BCFD to 5.9 BCFD or possibly even to 6.5 BCFD, could result in essentially the same tariff. Based on the State's consultant's analysis, significant low cost expansion is expected to be available. That is great news for the State and our company, because there will be significant incentive for exploration. I'll expand on this point later.

The initial pipeline capacity will be determined at the open season, but, all of the available information today suggests the proper balance of tariff, revenue and utilization of gas resources is a 4.5 BCFD pipeline.

Let's now look at some critical elements for achieving a successful project: the importance of Point Thomson gas to support the optimum pipeline capacity and the importance of open access.

**Slide 4: Critical Elements – Point Thomson / Open Access**




On this slide, the green bar on the left shows the State's known gas resource: Prudhoe Bay at 24 trillion cubic feet (or TCF), Point Thomson at 8 TCF, and then 3 TCF from other fields, which brings us to a total of 35 TCF. We've also shown the additional gas needed to keep the pipeline full for a 25 year period, which is a reasonable assumption for the firm transportation period likely to be requested.

In the 4.5 BCFD case, a total of approximately 50 TCF is needed, which would require that another 15 TCF of yet-to-find gas be discovered and developed, shown as the yellow bar in the middle of the screen. This illustrates how critical Point Thomson gas is to the project.

It is estimated that Point Thomson could provide daily gas production of approximately 1 BCF per day. So without this gas, the tariff will be too high; and, without this gas, the

critical firm transportation commitments (or "FT") may not be adequate to support the project. The financial markets will require sufficient long term transportation commitments and the ability for the pipeline owner to finance the project is threatened without Point Thomson.

Point Thomson gas also provides security for downstream consumers of Alaska gas by ensuring supply in the event of a temporary shutdown in the Prudhoe Bay Field. This gas also helps if exploration or "yet-to-find" gas does not materialize or is not adequate to meet gas marketing commitments.

The bottom line is that without Point Thomson, you would be counting on 23 TCF of yet-to-find gas which is essentially another Prudhoe Bay. On my prior slide, I showed that the State and Producers would forego significant profits at lower throughput rates, which makes it absolutely critical we land on the right approach at Point Thomson.

Through the extensive technical work we've performed to date, we've determined that a Point Thomson Unit (PTU) gas sales development will produce and recover the majority of the condensate from the gas reservoir. However, we also recognize a gas pipeline project is still many years away and there is still some uncertainty about the best way to produce Point Thomson.

For this reason, ExxonMobil and the 26 other lease holders developed the current proposed Plan of Development, which consists of a gas cycling project estimated to cost over $1.3 billion. The project will bring Point Thomson into production by year end 2014. More importantly, this project will give us the information that is needed to remove any doubt about how best to produce Point Thomson. In addition, we will perform the engineering necessary for individual Point Thomson lease holders to participate in a gas pipeline open season. There is no faster way to bring the Point Thomson into production; there is no faster way to ensure that the Point Thomson gas will be available for a gas pipeline – gas which is absolutely critical to the success of the pipeline project.

Turning back to yet-to-find gas, the 15 TCF required in the base case represents about 30% of the gas required to fill the 4.5 BCFD pipeline over a 25 year period. While that is a lot of gas, with both Prudhoe Bay and Point Thomson available, we are able to keep the pipeline full for well over 10 years – which allows time to find and develop additional gas.

The previous slide also showed that it may be possible to get an even lower tariff if we build the pipeline to carry 5.9 BCFD. While shipping gas at 5.9 BCFD would certainly generate more revenue early on, to do so would place too much reliance on future yet-to-find gas. That is just too risky for anyone. We believe the better solution is to expand the pipeline with low cost expansions as yet-to-find gas is discovered and developed.

Given the need for 15 TCF of yet-to-find gas in the base case and room for an additional 20 TCF of yet-to-find gas that can be shipped through low cost expansions, there will be significant incentive for exploration to occur once a pipeline project is advancing. We are already starting to see increased leasing activity in offshore Alaska, largely driven by today's prices. Although we should expect significant future gas exploration and development activity, this will take time and it is unlikely expansion shippers will commit to firm transportation in the initial open season for gas they don't have. That is why open access is so critical.

We recognize open access has long been on the minds of Alaskans and those in the industry. It is an important concern for us as well. However, we do believe the necessary assurances are in place. Let me describe how we come to this conclusion.

Some people have expressed concern that if the Producers own the business entity that builds and operates the gas pipeline, then those Producers would try to "shut out" any new explorers who find gas and want to ship it through the pipeline. There are several reasons why this would not occur.

First, as I discussed earlier, exploration or yet-to-find gas is needed for the success of the base project. Substantial expansion capacity at low cost should be available, so there are good reasons to bring on this new gas. Major hurdles to access do not exist.

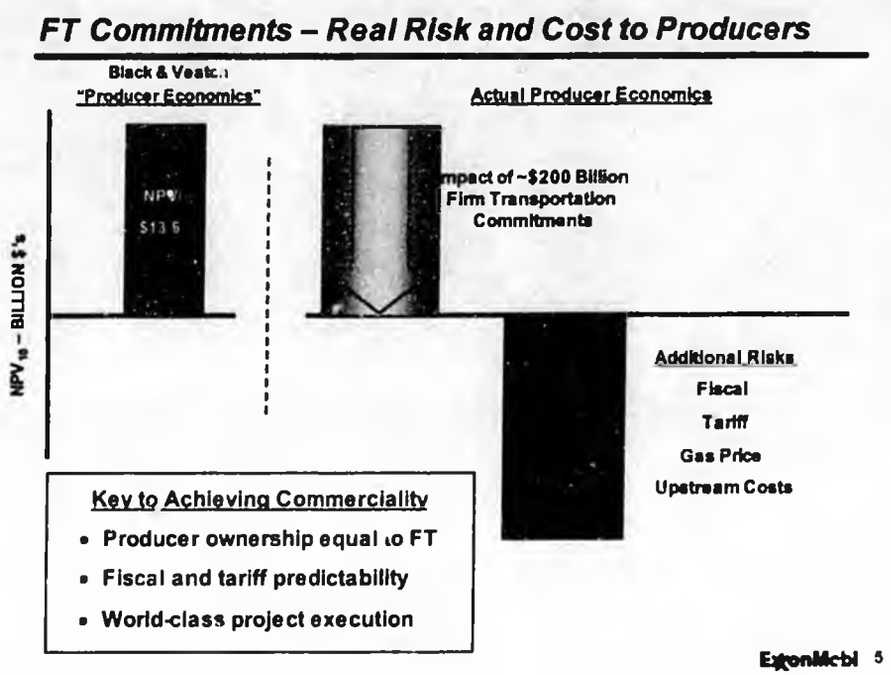
Second, the regulatory framework of FERC and NEB is based on the concept of open access. FERC rules expressly provide open, competitive access to gas pipeline capacity for prospective gas shippers. Canada's National E. ergy Board Act has similar objectives.

Further, the U.S. federal government recognized that an Alaska gas pipeline would be a very unique undertaking, so additional rules were established by Congress and FERC, which apply specifically to Alaska gas. These rules provide extra certainty that ANS explorers can obtain shipping capacity via expansions. For example, FERC could even order an expansion if there happens to be a disagreement about the need for an expansion.

I think the FERC's own words say it best. When he addressed this legislature in Anchorage on June 16, Jeff Wright, FERC's Deputy Director - Office of Energy Projects, stated: "the law says this is going to be an open access pipeline".

Finally, although we believe ample assurances of open access exist, we are willing to discuss other assurances that could be provided to make the State comfortable successful explorers will have access for their newly discovered gas.

**Slide 5: FT Commitments – Real Risk and Cost to Producers**




Now, let's turn to the economic picture.

To evaluate TransCanada's license application, the State's consultant Black and Veatch produced what they have termed "Producer Economics for a 3rd Party Pipeline Case". This is shown as the blue bar on the slide. In their words, Black and Veatch made a 'simplifying assumption' by treating the firm transportation commitment costs as an operating expense which they said 'does not materially change the relative attractiveness of the project from the producer's perspective' (Appendix G-1, Section 3.8.1, page 36). Anytime someone tells me they made a simplifying assumption, I pay close attention. Unfortunately, this assumption has an enormous impact on the producer economics.

Black and Veatch's simplifying assumption ignores the reality that firm transportation commitments represent real risk and are valued differently from an operating expense by the financial markets. Since an uncommitted operating expense cannot be used to support the proposed project financing like a 25-year ship-or-pay firm transportation commitment can, clearly something of value is being transferred from the shippers to the pipeline developer and lenders.

We, like many economists and finance practitioners, believe that firm transportation commitments are long-term and debt-like in nature. These financial commitments should be capitalized and treated as a lump sum cash outflow in the year the commitments are made. Handling the FT commitments in this manner significantly reduces Black and Veatch's estimate of the producer's benefit. In fact, as you can see by the yellow arrow, it drops Black and Veatch's producer economics from $13.5 billion $NPV_{10}$ to essentially zero. Allow me to explain this in a different way. For this project, as a gas shipper on the pipeline, we have two choices going forward.

- One option is that we can choose to invest in the project utilizing a pipeline affiliate. Under this approach we would invest our share of the capital upfront.

- The other option available to us is to make a long-term financial commitment to the pipeline developer to reimburse them for the actual cost (not their estimated cost) of the pipeline, plus a return on their investment. In this case our shipper affiliate, through the firm transportation commitments, is paying for the ultimate cost of the pipeline, plus the profit the pipeline builder requires and incremental financing costs. Because these are long-term, binding commitments to "pay for the project" regardless of whether the gas flows, we treat these commitments as if we were investing based on the value of those firm commitments.

When you think about it this way, the economics have to be worse for us to make a commitment to a third-party pipeline developer like TCPL because we are paying for actual costs plus their profits, and potentially higher financing costs. This is conceptually no different than a new car buyer looking at the true cost of leasing a car rather than purchasing it outright.

I think it is important for you to know how we run our economics and value these firm transportation commitments. And I know you have become very familiar with the need for firm transportation commitments to support financing for this project. By only making

this one change to Black and Veatch's analysis, the producer economics $NPV_{10}$ drops to zero.

In addition as shown by the red arrow, it is appropriate to recognize the additional risk that fiscal terms might change in the future; the risk that tariffs could increase; as well as exposure to higher costs and lower natural gas prices.

I realize some of these are difficult to predict, but it would only be prudent to recognize these exposures which could move the Black and Veatch $NPV_{10}$ for producers to well below zero.

We would welcome the opportunity to share our analysis with the Administration and their consultants. As you can see, we are in a much different place on how to value a third-party pipeline project.

So does this mean the project is unattractive under any scenario or that we won't bear any risk? No, we are quite willing to bear price risk. If we are an owner in the project, we will also bear our share of the capital risk. This is what we are in the business of doing.

However, from our perspective, the other risks I've outlined need to be mitigated. The keys to developing a commercial project are ownership in the pipeline equal to throughput. With this approach, any pipeline profits from transporting our gas will come to us. We can also work to achieve the lowest financing costs and participate in the project to ensure it is completed at the lowest possible capital cost.

At some point we will need to align with the State on fiscal and tariff predictability.

Lastly, world class project execution is a must to minimize the total cost of the project.

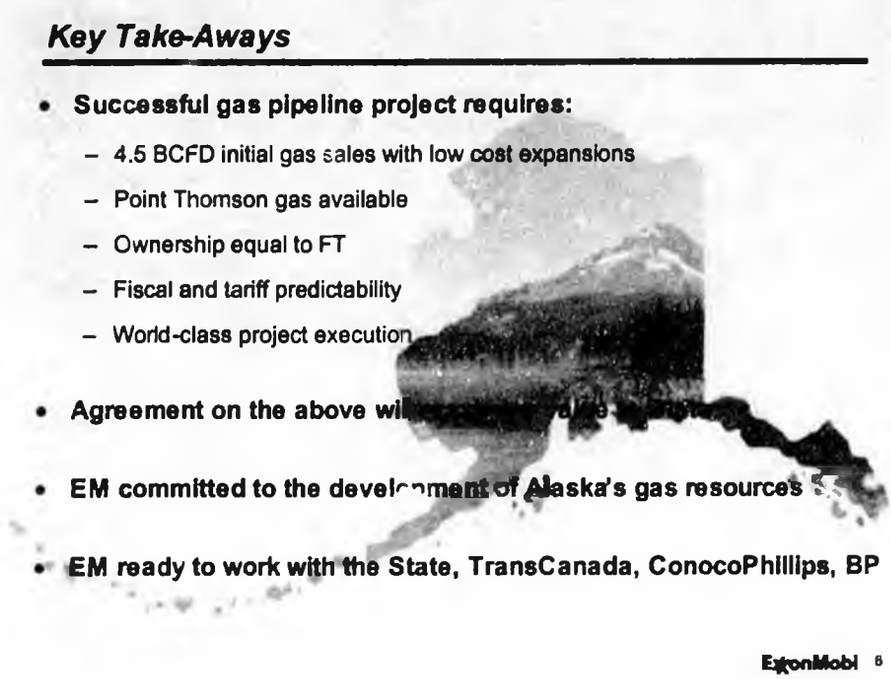
I think we are all coming to realize this project is not simply "another pipeline project". Goldman Sachs agree, as per Appendix H, page 2 – "It is important to note that this project is unprecedented in terms of scope, costs and financing requirements...". It is a

massive mega-project and faces extreme risks due to its scale and complexity. The project would be the largest private investment in North America. The gas treating plant, which is an integral part of the project, will be the largest of its kind in the world. There is not another project that compares to this one. For this reason, world-class project execution is essential.

Let me put this in perspective. A 20% overrun would reduce the State $NPV_5$ by more than $5 billion. So, the State and the Producers are aligned on achieving the lowest possible cost because our value comes from the netback on the gas...which is simply the gas sales price minus the transportation costs.

On a project of this magnitude and complexity, project construction and operating experience should be a significant consideration. This project will require combining the resources, skills, expertise and financial strength of all parties to be successful.

**Slide 6: Key Take-Aways**




Let me close with the key take-aways from my testimony today. A successful project will require alignment among the parties on the following:

- The pipeline should be built and flowed at an initial rate of 4.5 BCFD with the ability to add low-cost expansions.

- Point Thomson is critical to the pipeline. This gas should be made available to support commitments to the pipeline. The Point Thomson Initial Production System, which is currently underway, should be allowed to continue. The Point Thomson Plan of Development should be approved to remove any doubt on how best to produce the Thomson Sand. All 27 Point Thomson owners are committed to the plan and would like to resolve the current dispute with the State.

- Ownership equal to FT commitments, as well as fiscal and tariff predictability are necessary to achieve a commercially viable project.

- World-class project execution is essential. Expertise from all players is needed.

- Aligning on these important considerations will maximize value to the State.

- And finally and most importantly, we are committed to the development of Alaska's gas resources. We are ready to work with the State, TransCanada, ConocoPhillips and BP to develop a solution that ensures a successful project.

Thank you for the opportunity to speak with you today to address this important topic for the State of Alaska and our company. I look forward to addressing your questions.

Before the
Alaska State 25th Legislature Third Special Session

Regarding the

# TransCanada Application Pursuant to the Alaska Gasline Inducement Act

*Statement of*


## Prof. Joseph P. Kalt

**John F. Kennedy School of Government**
**Harvard University**
**and**
**Compass Lexecon Economic Consulting**


July 10, 2008

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# TransCanada Application Pursuant to the Alaska Gasline Inducement Act

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**July 10, 2008**

## Introduction

My name is Joseph P. Kalt. I am the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government, Harvard University, and a Visiting Professor at the Eller College of Management at the University of Arizona. The Kennedy School is Harvard's graduate school for the study of public policy and public administration. I also work as a senior economist in the Cambridge, Massachusetts, and Tucson, Arizona, offices of Compass Lexecon, an economics consulting firm. I have attached my biography as Attachment I.

I hold B.A., M.A., and Ph.D. degrees in economics and am a specialist in the economics of competition, antitrust, and regulation, with particular emphasis on the transportation, energy, communications, and financial sectors. Throughout my professional career I have conducted research, published, taught, and testified extensively on the economics of market structure, competition, antitrust policy, regulation, pricing, and strategic

performance in the energy industries (including natural gas transportation and marketing) and various other segments of the economy.

Of particular relevance, I have extensively studied the production and pipeline transportation of oil and gas resources throughout North America and, specifically, in Alaska. I have testified as an expert in various state and federal proceedings concerning the valuation of Alaskan North Slope crude oil and natural gas for purposes of royalty and taxation, and I have studied and testified as an expert regarding the regulation of the Trans Alaska Pipeline System.

I have now been asked by ExxonMobil Corporation to analyze key elements of the AGIA license application filed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd. (together "TransCanada") to build and operate a natural gas pipeline. In particular, I have been asked to assess the economics of TransCanada's AGIA application from the perspective of the State's and producers' interests as direct or indirect shippers on the proposed TransCanada pipeline.

## Key Findings

Based on my analysis of the economics of TransCanada's proposal to build and operate the critical pipeline infrastructure upon which North Slope gas development now depends, I find that four key aspects of the proposal bear particular attention:

- **The State's Interests:** Certainly, at least at this stage of project development, the State's interests are aligned with those of a North Slope gas producer. Alaska has abiding interests in (1) maximizing the ultimate magnitude and value of North Slope gas production; (2) expeditious completion of the major pipeline system upon which such development depends; and (3) minimization of dispute and litigation with the pipeline owner/operator over the life of the system.

- **TransCanada's Shifting of Risk:** The TransCanada proposal shifts substantial risk away from TransCanada and to producer-shippers and, in turn, to the State of Alaska. Unless subjected to appropriate, negotiated contractual risk-reward protections, this is markedly contrary to each of the State's interests noted above.
- **Threats to Producers' Economics:** In light of TransCanada's aggressive shifting of risks to producers (and the State) via the significant long-term, non-cancelable obligations of producers anticipated in the TransCanada proposal, claims of "robust" producer returns are dangerously overstated in the analysis of the State's consultant (Black and Veatch).
- **Need for Contract Negotiations and Conditioning:** In the presence of the very large risks that producers and the State are being asked to assume under TransCanada's proposal, it is in the producer-shippers' and State's best interests that contracting with TransCanada for long-term transportation be approached in a standard, businesslike manner. This means negotiating contracts and conditioning "open seasons" on pipeline capacity so as to strike sustainable agreements that reflect balanced allocations of risk.

Let us examine these findings in detail.

## The State's Interests: What Should It Care About?

The question of whether the TransCanada proposal sufficiently protects and maximizes the benefits to Alaskans is one that will have significant ramifications for the State's ability to fully realize its return from the development of the State's resource. The State's direct monetary interests, derived from the payment of royalties and severance and income taxes, are very much the same as those of a prospective producer-shipper on the pipeline. Gas will not flow and revenues will not be earned if pipeline development is delayed by inflexibility in project contracting or by the shifting of so much risk to producers, without offsetting protections and rewards, as to threaten the economics of producers' investments. The cost, delay, and disruption that can plague such an expensive and long-lived project will not be held at bay over the project's life if initial contracting does

not undertake best efforts to arrive at fair and balanced allocations of risks and rewards. With the only certainties about the future decades in world energy markets being that they are uncertain and will be volatile, contractual *imbalance* as risk converts itself to reality is a recipe for maximizing conflict among the stakeholders.

**Project Risks Cannot Be Eliminated:**
**Where Does TransCanada Put Them?**

With daily reports of world crude oil prices hitting ever-higher peaks and pulling up natural gas prices in the process, it is easy to believe that there is and will continue to be an endless supply of investment dollars ready and willing to flow into development of North Slope gas. But, as Figure 1 should remind us, we have been here before – and billions of dollars were lost betting that the price run-ups of the 1970s and early 1980s would not turn into two decades of prices substantially below their peak.

In fact, North Slope gas development, itself, was a victim of these risks. As everyone here is likely aware, during the early development of the State's crude oil resources, the expectation was that natural gas resource development would soon follow. However, dramatically declining worldwide energy prices subsequently rendered such natural gas projects uneconomic in light of the very high costs associated with providing transportation from such a remote area. The extremely high costs of TransCanada's proposed pipeline – estimated at $31.5 billion by the State's consultant, Black and Veatch ("B&V") – are no less a source of potential risk and impediment to North Slope development today. In fact, the cost of the proposed pipeline would far exceed the cost of any recent majority privately financed infrastructure development anywhere in the world (see Figure 2). TransCanada's proposal is approximately three times more expensive than the next largest "mega" project. Furthermore, the risk burden these figures

imply is only magnified by the remarkable size and length of TransCanada's proposed pipeline, the remoteness of the resource base, the arctic environment, and the existence of multiple state, provincial, national, and Native governmental jurisdictions along its path.

In light of the risks, it is readily understandable that TransCanada has assiduously sought to protect its economic interests by minimizing the risks it bears. In the process, however, TransCanada has shifted the lion's share of the project's risks to producer-shippers and those (like the State) with a producer's interests. This risk shifting is most starkly seen in TransCanada's proposal that producer-shippers be expected to sign long-term non-cancelable commitments to provide the pipeline developer with a steady stream of cash flows over the project life span. The mechanisms by which this would be achieved include:

- 25-year, firm ship-or-pay contracts for pipeline capacity;
- The absence of a project completion guarantee from TransCanada (leaving risks on producers and taxpayers);
- Cost recovery guarantees that leave TransCanada with a minimal cost at risk of about $125 million out of $31 billion.

## Risk, Risk Shifting, and Producer Economics

The costs to the producer-shipper of risk-shifting elements of the TransCanada proposal can be easily illustrated by the fact that TransCanada is looking for 25-year producer ship-or-pay contracts for essentially the entire capacity of the pipeline. Such 25-year, firm ship-or-pay contracts create fixed obligations that are payable to TransCanada over the next 25 years whether or not the producers ship gas on the system and whether or not producing and selling Alaska North Slope gas is actually profitable. For all intents and purposes, producer-shippers are being asked to take on the economic equivalent of a long-term stream of mortgage or lease payments that would

effectively finance and pay for the pipeline. In the process, producer-shippers would be taking on the risks of the system, but without acquiring any ownership and control. It's like putting up the financing to pay for a new house or a new condominium, but then letting the builder remain as pe petual landlord.

The fundamental economic character of producer-shippers' financial obligations have not been accurately characterized in B&V's analysis of the economics that *producers* face in developing and selling Alaskan gas. Since the producer-shippers would have to pay TransCanada the stream of mortgage like payments over the next 25 years regardless of other market and/or project changes, these obligations shift gas price, cost, and geologic risk to producer-shippers. The pipeline developer, meanwhile, would receive a stream of payments that are effectively guaranteed by the financial capability of the producer-shippers signing the long-term ship-or-pay contracts.

Critically, TransCanada's ability to raise the financing in this case is not dependant on TransCanada's financial capabilities. Rather, it is based almost exclusively on the financial capabilities of the parties signing the ship-or-pay contracts. TransCanada is essentially a pass-through middleman in the financing chain. For these reasons, it is the producers' balance sheets and debt-carrying capacity, not TransCanada's, that are the keys to the financial markets' willingness to finance the pipeline.

The financial implications of this risk shifting for the producer-shippers are not properly recognized by the net present value ("NPV") and rate of return calculations of the State's consultant, Black & Veatch. In its analysis, B&V treats the ship-or-pay contracts as an operating expense ("OPEX") of the producer-shippers, rather than as a fixed commitment that

must be paid regardless of other market developments. This is economically incorrect: The ship-or-pay contracts are actually capital commitments whose basic payment obligation does not vary with operations (throughput). Financial markets (and economics) properly treat such commitments as upfront debt *of the producer-shippers*[1] – especially under the huge costs and unique risks of an Alaskan gas pipeline. TransCanada ends up bearing the relatively low risk that very large and financially sound producer-shippers like ExxonMobil, BP, and ConocoPhillips will not be able to pay their debts. The producer-shippers, meanwhile, end up bearing the very substantial risks of volatility in world energy markets, the uncertainties of geologic unknowns in the arctic, and the vagaries of domestic and international politics and regulation affecting development costs and pricing. Failure to account for this leads B&V to overstate the risk borne by TransCanada and understate the risk borne by producers.

### The Threat to Producers' Economics

Under proper treatment of ship-or-pay commitments, B&V's characterization of producers' economics of investing in and developing North Slope gas as "robust" evaporates. With project risk shifted overwhelmingly to producer-shippers under TransCanada's proposal, it is inappropriate to discount the costs of the pipeline tariff at the overall project risk rate since that payment stream is guaranteed by the producer's debt-bearing capability. Using a 6% discount rate (as a measure of the producer's weighted average cost of debt) for the projected stream of tariff costs, B&V's claim of an NPV project worth of $13.5 billion collapses to worse than breakeven (see Figure 3). That is, the overall project does not generate enough risk-adjusted revenue to cover producers' costs of capital. The State cannot have security

[1] See, e.g., Standard & Poor's, *Operating Lease Analytics, Corporate Ratings Criteria 2006*; and Brealey, Richard A., Stewart C. Myers, and Franklin Allen, *Principles of Corporate Finance*, 9th edition, McGraw-Hill Irwin, 2008, at 706.

that the TransCanada proposal will enable the development of the State's gas resources.

But is there really much risk being borne by producers, in light of the very high prices and go-go investment environment we now see in energy markets around the world? History says there is. While describing the producer returns as "robust," even the B&V sensitivity analysis acknowledges that positive producer returns evaporate if prices fall 40-60% from the B&V base case of steadily rising prices.[2] While world energy prices are likely to be on an upward trend over the very long term, history tells us that such trends can be upended for sustained periods of time.

Consider the actual case of the 1980s and 1990s shown in Figure 1. World oil prices peaked in 1982, and then embarked on a long period in which prices were far below the peak. It was not until 2004 that prices once again exceeded the 1982 level. At the peak in the early 1980s, "consensus forecasts" (see Figure 4) of rapidly rising prices implied "robust," positive economics for a multitude of potential projects (including a natural gas pipeline from the North Slope). Given the subsequent decline in world energy prices, however, investors in many of those projects, if they had moved forward, would have regretted their decision. Billions of dollars were lost as expectations were dashed. Accounting for the possibility that price forecasts may turn out to be significantly overly optimistic is clearly relevant to the discussion of the "robustness" of producer economics. If history repeated itself, based on the pattern of percentage declines shown in Figure 1 – which it could – B&V's framework indicates that the Alaskan producers' NPV would be reduced to approximately *negative* $1.5 billion.

[2] Black & Veatch, AGIA NPV Analysis Report Prepared for the State of Alaska, May 22, 2008, at 222.

Producers bear risks not only of price decline. Mega projects can also experience significant cost overruns, especially in new and untested environments. For example, the cost of the TAPS crude oil pipeline was originally estimated at $900 million, but eventually ballooned to over $8 billion in the 1970s.[3] That represents a ninefold increase in project cost and subsequent tariffs. Such cost escalation on large energy projects is not unique to the TAPS project. More recently, even smaller, faster-to-market projects have exhibited significant increases in costs. For example, press reports indicate that the Nabucco Gas Pipeline (serving Europe) is over budget by 60% due to increasing materials cost and the Sakhalin-2 project has exceeded early cost estimates by over 100%.[4]

Other important factors that can affect producer profitability include the fiscal regimes under which they operate. While the B&V analysis assumes a certain set of governmental fiscal policies over the life of the pipeline, the chance that these policies may change over time creates an additional layer of uncertainty that must be considered in the context of existing price and cost risks faced by the producers. As so many countries around the world have learned, uncertainty regarding fiscal regimes raises producer risk and deters investment and development in otherwise well-functioning marketplaces.

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[3] Testimony of Monte Canfield, Jr., Director, Energy and Minerals Division, GAO, before the Senate Committee on Energy and Natural Resources, *Planning and Construction of the Trans-Alaska Pipeline*, September 26, 1977.

[4] "Sakhalin Energy Projects Face Reality Check", *Eurasia Daily Monitor*, July 27, 2005, http://www.jamestown.org/edm/article.php?article_id=2370064; and "Nabucco natural gas pipeline over budget as steel prices soar", *International Herald Tribune*, June 3, 2008, http://www.iht.com/articles/2008/06/03/business/pipe.php.

## Protecting the State and Producer-Shippers through Negotiation and Conditioning

As I have discussed above, the risk-shifting contained in the TransCanada proposal is understandable from TransCanada's perspective. At the same time, however, it is eminently rational for the producers and the State to work to protect their interests. It is not in producers' or the State's interests to treat the TransCanada proposal as "take it or leave it." As in any case of a business proposal involving substantial risk and huge cost, producer and State interests here should be protected by allowing parties to negotiate over key terms and conditions that define the project's risk-sharing relationships.

It is standard practice for prospective shippers to "condition" their bids in a new pipeline's "open season" for capacity contracting on contractual provisions and terms that protect their interests. Similarly, it is standard practice that prospective shippers engage in extensive negotiations and discussions with the pipeline developer. This often leads to extensive changes in what the developer might originally propose – changes that ultimately result in a sustainable, viable project that all parties can enter into and live with over the long term. In this context, North Slope producer-shippers should be expected to condition "open season" offers to TransCanada and to negotiate with TransCanada. Doing so is consistent with their interests and ultimately serves to protect the State's interests.

While it is up to the parties to define the key elements of their negotiations, there are several aspects of the TransCanada proposal that are reasonable candidates for possible negotiation and conditioning as part of the pipeline capacity contracting and development process. These include measures to provide:

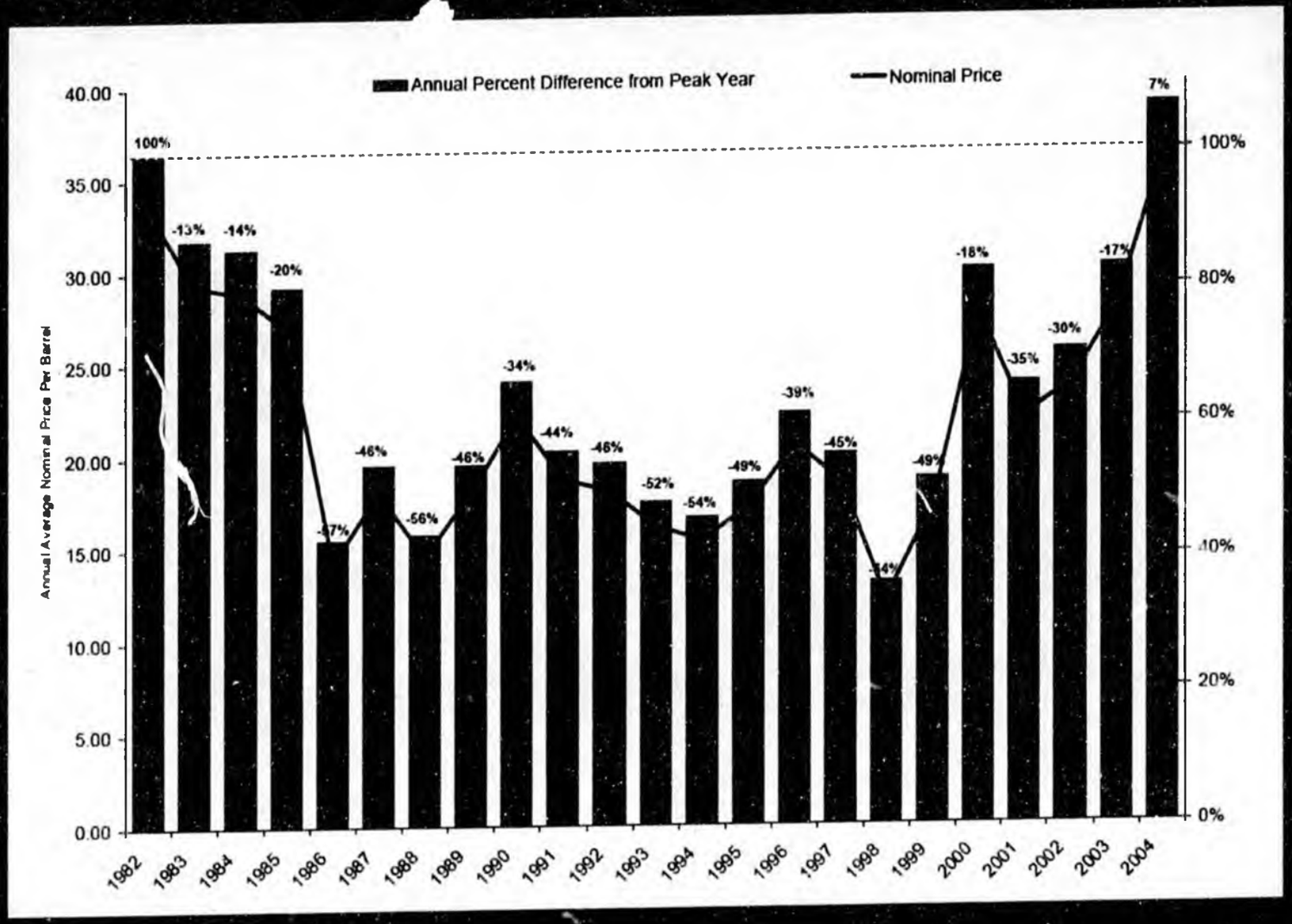
- Tariffs commensurate with risk allocation between TransCanada v. the State and producer-shippers;
- Matching of risk and control via producer-shippers holding ownership interest in accord with expected throughput[5];
- Conditioning and/or modifying such provisions as downstream TransCanada exclusivity, withdrawn partner liability, and cost overrun responsibility (all of which now a: tilted strongly in TransCanada's favor).

Finally, conditioning and negotiation over these kinds of matters should not be viewed as setbacks to the process of establishing a pipeline project in a reasonable timeframe. Given the possibility that the lack of flexibility around key risk and control provisions could create a "one size fits none" outcome, the ability to condition bids and engage in negotiations of key terms and conditions can enhance the chances for the State's resources to be developed sooner rather than later. And, developing a pipeline with a balanced sharing of risk and reward will promote a pipeline system that is sustainable and subject to fewer disputes and disruptions over its life. This is clearly in the State's interest.

[5] With access by future expansions and producer-shippers now being protected by new FERC access rules pursuant to recent federal legislation.

Figure 1

# DESPITE FORESCAST MADE AT A PEAK, WORLD ENERGY PRICES CAN KILL PRODUCER ECONOMICS




Source: EIA

Figure 2

# THE TRANSCANADA PIPELINE IS EXTREMELY COSTLY

| Project Name | Amt. ($B) | Country | Sector | Year |
|---|---|---|---|---|
| Saudi Kayan Petrochemical Complex | 10.00 | Saudi Arabia | Petrochemical Chemical Plant | 2008 |
| Rabigh Petrochemical Expansion Project | 9.90 | Saudi Arabia | Petrochemical Chemical Plant | 2006 |
| Abu Dhabi Aluminium Smelter | 7.05 | United Arab Emirates | Processing Plant | 2007 |
| Liaoning Nuclear Power Plant Project | 6.94 | China | Power | 2008 |
| Jamnagar Petrochemicals Refinery Complex | 6.00 | India | Petrochemical/Chemical Plant | 2006 |
| Qatargas 4 | 5.71 | Qatar | Oil Refinery/LNG and LNG Plants | 2007 |
| Fujian Refining and Ethylene Joint Venture Project | 5.60 | China | Petrochemical/Chemical Plant | 2007 |
| YanSab Petrochemical Complex | 5.00 | Saudi Arabia | Petrochemical/Chemical Plant | 2006 |
| Indiana Toll Road | 4.83 | United States | Road | 2006 |
| Qatar Aluminum Trust | 4.74 | Qatar | Processing Plant | 2007 |
| QCTC Nakilat LNG Vessels | 4.74 | Qatar | LNG | 2006 |
| FARAC Toll Road PPP | 4.28 | Mexico | Road | 2007 |
| Ambatovy Nickel Project | 3.70 | Madagascar | Mining | 2007 |

Note: * In 2008 dollars according to Black Veatch $NPV_{10}$ analysis at 9.
Source: Project Finance and Infrastructure Finance, Issues 288 and 277., Dealogic.

Figure 3

# PURPORTEDLY "ROBUST" PRODUCER ECONOMICS v. REALITY OF RISK SHIFTING

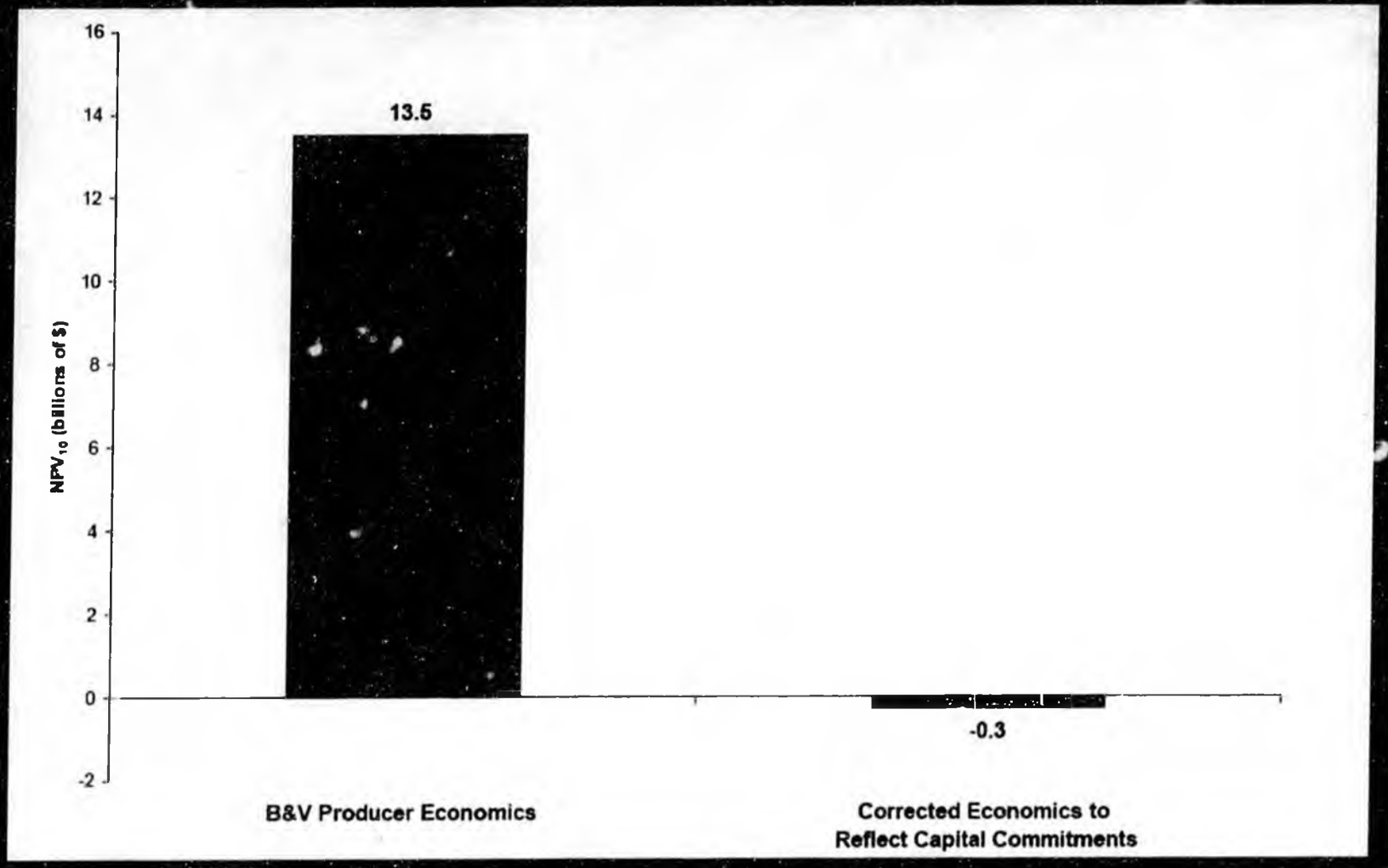
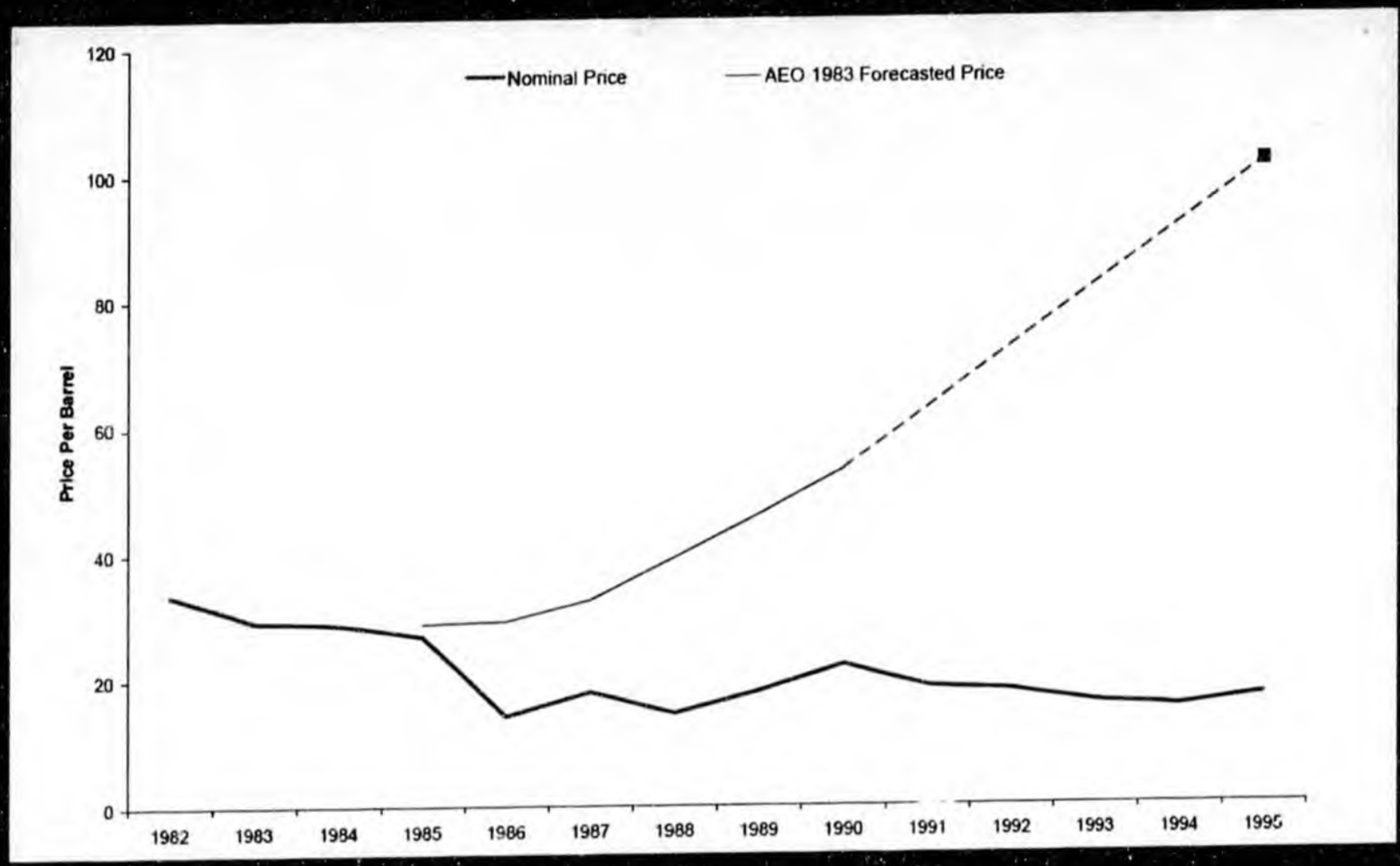


Figure 4

# THE PRICE PER BARREL OF OIL v. THE AEO 1983 FORECASTED PRICE PER BARREL OF OIL




Source: EIA

## Attachment I

**JOSEPH P. KALT**
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**INTERNATIONAL POLITICAL ECONOMY**
**JOHN F. KENNEDY SCHOOL OF GOVERNMENT**
**HARVARD UNIVERSITY**

Joseph P. Kalt is the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government at Harvard University. He joined the faculty at Harvard in 1978 and is a specialist in the economics of development, political economy, industrial organization, antitrust, and regulation. The Kennedy School of Government is Harvard's graduate school for public policy and administration, and Prof. Kalt has served as the School's Academic Dean for Research, chair of degree programs, chair of Ph.D. programs, and chair of the economics and quantitative methods section. Since 2005, Prof. Kalt also has served as a visiting professor at The University of Arizona's Eller College of Management. He received his Ph.D. (1980) and M.A. (1977) in Economics from the University of California at Los Angeles, and his B.A. (1973) in Economics from Stanford University.

Prof. Kalt's publications include *The Economics and Politics of Oil Price Regulation*, *Drawing the Line on Natural Gas Regulation* (with Frank C. Schuler), *Petroleum Price Regulation: Should We Decontrol?* (with Kenneth Arrow), and *New Horizons in Natural Gas Deregulation* (with Jerome Ellig). He is a Senior Economist with Compass Lexecon, an FTI Consulting company specializing in the economics of competition and regulation. He previously founded The Economics Resource Group, an economics consulting firm acquired by Lexecon in 1999. Prof. Kalt has appeared frequently as an expert before the U.S. Congress and various state, federal and international tribunals, and he has served as mediator and arbitrator in various private and intergovernmental disputes. Prof. Kalt has also served as an adviser to various national and international governments, including the U.S., Thailand, China, Canada, and numerous American Indian tribes.

Prof. Kalt is widely recognized for his work in economic development on American Indian reservations and among First Nations in Canada. In 1987, he founded (with Stephen Cornell) the Harvard Project on American Indian Economic Development. He continues to serve as the Project's co-director. He is a principal author of *The State of the Native Nations: Conditions under U.S. Policies of Self-Determination* (with the Harvard Project), co-editor and a primary author of *What Can Tribes Do? Strategies and Institutions in the Economic Development of American Indian Reservations* (with Stephen Cornell), and a principal author of *Rebuilding Native Nations: Strategies for Governance and Development.* In 2005, Professor Kalt received the National Center for American Indian Enterprise Development's First American Leadership Award for his contributions to research in public policy affecting Native peoples.

Prof. Kalt is a member of the Board of Trustees of The Communications Institute, the National Advisory Board of The Big Sky Institute, and the Board of Directors of The Sonoran Institute. He served on the President's Commission on Aviation Safety and on the Steering Committee of the National Park Service's *National Parks for the 21st Century.*

Prof. Kalt is a native of Tucson, Arizona. He and his wife, Judy Gans, have two children. The family owns Arrow Mountain Ranch, with horse breeding and training operations in Montana and Arizona.

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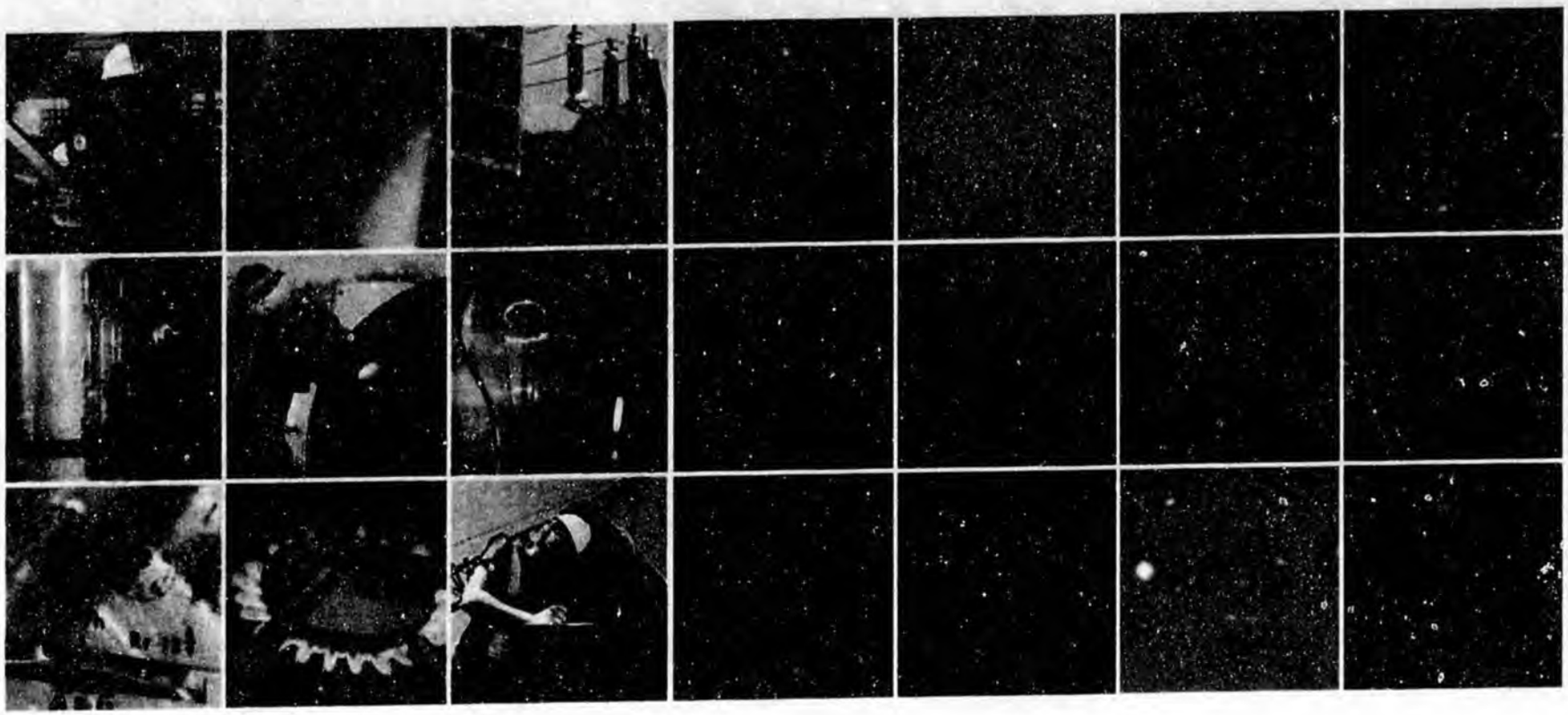

# Alaska Pipeline Project

## Workforce Plan in Alaska

TransCanada
*In business to deliver*

# Presentation Overview

1. AGIA Commitments
2. Alaska Pipeline Project Phases
3. Alaska Section Workforce Requirements
4. Alaska Workforce Strategy
5. Workforce Risks / Opportunities
6. Workforce Preparation / Training



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# AGIA Commitments

- AS 43.90.130 (15) – **hire qualified residents** from throughout the state for management, engineering, construction, operations, maintenance, and other positions on the proposed project;
- **Contract with businesses** located in the state;
- Establish **hiring facilities** or use existing hiring facilities in the state;
- Use, as far as is practicable, the **job centers** and associated services operated by the Department of Labor and Workforce Development and the Internet-based labor exchange system operated by the state;
- AS 43.90.130 (17) commit to negotiate, before construction, a **project labor agreement** to the maximum extent permitted by law….



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# APP Project Phases

## Development Phase

### Proposal (< 2 years)

- Define Project scope, cost and schedule (Initial Front End Engineering Design [FEED])
- Conduct initial binding Open Season

### Definition (4 years)

- FERC and NPA approvals / certificates
  - Technical, environmental and regulatory effort (complete FEED)

## Execution (<4 years)

- Build the project

## Operations

- Operate and maintain the facilities



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# Alaska Section Workforce Requirements (Averages – Full Time Equivalents)

| ***PHASE*** | ***RESOURCES REQUIRED*** |
|---|---|
| Proposal<br>2008 - 2010 | 100 - 150 |
| Definition<br>2010 - 2014 | 275 - 400 |
| Execution<br>2014 - 2018 | 7000 - 9000 |
| Operations<br>Excludes GTP<br>2018 - | 50 – 80 |

Estimates only – subject to revision through Front End Engineering work

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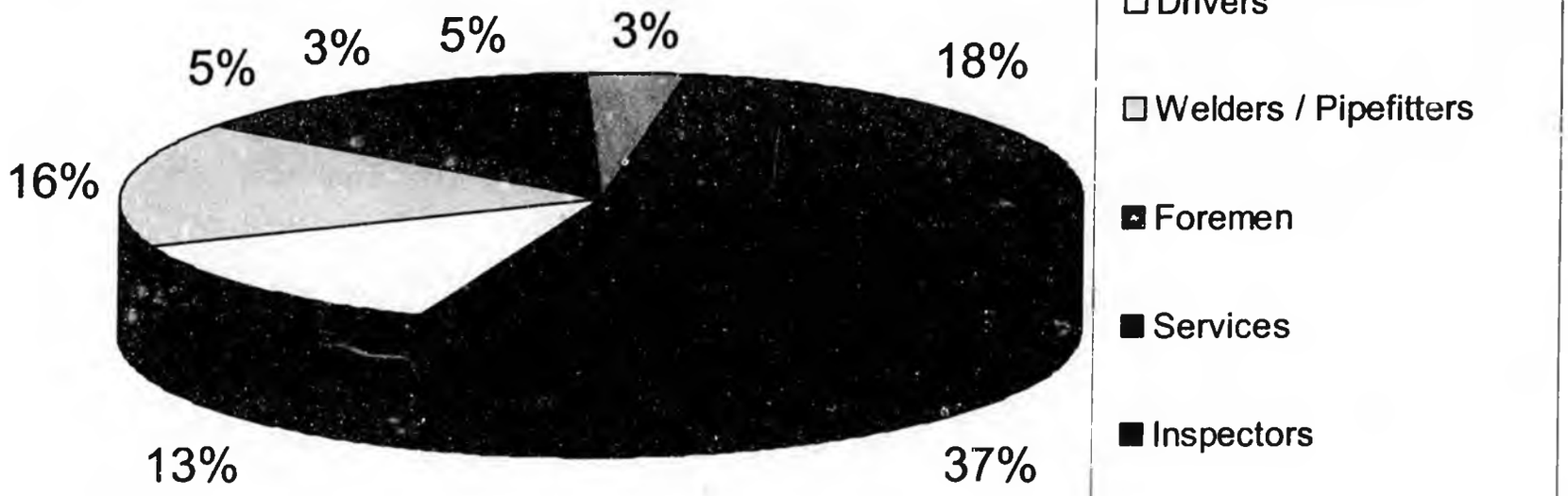
# Execution Phase Workforce Requirements

## APP Construction Spread Workforce Breakdown

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# Development Phase

## Proposal Phase

- Internal team managing few contracts
  - Hire Alaska residents for some key internal roles
  - Utilization of owner's engineer contract and existing environmental Master Services Agreements, both of which incorporate Alaska based firms
  - Supplement with additional Alaska based sub-contracts for services
  - Web based instrument for goods and service providers to supply information on offerings – information will be shared with contractors for consideration throughout project



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# Alaska Workforce Strategy (continued)

## Definition Phase

- Larger internal team managing new contracts with service providers
  - Requests For Proposals would be issued during previous phase for major engineering, environmental and socio-economic work packages for the Definition Phase. This would provide great opportunity for Alaska service providers, including Alaska Native Regional Corporations.
  - Opportunities for internal team will be open for Alaska residents
  - Work will be supplemented with Alaska based sub-contracts for services



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# Alaska Workforce Strategy (continued)

## Execution Phase

- Project Labor Agreements will be negotiated
- Internal team will manage large EPCM contractors
- Requests For Proposals will be issued and evaluated during previous phase
- TransCanada commitments will be reflected in resultant contracts regarding Project Labor Agreements, Alaska hire and Alaska business opportunities
- Opportunities for internal team will be open for Alaska residents – job centers and associated services operated by the Department of Labor and Workforce Development will be utilized



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# Alaska Workforce Strategy (continued)

## Operations Phase

- Efficient team will provide operations and maintenance services for facilities in Alaska, including the GTP if required
- Support services will be contracted to local service providers
- Maintenance activities will be contracted to local service providers to the fullest extent possible



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# Workforce Risks / Opportunities

Opportunities:

- High profile, anticipated project
- Good potential for multi-year, year round construction effort
- Strategies have been largely developed
- Time available to act on strategic initiatives
- TransCanada support and involvement with AGIA Training Strategic Plan

Risks

- 'Heated' labor market factors
- Demographic profile of workforce
- Potential for significant in-migration



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# Workforce Preparation and Training
# AGIA Training Strategic Plan

- Broad-based, inclusive, strategic and action oriented framework

Industry

Trade Associations

Trade Unions

State Agencies

Educational Institutions

Federal Agencies

**TransCanada roles:**

- Direct participation with strategic planning process
- Provision of timely project labor demand information
- Dialogue with all stakeholders
- Coordination of training implementation
- On-going effectiveness evaluation



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