SCOMM

129:11

ALASKA STATE LEGISLATURE

JOINT COMMITTEE ON NATURAL GAS PIPELINES

Official Business

Senator John Torgerson, Chair
Senator Rick Halford
Senator Pete Kelly
Senator Johnny Ellis

Representative Joe Green, Vice-Chair
Representative Brian Porter
Representative Scott Ogan
Representative John Davies

AGENDA

Joint Committee on Natural Gas Pipelines
April 10, 2002

1) **Update on Calgary Conference: Senator Torgerson**

2) **Update on Federal Legislation: Patrick Coughlin**

3) **Introduction of SB 360 - "Alaska Natural Gas Project Act"**

4) **Economic Models of Pipeline Projects: Dr. Doug Reynolds**

Session: January – May
State Capitol, #427
Juneau, AK 99801
Phone: 907-465-2828
Fax: 907-465-4779

Interim: May – December
35477 Kenai Spur Hwy., Suite 101A
Soldotna, AK 99669
Phone: 907-260-3041
Fax: 907-260-3044

4/10/02
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Economic Models of Pipeline Projects

Dr. Douglas B. Reynolds
Dr. Robert R. Logan
Dr. H. Charlie Sparks
Mr. Michael Backus

Model Building

- Looked at a large number of models
- Consulted and exchanged data with economists from the Department of Revenue, Department of Natural Resources and others to work out key issues involved
- Had updates every morning with Senator John Torgerson, Mr. Patrick Coughlin and other experts
- Modeled three simplified scenarios
- Other scenarios possible

Rate of Return Concept

Rate of return is a cash flow concept

Assume 1st year Equity Investment = -$100

Assume the following cash flow for each year

Yearly Revenue	**= +$30**
Yearly cost	**= -$10**
Yearly tax	**= -$10**
	+_____
Cash flow	**=+$10**

Cash flow per year

	Year 1	**Year 2**	**Year 3 ...**
-$100 Investment	**+$10**	**+$10**	**+$10**

ROR = 10%

- ROR is like interest from a Bank
- Higher ROR means a better investment and more profit
- If ROR is low, then firms choose alternative investments
- Producers want to sell gas to high ROR projects
- ROR affected by certain issues

Issue #1
Leveraging

- It is possible to pay for entire project out of pocket
  - called 100% equity financing
- It is possible to also leverage project with debt
  - example 70% Debt
    30% equity
- The ROR for the project is then the weighted average of the debt interest rate and the return on equity
- Most oil companies only compare projects with 100% equity

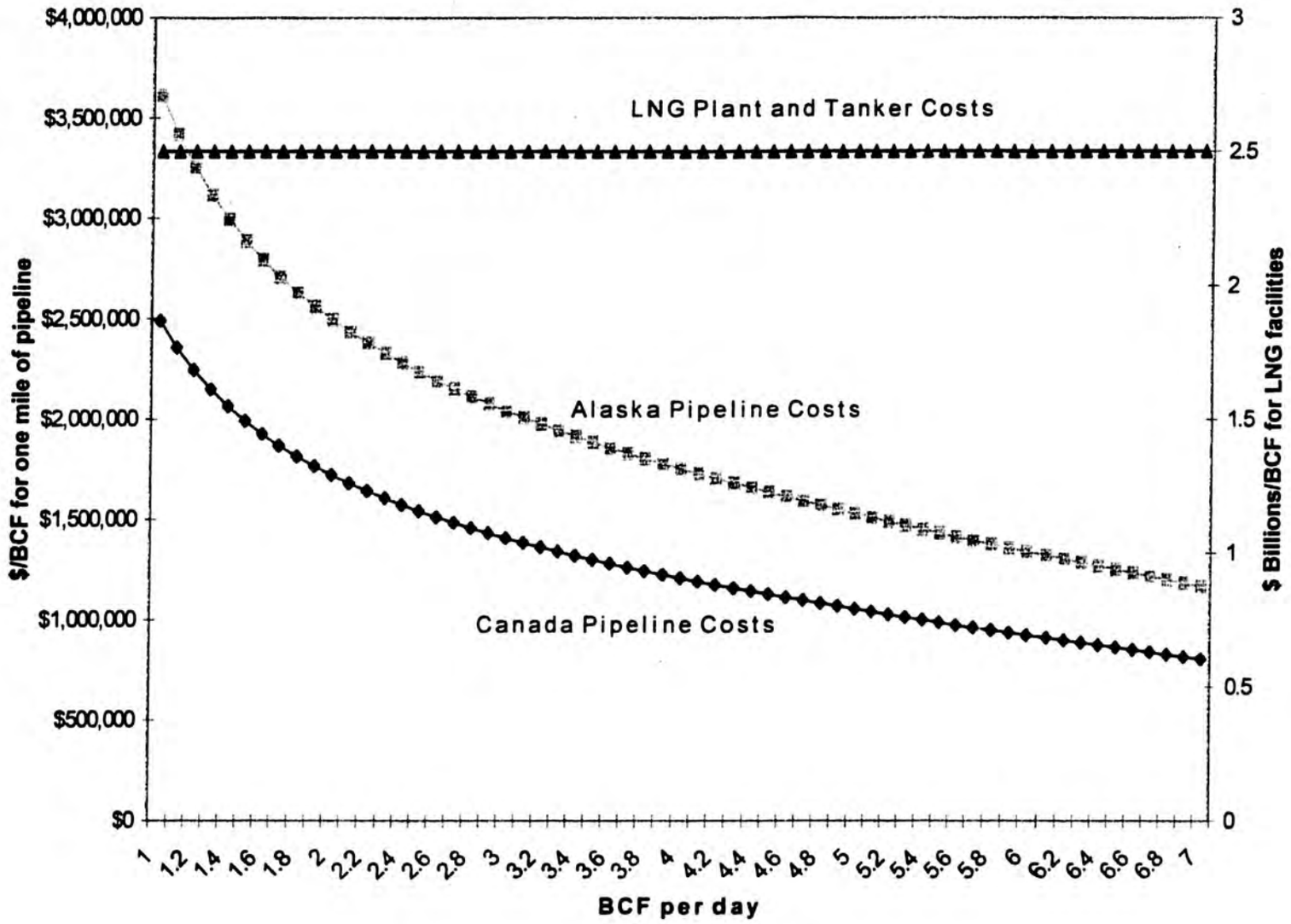
Issue #2
Natural Gas liquids (NGL)

- Some used as miscible injectants (MI), Heavy NGL's shipped in TAPS, lighter NGL's stripped and sold at the end of the gas pipeline
- NGL's more valuable than natural gas
- Selling more NGL's increases ROR
- High levels of NGL's not sustainable

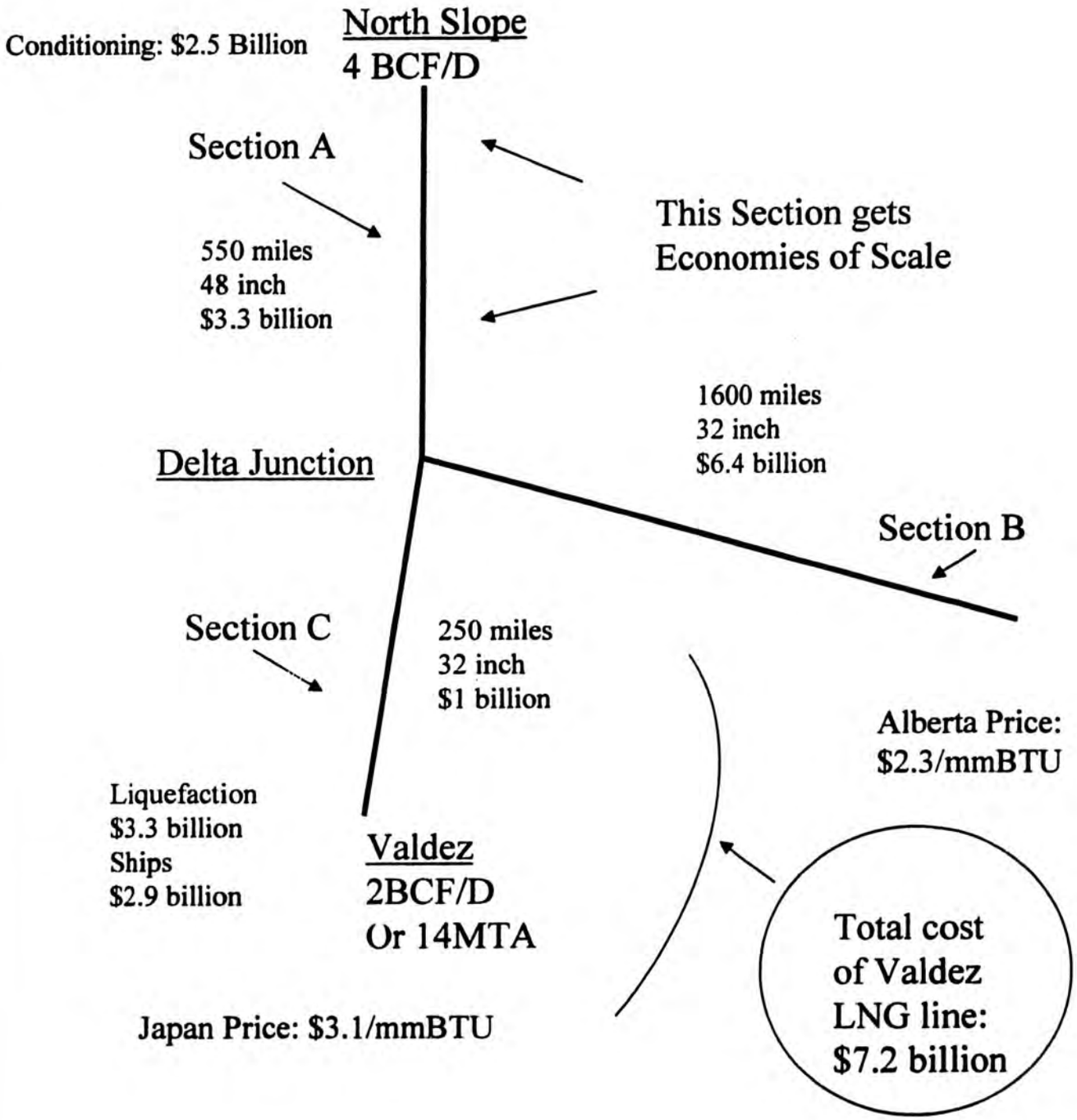
Issue #3
Economies of Scale

- The larger diameter the Pipeline the lower the costs
- Liquefied Natural Gas (LNG) plants and tankers have constant costs
- Lower costs increase ROR

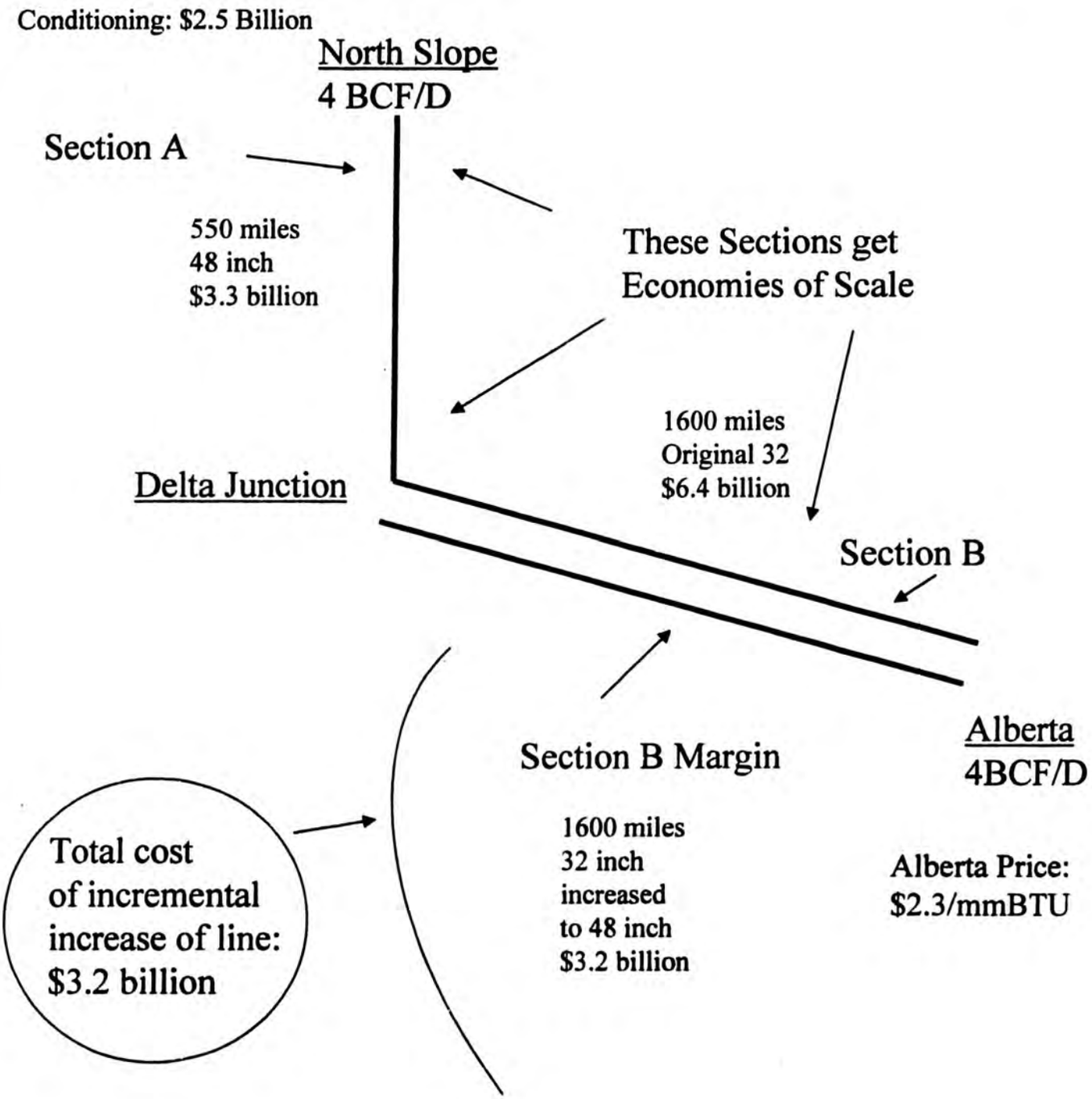
Economies of Scale



Typical Y Line Concept



Typical ALCAN Route



Issue #4
Price of Product

Pacific Rim Market

- Demand in the Pacific Rim --- 20 MTA for next ten years
- Supply potential --- 60 MTA from the Middle East and other countries
- The only way to enter the market is to have low prices
- Cannot use historic prices
- Lower prices reduce ROR

North American Market

- Demand in North America will increase at 2% per year
- Supply in Mid Continent will begin to decline
- LNG imports are hard to get into the US
- One to two new BCF per day of gas will be needed every year
- US prices can shoot up
- North America is the better market

Issue #5
Risk

- Producers must guarantee a "Ship or Pay" contract
- Producers take the risk no matter who owns the pipeline
- Only TAPS and Soviet Pipeline are as large as Alaskan gas line
- It is an all or nothing project
- Therefore, any pipeline project must obtain high rates of return (ROR) to compensate for risk

Issue #6
Federal Tax Exemption

Tax Free Bond Financing

- Tax free bonds can reduce financing costs
- As project finance costs decline, the project ROR can increase
- Possible to get tax free bonds from Railroad bonding or a natural gas authority

Tariff Income Tax Exemption

- Pipeline owners pay a tariff income tax
- An income tax exemption can cut those taxes
- HOWEVER,
  Passing on that benefit to producers will still incur an income tax
- Producers cannot gain with a tariff income tax waiver

Issue #7
In-State Demand

- A pipeline can be built to support in-state demand
- If in-state demand is delayed, then there is unused capacity
- Someone must pay for the added unused capacity of any pipeline project
- If there is unused capacity built, the ROR declines

Producer Numbers

- We asked for but have not yet received producer study numbers for their projects

Approximate Model Cost Assumptions

- Pipeline Costs
  - $140,000 per inch mile (less in Canada) includes pipe and compressor
  - Example: 4 BCF needs 46 inch pipe, 1 mile will cost $6.4 million

- Conditioning Plant Costs
  - $600 million per BCF plus some fixed costs

- Liquefied Natural Gas (LNG) Plant costs
  - $1.6 Billion per BCF

- LNG Tankers
  - $175 million per ship
  - need three ships per BCF

- Gas losses
  -There are some gas losses during gas shipping which reduces revenues

Final Model

- Compared different projects with a similar cost structure
- Used ROR to compare the different projects
- Included the sale of NGL's at sustainable levels

30 Years of Production

	Capital Cost (millions) (2002$)	bcf/day	Return on Equity	Return to Project	Wellhead	State Revenue (millions) (2002$)	Federal Revenue (millions) (2002$)	Canadian Revenue (millions) (2002$)	Undiscounted Profit (millions) (2002$)
Yukon Pacific									
YPC LNG TAGS 1.4									
YPC Numbers 75/25 Dbt/Eqt	$9,500	1.4	N/P	**14.80%**	$0.50/mmBTUs	N/P	N/P	N/A	N/P
YPC model 75/25 Dbt/Eqt	$9,444	1.4	19.83%	**13.21%**	$0.49/mmBTUs	$5,500	$4,610	$0	$10,498
NERA LNG 1.5									
70/30 Dbt/Eqt	$9,210	1.5	18.82%	**13.35%**	$0.48/mmBTUs	$5,984	$5,750	$0	$12,354
100% Equity			12.08%	**12.08%**	$0.01/mmBTUs	$6,568	$11,511	$0	$19,837

INPUTS:

Cost:	YPC	NERA
Total Conditioning Plant	$1,500	$1,687
Total Pipeline	$3,305	$3,397
Total LNG/MT	$3,049	$2,429
LNG Tankers	$1,590	$1,696
Total Other Expense	$0	$0
Total all	$9,444	$9,210

Price:	YPC	NERA
LNG	$3.50/mmBTUs	$3.10/mmBTUs
CA price	$2.75/mmBTUs	$3.10/mmBTUs
AK price	$2.50/mmBTUs	N/A
LPG	$16.70/Bbl	$15.00/Bbl
NGL	$5.53/Bbl	$8.40/Bbl

Sold:	YPC	NERA
LNG	7.0 MTA	8.5 MTA
LPG	75,000 Bbl	57,655 Bbl
NGL AK	50,000 Bbl	60,064 Bbl
NGL ANS	0 Bbl	0 Bbl

N/P: Not Provided
N/A: Not Applicable

30 Years of Production

	Capital Cost (millions) (2002$)	bcf/day	Return on Equity	Return to Project	Wellhead	State Revenue (millions) (2002$)	Federal Revenue (millions) (2002$)	Canadian Revenue (millions) (2002$)	Undiscounted Profit (millions) (2002$)
Alaska Natural Gas Port Authority									
ANGPA Y-Line 6									
ANGPA Numbers 100% Debt	N/A[1]	6.73	N/A	N/A	$0.75/mmBTUs	$9,115 (@ 7.3% NPV)	$0	N/P	N/P
ANGPA model 85/15 Dbt/Eqt	$24,744	6	34.84% [2]	14.58%	$1.14/mmBTUs	$27,932 or $8,993 (@ 7.3% NPV)	$22,549	$2,525	$56,014
NERA Y-LINE 6									
70/30 Dbt/Eqt	$24,051	6	24.51%	15.05%	$0.83/mmBTUs	$23,678	$22,889	$3,843	$49,835
ALCAN Portion		3		15.64%	$0.83/mmBTUs				
LNG Portion		3		14.57%	$0.83/mmBTUs				
ALCAN Marg[3]				17.70%					
ALCAN 6	$16,622	6	29.90%	16.67%	$1.03/mmBTUs	$24,934	$23,512	$5,686	
100% Equity	$24,051	6	14.31%	14.31%	$0.49/mmBTUs	$22,123	$34,923	$7,259	$71,155
ALCAN Portion		3		15.38%	$0.55/mmBTUs				
LNG Portion		3		13.49%	$0.37/mmBTUs				
ALCAN Marg[3]				18.36%					
ALCAN 6	$16,622	6	16.87%	16.87%	$0.78/mmBTUs	$23,072	$29,771	$10,753	

INPUTS:

Cost:	ANGPA	NERA
Total Conditioning Plant	$4,200	$5,144
Alaska Pipeline	$9,706	$6,794
Canadian Pipeline	$3,049	$3,049
Alaska LNG/MT	$4,095	$5,096
Alberta Stripper Plant	$450	$724
LNG Tankers	$3,244	$3,244
Total less ANGPA Omissions[1]	$18,001	$17,034
Total all	$24,744	$24,051

Price:	ANGPA	NERA
LNG	$3.35/mmBTUs	$3.10/mmBTUs
Albt. Price	$2.30/mmBTUs	$2.30/mmBTUs
LPG	$15.00/Bbl	$15.00/Bbl
Propane	N/A	$14.00/Bbl
NGL	N/A	$8.40/Bbl
NGL ANS	$16.50/Bbl	N/A

Sold:	ANGPA	NERA
Gas to Alberta	3 BCF	2.59 BCF
LNG	14.0 MTA	17.93 MTA
LPG/Propane	260,000 Bbl	97,826 Bbl
NGL	0 Bbl	184,395 Bbl
NGL ANS	81,000 Bbl	0 Bbl

1 ANGPA model only includes capital costs incurred in Alaska.
2 Return on equity is skewed by the large debt proportion.
3 The marginal value if all South Shore gas is redirected to Alberta.

30 Years of Production

	Capital Cost (millions) (2002$)	bcf/day	Return on Equity	Return to Project	Wellhead	State Revenue (millions) (2002$)	Federal Revenue (millions) (2002$)	Canadian Revenue (millions) (2002$)	Undiscounted Profit (millions) (2002$)
North Slope Gas Producers									
PRODUCERS ALCAN 4									
Producer's Numbers 100% Equity[1]	$13,200 [2]	4	N/P[3]	N/P[3]	$0.79/mmBTUs [4]	$22,700 [5]	$23,700 [5]	$18,100 [5] (to Chicago)	N/A
Producer model 100% Equity	$11,900	4	15.79%	**15.79%**	$0.63/mmBTUs	$14,032	$18,886	$7,942 (to Alberta)	$44,111
NERA ALCAN 4									
70/30 Dbt/Eqt	$12,881	4	26.44%	**15.63%**	$0.87/mmBTUs	$15,177	$14,256	$4,502	$33,553
100% Equity				15.36%	$0.59/mmBTUs	$13,825	$19,009	$8,507	$45,068

INPUTS:

Cost:	Producer	NERA	Price:	Producer	NERA	Sold:	Producer	NERA
Total Conditioning Plant	$2,600	$3,608	Albt. Price	$2.25/mmBTUs	$2.30/mmBTUs	Gas[6]	4 BCF	3.42 BCF
Pipeline to Alberta	$9,000	$8,308	Propane	$15.00/Bbl	$15.00/Bbl	Propane[6]	45,000 Bbl	79,203 Bbl
NGL Stripper Plant	$300	$965	NGL	N/A	$8.40/Bbl	NGL Albt	0 Bbl	127,513 Bbl
Total all	$11,900	$12,881						

1 From producer's midsummer report.
2 Includes development of Pt. Thomson at a cost of $1.3 billion.
3 According to producer's report.
4 Estimated on gas energy content of 1.08 mmBtu's per mcf.
5 In current dollars, not deflated.
6 Estimated.

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ALASKA STATE LEGISLATURE

Chairman: Senator John Torgerson
Vice Chair: Senator Gary Wilken
Senator Rick Halford
Senator Ben Stevens
Senator Robin Taylor
Senator Kim Elton
Senator Georgianna Lincoln

Official Business

State Capitol, Room 427
Juneau, AK 99801
Phone: (907) 465-4907
Fax: (907) 465-4779

SENATE RESOURCES COMMITTEE

SPONSOR STATEMENT
SB 360
ALASKA NATURAL GAS PROJECT ACT

Support for the expeditious construction and operation of an Alaska natural gas pipeline project has been one of this legislature's highest priorities. This legislature formed a Joint Committee on Natural Gas Pipelines to work with the federal government with regard to pipeline issues and to take whatever action may be appropriate to ensure that the state's interests are protected. The Joint Committee has worked with the United States Senate on a bill that would expedite construction of an Alaska gas line and would provide certain benefits to the citizens of Alaska. The Joint Committee adopted certain proposals reflecting principles to protect the state's best interests that should govern the development of a pipeline project.

Consistent with those principles, SB 360 seeks to expedite the construction and operation of an Alaska gas line from the North Slope, whether south through Canada to the lower 48 or to Alaska tidewater for shipment as LNG ("Project"). It provides incentives and other benefits to those project sponsors who are willing to work with the State of Alaska to ensure: (1) opportunities for employment of Alaskans and for contracting with Alaskan businesses are maximized; (2) potential in-state demand for gas from the project can be satisfied; and (3) competition in the exploration and development of northern Alaska gas is promoted.

Currently, a project sponsor for a pipeline Right-of-Way (ROW) lease to construct a pipeline from the North Slope can proceed under the provisions of the Alaska Pipeline Right-of-Way Leasing Act. However, those provisions and other provisions of Alaska law will be modified for a sponsor who agrees to do the following:

1. Train and hire Alaskans and use Alaska businesses in the construction and operation of the Project consistent with constitutional provisions.
2. Complete a study on in-state demand and submit a plan that must be approved by the RCA to meet that demand.
3. Complete a study on natural gas resources in northern Alaska and submit a plan that must be approved by the RCA to maximize

access to the Project so that competition in the Alaska oil and gas industry is promoted.

4. Update those demand and resources studies ten years after construction of the Project starts.
5. Agree to provisions in the ROW lease providing for in-state use of gas and expansion of the Project.

A project sponsor can still proceed to get a ROW lease without doing the above, but will not get the benefits described below.

If a project sponsor gets certifications from the appropriate agencies that the sponsor will or has done all of the above, the sponsor gets the following expeditious treatment in obtaining authorizations to construct and operate the Project:

1. The Project may be phased under the ROW leasing act.
2. All agencies must give full cooperation to the DNR commissioner on Project matters by providing information and by issuing any necessary authorizations at the earliest practicable date, on an expedited basis, and with precedence over any like matter pending before the agency.
3. Any authorization may be amended as necessary to further the purposes of the Act.
4. If the governor finds a provision of law that impedes the Project, he may propose a waiver of law.
5. Any decisions by the commissioner and other agencies shall be subject to limited judicial review only and such claims must be brought within 60 days.

In addition, a project sponsor, who gets the required certificates, can be granted certain financial incentives. First, the DOR commissioner may waive, reduce, or defer all or a portion of the property tax payments relating to the Project upon a showing that the Project would not otherwise be economically feasible and an agreement to begin construction by a certain date, and approval by the legislature. Second, the DNR commissioner may waive, reduce, or defer all or a portion of the royalty payments relating to the Project upon a similar showing, agreement and legislative approval. Third, the Alaska Railroad Corporation may provide tax exempt financing for the project. These financial incentives will not be available to a project sponsor who does not get the required certificates.

4/10/02
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ALASKA STATE LEGISLATURE

JOINT COMMITTEE ON NATURAL GAS PIPELINES

Official Business

Senator John Torgerson, Chair
Senator Rick Halford
Senator Pete Kelly
Senator Johnny Ellis

Representative Joe Green, Vice-Chair
Representative Brian Porter
Representative Scott Ogan
Representative John Davies

MEMORANDUM

TO: Joint Committee on Natural Gas Pipelines Members

FROM: Senator John Torgerson, Chair

DATE: April 10, 2002

RE: Global Petroleum Show – Calgary, Alberta

Senator John Torgerson and the International Alaska Highway Pipeline Committee would like to invite Joint Committee on Natural Gas Pipelines members to join us in participating in the Global Petroleum Show to be held in Calgary, Alberta, Canada June 11-13, 2002.

This is the largest and most comprehensive biennial oil and gas show held anywhere in the world. It covers 500,000 sq. ft. of exhibit space and houses over 1,450 petroleum industry companies. Over 60,000 visitors from 88 countries attended in 2000.

We have secured a 10'x10' exhibition booth for Alaskan companies and the Division of Oil and Gas to display promotional information. We have also reserved the Archie Boyce Theatre, a 240 person theatre at the Centre 21 Exhibition site, for a panel discussion forum on June 12th.

The current outline for the forum is very fluid as we seek input from various agencies and institutions on the state/provincial and federal level. We envision a two-tiered Regulations panel to focus on how to approach working towards an Alaska gas line and potential barriers. The first tier will engage in a discussion between FERC and NEB representatives on the federal level and the second tier will involve state/provincial regulatory agencies.

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A Labor panel will consist of the Commissioners and Ministers of Labor discussing labor issues and potential barriers, such as constitutional hiring impediments in Alaska.

A Training panel will include major universities in the region as well as vocational training schools that will discuss workforce development, cross-border training, and reciprocity agreements.

We also hope to have a NAFTA attorney available to speak on cross-border issues that will need to be examined and representatives from First Nations in the northern regions.

We have reserved a block of 25 rooms at the Fairmont Palaser Hotel (a Calgary landmark!) in downtown Calgary at the rate of $199 CDN per night +7% tax from June 9-14, 2002. ROOMS NOT RESERVED BY APRIL 15, 2002 WILL BE RELEASED!!

A detailed website for the Show is maintained at: www.petroleumshow.com
Registration to the attend the show is free at:
http://www.petroleumshow.com/registration/regtype.asp?status=visitor&show=2&id=&comid=&expid=&areatype=featured&othershow=&l2=

Please call Kim Ognisty in Senator Torgerson's office at 465-3421 for more details and participation confirmation.

INTERNATIONAL ALASKA HIGHWAY PIPELINE COMMITTEE

Senator John Torgerson, Alaska
Minister Scott Kent, Yukon Territory
MLA Mark Hlady, Alberta
Minister Greg Halsey-Brandt

Mission Statement

The mission of the International Alaska Highway Pipeline Committee is to identify and promote measures that the Legislatures of Alaska, Alberta, British Columbia, Northwest Territories, and Yukon may take to expedite the timely delivery of natural gas to market via the Alaska Highway Pipeline Project while maximizing benefits to jurisdictions that are affected.

Principles

1) To encourage a decision to begin construction of an Alaska pipeline projects.
2) To openly exchange information.
3) To maximize local jobs and business opportunities.
4) To ensure community access to the resource.
5) To encourage aboriginal participation in Alaska Highway pipeline projects.
6) To recommend a streamlined regulatory process.
7) To meet jointly with producers and pipeline construction companies to identify barriers and work toward solutions.
8) To complete this committee's work by December 1, 2002 and submit a written report to their respective legislative bodies on their findings and accomplishments, including recommendations or issues still left unresolved or programs that should be continued.

Senator Torgerson
Session: January – May
State Capitol, #427
Juneau, AK 99801
Phone: 907-465-2828
Fax: 907-465-4779

Minister Kent
P.O. Box 2703
Whitehorse, Yukon
Canada Y1A-2C6
Phone: 867-667-5813
Fax: 867-667-8409

MLA Hlady
710 Legislature Anex
9718-107 St.
Edmonton, AB
Canada T5K-1E4
Phone: 403-216-5445
Fax: 780-422-1671

Accommodation Form - Global Petroleum Show – June 11-13, 2002

INSTRUCTIONS: • Print or type requested data using abbreviations as necessary.
• Complete each part below in detail for correct processing.

FILE: _____

CONFIRMATION WILL BE SENT TO THIS PERSON FROM THE HOTEL:

NAME _____
FIRST LAST

COMPANY _____

ADDRESS _____ CITY _____

PROV. _____ POSTAL CODE _____ PH.# (_____) _____

CREDIT CARD TYPE _____ #: _____ EXP. DATE _____ FAX# (_____) _____

ACCOMMODATION BUREAU POLICY

- Rooms will be assigned on a first-come first-serve basis. **(Hotels sell-out, book early.)**
- Prices quoted are for clients booking through Eu-Anna Hospitality only.
- Hotels will confirm directly. Please check confirmation for advance deposit requirement.

PLEASE RETURN THIS FORM TO:

Eu-Anna Hospitality
282 - 11830 Kingsway Avenue
Edmonton, AB T5G 0X5
PH: (780) 453-3030 • FAX (780) 453-2077
1-888-559-8170

ROOM OCCUPANTS

INSTRUCTIONS:

- Print or type names of all persons occupying each room.
- Select room type desired, with arrival and departure dates.
- Late arrivals require credit card no. or cheque to cover first night accommodation. DO NOT send cheque to Eu-Anna Hospitality. **Hotel will indicate if cheque is required on the confirmation forwarded to you.**
- In all cases other than specified, there will be an additional charge for more than two people or a cot in one room.

Names of All Room Occupants

*** REMEMBER TO PUT IN DATES NEEDED**

Room # 1	1	Single Hotel Room (check one): ❑ 1 Bed ❑ 2 Beds ❑ Smoking ❑ Non-Smoking
	2	
	3	Arr. Date: _____ Dep. Date: _____
	4	Arrival Time: _____ ❑ AM ❑ PM (check one)
Room # 2	1	Single Hotel Room (check one): ❑ 1 Bed ❑ 2 Beds ❑ Smoking ❑ Non-Smoking
	2	
	3	Arr. Date: _____ Dep. Date: _____
	4	Arrival Time: _____ ❑ AM ❑ PM (check one)

HOTEL PREFERENCE *(Please print full name of hotel)*

NOTE: You are always given your first choice unless the hotel is totally booked up on that date.

First Choice _____

Second Choice _____ Third Choice _____

Please note: Be sure to list your top three choices.
If these accommodations are sold out at the time your form is received, may we reserve space for you at an alternative Hotel: ❑ YES ❑ NO

- Accommodations have been reserved for the attendees of the show at the following Hotels.
- Also for convenience you can now fax your reservation form direct to **Eu-Anna Hospitality at (780) 453-2077.**
- Please note that room rates do not include the **5% Provincial Room Tax and applicable G.S.T.**

FOR PREFERRED RESERVATIONS FORWARD THE COMPLETED FORM DIRECT TO:

RESERVE EARLY

EU-ANNA HOSPITALITY

282 - 11830 KINGSWAY AVENUE
EDMONTON, ALBERTA T5G 0X5
FAX (780) 453-2077

FAX Reservations Accepted

Hotel listings for Global Petroleum Show 2002

Important note: All bookings should be made by filling out this form.
* means bus transportation is available all day
** means bus transportation is limited to before show and after show.

Downtown Properties (5 to 10 min. drive)

Hyatt Regency * (Host Hotel)	$209
Delta Bow Valley*	$190
Ramada Downtown **	$172-$202
Westin *	$199
Best Western Suites **	$139-179
International Suites *	$175
Sheraton Suites **	$235
Marriott *	$192
Fairmont (The Palliser) *	$199
Holiday Inn Downtown **	$209
Sandman Inn **	T.B.A.

Macleod Trail Properties (5 to 20 min. drive)

Best Western Hospitality Inn **	$129-149
Quality Hotel **	$159-169
Elbow River Inn	$129
Econolodge South	$129 Single - $139 Double
Carriage House **	$159
Travelodge on 92nd **	$89-$99
Comfort Inn and Suites	$149 RM - $179 Suite

Airport Hotels (20-25 minutes by car)

Coast Plaza	$139-169
Radisson	$145
Sheraton Cavalier **	$179
Delta Airport **	$159
Port o Call **	$149
Days Inn Airport	$119

Motel Village

Hampton Inn & Suites	$155
Econolodge Banff Trail	$109 Single
	$119 Double
Econolodge Motel Village	$109 Single
	$119 Double

Other

Four Points Sheraton - Southwest	$139
Glenmore Inn - Southeast Premier Tower **	T.B.A.

IMPORTANT NOTE: **Each hotel may vary on deposit and cancellation policies. Check your confirmation from hotel to confirm these policies. Hotels will fax you confirmations directly.**

Toll Free in North America:
1-888-799-2545 (ext. 561)
E-mail: simonrose@ca.dmgworldmedia.com

Photo credit:

World's Largest Oil and Gas Show

For more than a decade, the biennial National Petroleum Show has been pivotal to international oil and gas suppliers as a venue to launch new products. Held every two years, the Global Petroleum Show will remain as an important showcase for world class technology in the fields of exploration, production and transportation.

This is the largest and most comprehensive oil and gas Show held anywhere in the world. It covers over 500,000 square feet of exhibit space and houses over 1,450 petroleum industry companies. Over 60,000 visitors from 88 countries attended the Show in 2000.

According to independent research an amazing **74%** of attendees indicated they have a purchasing role within their company and over **40%** were proactive in at-show transactions; this represents approximately **$2.8 billion** worth of at-show purchases

CANADIAN INTERNATIONAL PETROLEUM CONFERENCE

Global Petroleum Show 2002 will be held in conjunction with Canada's premier technical conference, the Petroleum Society's Canadian International Petroleum Conference. Contact (403) 237-5112.

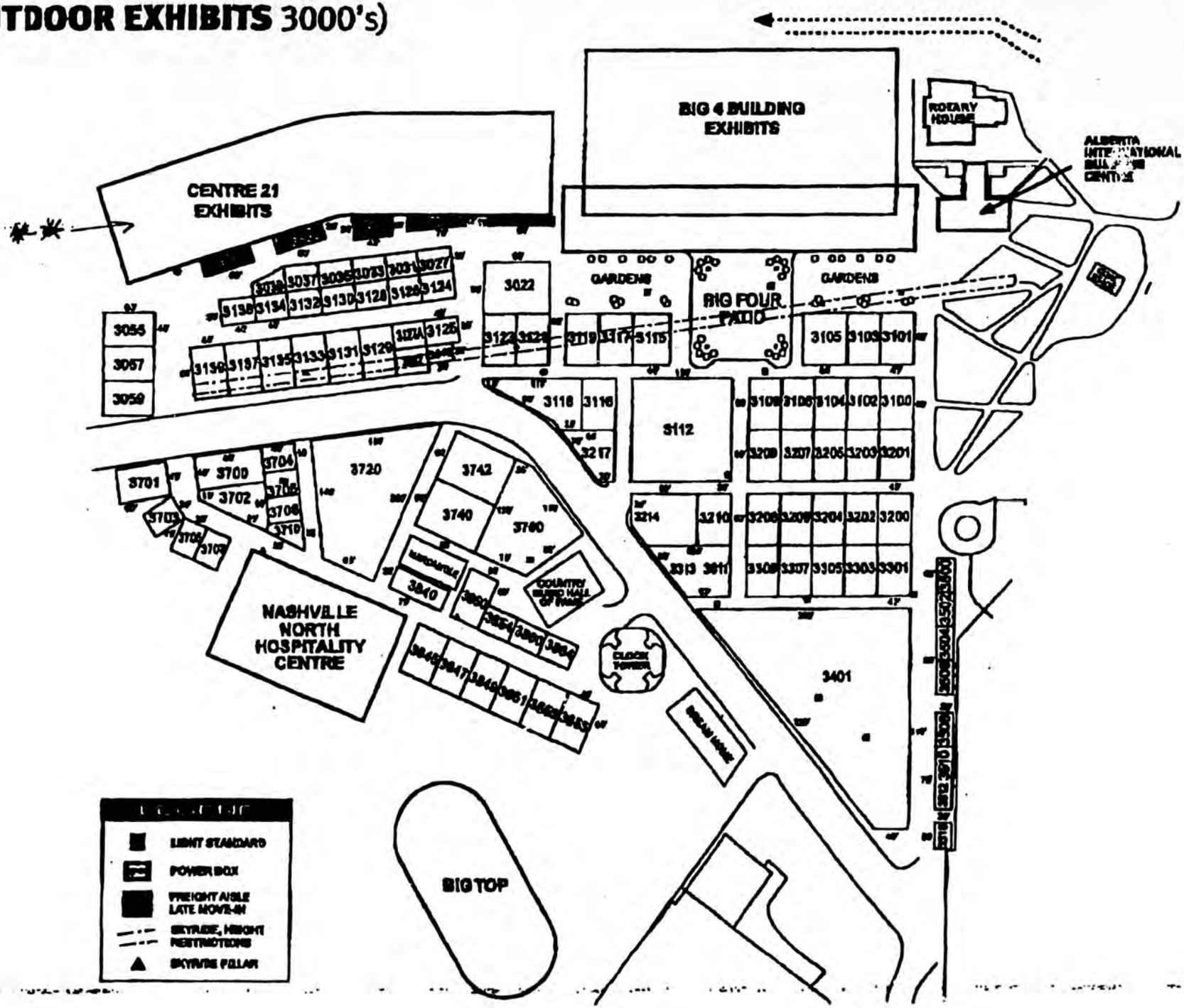
dmg world media (Canada) inc.
Global Petroleum Show

#605, 999 - 8th Street SW
Calgary, AB T2R 1J5 Canada

Tammy Ingram (Indoor exhibits)
T (403)209-3566
(888)799-2545 (ext. 566)
F (403)245-8649
E-Mail: tammyingram@ca.dmgworldmedia.com

OUTDOOR EXHIBITS 3000's)

location for "North of Sixty" exhibits.



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MONEY

FRIDAY, MARCH 29, 2002

ANCHORAGE DAILY NEWS

Natural gas finds back door in Baja

■ LNG: Mexico is ideal port for firms eager to serve California.

By JOEL MILLMAN
The Wall Street Journal

ENSENADA, Mexico — Some of the world's biggest energy companies are lining up to turn Baja California's rocky Pacific coast into a major receiving port for imported natural gas. Aiming to serve United States consumers without riling United States environmentalists, investors are betting Mexico can be their open back door to energy-challenged California.

Shell Gas & Power, a unit of Royal Dutch/Shell Group, on Wednesday was the latest to announce plans to bring liquefied natural gas to a "regasification" terminal on the Baja California coastline, a $500 million project set to be in operation by 2006.

Already three other consortia have emerged with plans to bring LNG terminals to Baja, just south of the U.S. border. Phillips Petroleum Co. plans a joint venture with Houston's El Paso Corp. to bring LNG to the city of Rosarito from gas fields in the Timor Sea. San Diego-based Sempra Energy and CMS Energy Inc. have plans to bring South American gas to a terminal outside Ensenada. Earlier this month,

GAS: *Mexico is reviewing 18 LNG proposals*

Continued from D-1

Houston's Marathon Oil Co. unveiled a venture with Indonesian state oil company Pertamina to build an LNG complex near Tijuana.

All told, the country is reviewing 18 proposals for LNG terminals, Javier Estrada of Mexico's Energy Regulatory Commission told a natural gas conference in Calgary, Alberta, this month.

LNG projects are ambitious, costing up to $1 billion for all the port facilities, pipelines and regasification plants to convert liquid fuel back into a gas that can be piped to consumers. For Baja, such investment would create the opportunity to diversify employment beyond tourism and the assembly plants that have meant thousands of new jobs in cities like Mexicali and Tijuana.

For the energy companies, LNG offers the chance to "gasify" a new energy market. Mexico imports about 300 million cubic feet of LNG a day, barely enough to meet demand. Bringing cheaper energy to northern Baja California's industrial corridor, where assembly plants pay some of the highest electricity rates in North America, is likely to drive demand for years to come.

Since the mid-1990s, Baja consumers have been allowed to import natural gas piped down from the United States and Canada. The proposed LNG projects will put "Baja at the front of the pipeline, instead of at the back," says Don Felsinger, head of Sempra Energy Global Enterprises. The consortia behind at least three of the announced projects expect to break ground on their plants by late summer, or as soon as Mexican regulators put the finishing touches on a new set of regulations governing gas storage and regasification plants. All four projects are expected to be online between 2005 and 2006.

But in the near term, Mexico may be more promising as a bridge than as a market. The partners in each of the four announced projects say they intend to use Baja to carry natural gas into southern California, where energy demand is surging.

PETROLEUM NEWS ALASKA
March 24, 2002

Alaska, Alberta, or Chicago — who will get North Slope gas liquids?

Some argue the economics favor a 'bullet line' to the expanding Chicago hub; others want extraction in Alaska, Alberta to meet forecast demand in U.S., Asia

By Gary Park
PNA Canadian Correspondent

Courtesy of Williams

Williams' Redwater fractionation plant and natural gas liquids storage facility at Fort Saskatchewan, Alberta, is one of four major NGL hubs in North America. Other companies own plants at the hub as well. It is possible some of Alaska's NGLs will be delivered to this hub.

While uncertainty hangs over the future of an Alaska Highway gas pipeline, a sideline debate is taking place over where ethane and other natural gas liquids from North Slope gas will be extracted.

In one mind, there is no doubt who will make the decision.

The producers — Exxon Mobil Corp., BP PLC and Phillips Petroleum Co. — will have the final say, not the industry, says Norval Horner, vice president of Aux Sable Canada Ltd.

But whether that decision will favor Alaska, Alberta or Chicago is the topic of most speculation.

The prize, assuming North Slope production of

see LIQUIDS page A10

continued from page A1

LIQUIDS

4 billion cubic feet per day, would be 100,000 barrels per day of ethane and similar volumes of propane and butane, he told an Arctic Gas Symposium in Calgary earlier this month.

Horner said he believes Alaska gas will be shipped directly to Chicago, despite Alberta's insistence that no pipeline will cross through the province without giving the local petrochemical industry access to the liquids.

Aux Sable Canada is the subsidiary of a U.S. company that extracts ethane and NGLs at Chicago from the Alliance pipeline, which delivers about 1.5 billion cubic feet per day of gas from northern British Columbia to the U.S. Midwest.

Aux Sable currently produces 40,000 barrels per day of ethane, Horner said it can be easily and inexpensively expanded in line with Alliance's capacity to boost deliveries to 2.1 billion cubic feet per day.

Good economic for bullet

But the Alberta government is still seething over the decision by Canada's National Energy Board to approve Alliance as a "bullet" line crossing through Alberta without allowing any access to the liquids.

Horner suggested that if Alaska gas enters Alberta and gets mixed in with gas in other pipeline systems, it would be "very likely" that some ethane recovery would take place in the province.

But if the ethane "goes to Chicago as a rich stream, it's very likely to be recovered in Chicago," he said.

However, Horner is betting is on a "high pressure, large diameter bullet line" to the emerging Chicago hub, arguing the economics would be "hard to beat."

Other speakers pointed to options involving the recovery of ethane in either Alaska or Alberta.

GAS LIQUIDS CONTINUED

New facilities possible

Mike Hantzsch, vice president of business development at Williams Energy Canada Inc., said his company supports the stripping of ethane before it reaches Chicago and is evaluating the feasibility of a plant in either Alaska or Alberta.

He said such a facility would require feedstock of about 600,000 barrels per day of ethane. Williams already produces 130,000 barrels per day from straddle plants at Cochrane and Empress in Canada.

Under study are new facilities at Fairbanks near Williams' existing oil refinery or at Fort Saskatchewan, the refining district near Edmonton.

Other possible locations in Canada include Empress, which has surplus processing capacity of 10 billion cubic feet per day; James River, Alberta, the certified junction of the Alaska Natural Gas Transportation System; and other sites in northeastern British Columbia.

Hantzsch said preliminary findings by consultants suggest that polyethylene capacity additions in either Alaska or Alberta are supported by forecast demand growth in the U.S. and Asian markets.

He said about 70 percent of polyethylene produced in Alberta would be shipped to Asia with the balance heading for the western United States, while polyethylene from Alberta would be exported equally between the western and eastern United States.

Hantzsch told the conference the cost of building a petrochemical plant in Alberta would be 1.1 to 1.2 times greater that building one in the U.S. Gulf Coast while Alaska's costs would be 1.4 times greater.

He argued Alberta has an edge given it advanced petrochemical industry and its underutilized infrastructure, although challenges include the comparative feedstock cost in Alaska vs. Alberta.

U.S. liquids prices higher

Horner's case for direct shipments to Chicago was based heavily on the overwhelming flow of liquids from Canada and the United States to the U.S. Midwest and east.

In addition he said liquids fetch an average 6 cents per gallon more in the Midwest than Alberta and even more in Mount Bellevue, a storage and petrochemical center on the Gulf Coast.

He said the six pipelines from the Gulf Coast to the Chicago area are underused and Aux Sable is weighing the possibility of reversing one of the lines to carry ethane to the Gulf Coast.

Meanwhile, planning for Mackenzie Delta gas development involves decisions on who will build the pipeline portion shipping dehydrated gas and liquids from Inuvik to Norman Wells, in the central Northwest Territories, and the pipeline to transport liquids from Norman Wells to northwestern Alberta.

Industry observers think it's likely the liquids will be shipped south from Norman Wells to Zama via the Enbridge Inc. system — a 12-inch liquids line that has designed capacity of 50,000 barrels per day, but is currently using only 60 percent of that space.

However, a battle is also looming, with TransCanada PipeLines Ltd. — Enbridge's chief pipeline competitor in Canada — trying to force its Alberta network north to Norman Wells, then requesting that the system be placed under federal jurisdiction that would allow TCPL to boost tolls for unused capacity on its mainline system east of Alberta. ◆

ALASKA STATE LEGISLATURE

JOINT COMMITTEE ON NATURAL GAS PIPELINES

Official Business

Senator John Torgerson, Chair
Senator Rick Halford
Senator Pete Kelly
Senator Johnny Ellis

Representative Joe Green, Vice-Chair
Representative Brian Porter
Representative Scott Ogan
Representative John Davies

MEMORANDUM

To: Members of the Joint Committee on Natural Gas Pipelines

From: Senator John Torgerson, Chair

Date: April 29, 2002

Re: Hogan & Hartson report on Federal Legislative Developments Related to Natural Gas Pipelines

The Senate, by a vote of 88 to 11, approved the comprehensive energy bill (H.R. 4, formally S. 517) on April 25. Before final passage, the Senate substituted language of its own bill (S. 517) for the language approved by the House in H.R. 4 last year and requested a conference with the House to negotiate a single bill that can be sent to the President. Due to controversial differences between the two versions of the legislation, the conference negotiations could prove to be lengthy and difficult.

On Tuesday, April 23, the Senate adopted Amendment # 3257 (as modified) sponsored by Senators Murkowski (R-AK) and Stevens (R-AK), to provide a tax incentive for producers to commit reserves to the proposed Alaska natural gas pipeline. The amendment would provide a federal tax credit if the price of natural gas drops below $3.25 per one million Btu. The credit would stay in place for 15 years after the pipeline is completed. Gas producers would be required to repay the credits when the cost of gas rises above $4.85 per one million Btu. This recapture provision would never expire until all of the credits are paid back. Senate Amendment # 3257 (as modified) is reprinted below.

Session: January – May
State Capitol, #427
Juneau, AK 99801
Phone: 907-465-2828
Fax: 907-465-4779

Interim: May – December
35477 Kenai Spur Hwy., Suite 101A
Soldotna, AK 99669
Phone: 907-260-3041
Fax: 907-260-3044

During the Senate's debate on April 25, an amendment offered by Senator Fitzgerald (R-IL) to strike the provisions authorizing the loan guarantees for the Alaska NG pipeline was adopted by voice vote. However, the adoption of this amendment was later vitiated. Both actions were done as part of en bloc amendments without any discussion or objections on the floor. The net result of these actions is that the loan guarantees are retained in the Senate-passed bill.

The Senate also adopted an amendment striking section 721 from the bill. This section would have prohibited the inclusion of operating pipelines on the National Register of Historic Places without owner consent. The amendment was adopted by voice vote and without debate.

AMENDMENT NO. 3257 TO AMENDMENT NO. 2917, AS MODIFIED

At the appropriate place insert the following

SEC. . CREDIT FOR PRODUCTION OF ALASKA NATURAL GAS.

(a) **IN GENERAL.**--Subpart D of part IV of sub-chapter A of chapter 1 (relating to business related credits), as amended by this Act, is amended by adding at the end the following new section:

``**SEC. 45M. ALASKA NATURAL GAS.**

``(a) **IN GENERAL.**--For purposes of section 38, the Alaska natural gas credit of any taxpayer for any taxable year is the credit amount per 1,000,000 Btu of Alaska natural gas entering any intake or tie-in point which was derived from an area of the state of Alaska lying north of 64 degrees North latitude, which is attributable to the taxpayer and sold by or on behalf of the taxpayer to an unrelated person during such taxable year (within the meaning of section 45).

``(b) **CREDIT AMOUNT.**--For purposes of this section--

``(1) **IN GENERAL.**--The credit amount per 1,000,000 Btu of Alaska natural gal entering any intake or tie-in point which was derived from an area of the state of Alaska lying north of 64 degrees North latitude (determined in United States dollars), is the excess of—

``(A) $3.25, over

``(B) the average monthly price at the AECO C Hub in Alberta, Canada, for Alaska natural gas for the month in which occurs the date of such entering.

``(2) **INFLATION ADJUSTMENT.**--In the case of any taxable year beginning in a calendar year after the first calendar year ending after the date described in subsection (g)(1), the dollar amount contained in paragraph (1)(A) shall be increased to an amount equal to such dollar amount multiplied by the inflation adjustment factor for such calendar year (determined under section 43(b)(3)(B) by substituting `the calendar year ending before the date described in section 45M(g)(1)' for `1990').

``(c) **ALASKA NATURAL GAS.**--For purposes of this section, the term `Alaska natural gas' means natural gas entering any intake or tie-in point which was derived from an area of the state of Alaska lying north of 64 degrees North latitude produced in compliance with the applicable

State of Federal pollution prevention, control, and permit requirements from the area generally known as the North Slope of Alaska (including the continental shelf thereof within the meaning of section 638(1)), determined without regard to the area of the Alaska National Wildlife Refuge (including the continental shelf thereof within the meaning of section 638(1)).

``(d) **RECAPTURE.--**

``(1) **IN GENERAL.**--With respect to each 1,000,000 Btu of Alaska natural gas entering any intake or tie-in point which was derived from an area of the state of Alaska lying north of 64 degrees North latitude after the date which is 3 years after the date described in subsection (g)(1), if the average monthly price described in subsection (b)(1)(B) exceeds 150 percent of the amount described in subsection (b)(1)(A) for the month in which occurs the date of such entering, the taxpayer's tax under this chapter for the taxable year shall be increased by an amount equal to the lesser or—

``(A) such excess, or

``(B) the aggregate decrease in the credits allowed under section 38 for all prior taxable years which would have resulted if the Alaska natural gas credit received by the taxpayer for such years had been zero.

``(2) **SPECIAL RULES.--**

``(A) **TAX BENEFIT RULE.**--The tax for the taxable year shall be increased under paragraph (1) only with respect to credits allowed by reason of this section which were used to reduce tax liability. In the case of credits not so used to reduce tax liability, the carryforwards and carrybacks under section 39 shall be appropriately adjusted.

``(B) **NO CREDITS AGAINST TAX.**--Any increase in tax under this subsection shall not be treated as a tax imposed by this chapter for purposes of determining the amount of any credit under this chapter or for purposes of section 55.

``(e) **APPLICATION OF RULES.**--For purposes of this section, rules similar to the rules of paragraphs (3), (4), and (5) of section 45(d) shall apply.

``(f) **NO DOUBLE BENEFIT.**--The amount of any deduction or other credit allowable under this chapter for any fuel taken into account in computing the amount of the credit determined under subsection (a) shall be reduced by the amount of such credit attributable to such fuel.

``(g) **APPLICATION OF SECTION.**--This section shall apply to Alaska natural gas entering any intake or tie-in point which was derived from an area of the state of Alaska lying north of 64 degrees North latitude for the period—

``(1) beginning with the later of—

``(A) January 1, 2010, or

``(B) the initial date for the interstate transportation of such Alaska natural gas, and

``(2) except with respect to subsection (d), ending with the date which is 15 years after the date described in paragraph (1).''.

(b) **CREDIT TREATED AS BUSINESS CREDIT.**--Section 38(b), as amended by this Act, is amended by striking ``plus'' at the end of paragraph (22), by striking the period at the end of paragraph (23) and inserting ``, plus'', and by adding at the end the following new paragraph:
``(24) the Alaska natural gas credit determined under section 45M(a).''.

(c) **ALLOWING CREDIT AGAINST ENTIRE REGULAR TAX AND MINIMUM TAX.--**

(1) **IN GENERAL.--**Subsection (c) of section 38 (relating to limitation based on amount of tax), as amended by this Act, is amended by redesignating paragraph (5) as paragraph (6) and by inserting after paragraph (4) the following new paragraph:

``(5) **SPECIAL RULES FOR ALASKA NATURAL GAS CREDIT.--**

``(A) **IN GENERAL.**--In the case of the Alaska natural gas credit—

``(i) this section and section 39 shall be applied separately with respect to the credit, and

``(ii) in applying paragraph (1) to the credit—

``(I) the amounts in subparagraphs (A) and (B) thereof shall be treated as being zero, and

``(II) the limitation under paragraph (1) (as modified by subclause (I)) shall be reduced by the credit allowed under subsection (a) for the taxable year (other than the Alaska natural gas credit).

``(B) **ALASKA NATURAL GAS CREDIT.--**For purposes of this subsection, the term `Alaska natural gas credit' means the credit allowable under subsection (a) by reason of section 45M(a).".

(2) **CONFORMING AMENDMENTS.**--Subclause (II) of section 38(c)(2)(A)(ii), as amended by this Act, subclause (II) of section 38(c)(3)(A)(ii), as amended by this Act, and subclause (II) of section 38(c)(4)(A)(ii), as added by this Act, are each amended by inserting ``or the Alaska natural gas credit" after ``producer credit".

(d) **CLERICAL AMENDMENT.--**The table of sections for subpart D of part IV of subchapter A of chapter 1, as amended by this Act, is amended by adding at the end the following new item:
``Sec. 45M. Alaska natural gas.".

Alaska Producer Pipeline Update

April, 2002

ExxonMobil

Outline of Information

- Overview and Conclusions
- Project Design and Technology
- Updated Project Feasibility
- Wrap-up

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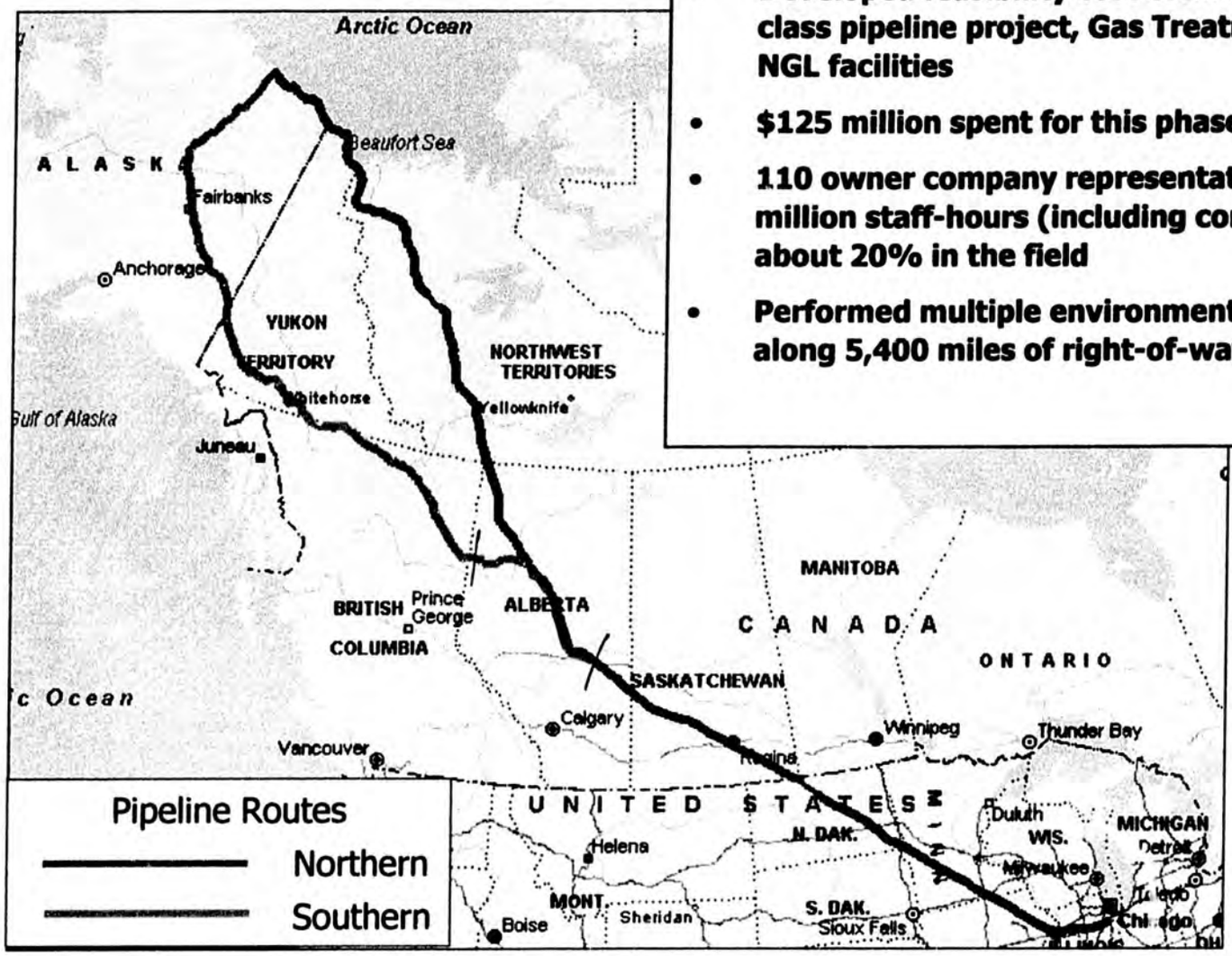
Project Overview

- **Developed feasibility cost estimates for a world class pipeline project, Gas Treatment Plant, & NGL facilities**
- **$125 million spent for this phase of the project**
- **110 owner company representatives and over 1 million staff-hours (including contractors) with about 20% in the field**
- **Performed multiple environmental field studies along 5,400 miles of right-of-way**



bp ExxonMobil Phillips 66

Conclusions

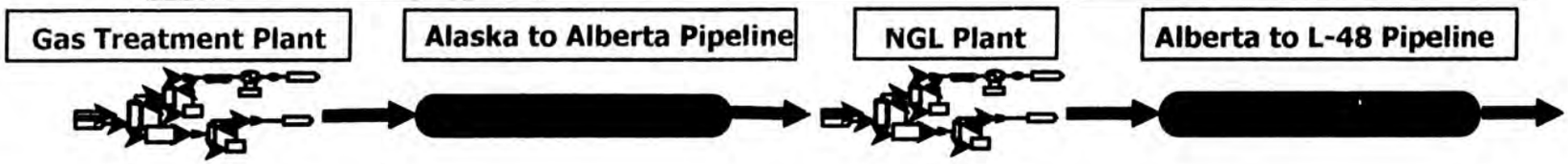
- Project currently not commercially viable
  - Risks outweigh rewards
  - Substantial additional engineering work not justified at this time
  - Future activity must match progress with governments and commercial viability

- Governments will play a key role in reducing project cost, schedule risk
  - US Federal regulatory enabling legislation
  - NEB/First Nations regulatory process clarity
  - Alaska fiscal certainty

Outline of Information

- Overview and Conclusions
- **Project Design and Technology**
- Updated Project Feasibility
- Wrap-up

Statistical Summary (Alaska to L-48)



- **Pipeline Design Rate (bcfd) : 4.5**
- **Expansion Potential (bcfd) : 5.6**
- **Compressor Stations : 24 - 28**
- **Total Pipeline Horsepower : 1.2 – 1.4 million**
- **Alaska to Alberta (miles) : 1,800 - 2,100**
- **Alberta to Market (miles) : 1,500**
- **Pipe Diameter (inches) : 52**
- **Operating Pressure (psi) : 2,000 – 2,500**
- **Tons of Steel : 5 – 6 million**
- **Construction Staff-Hours : 50 million+**

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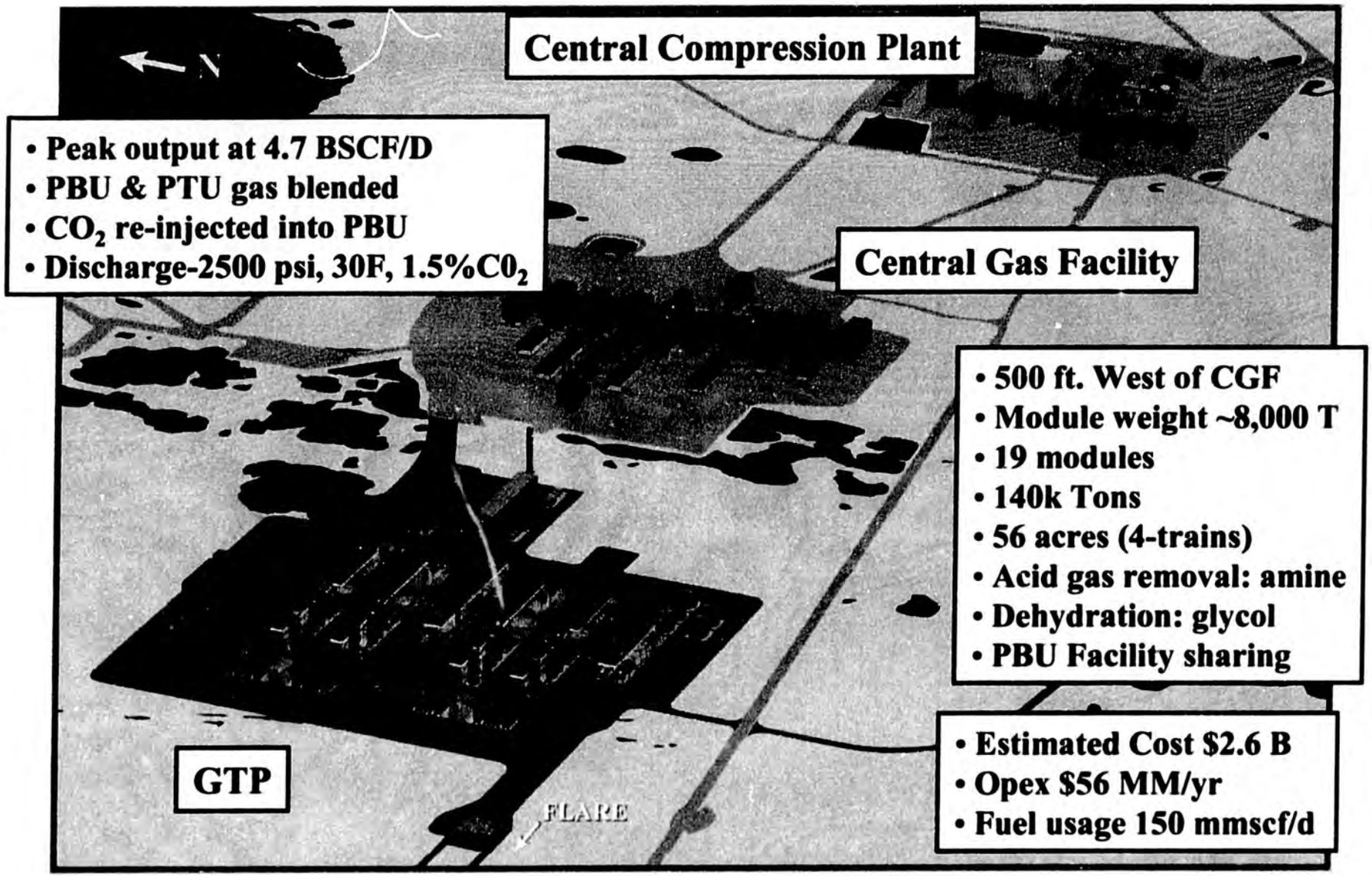
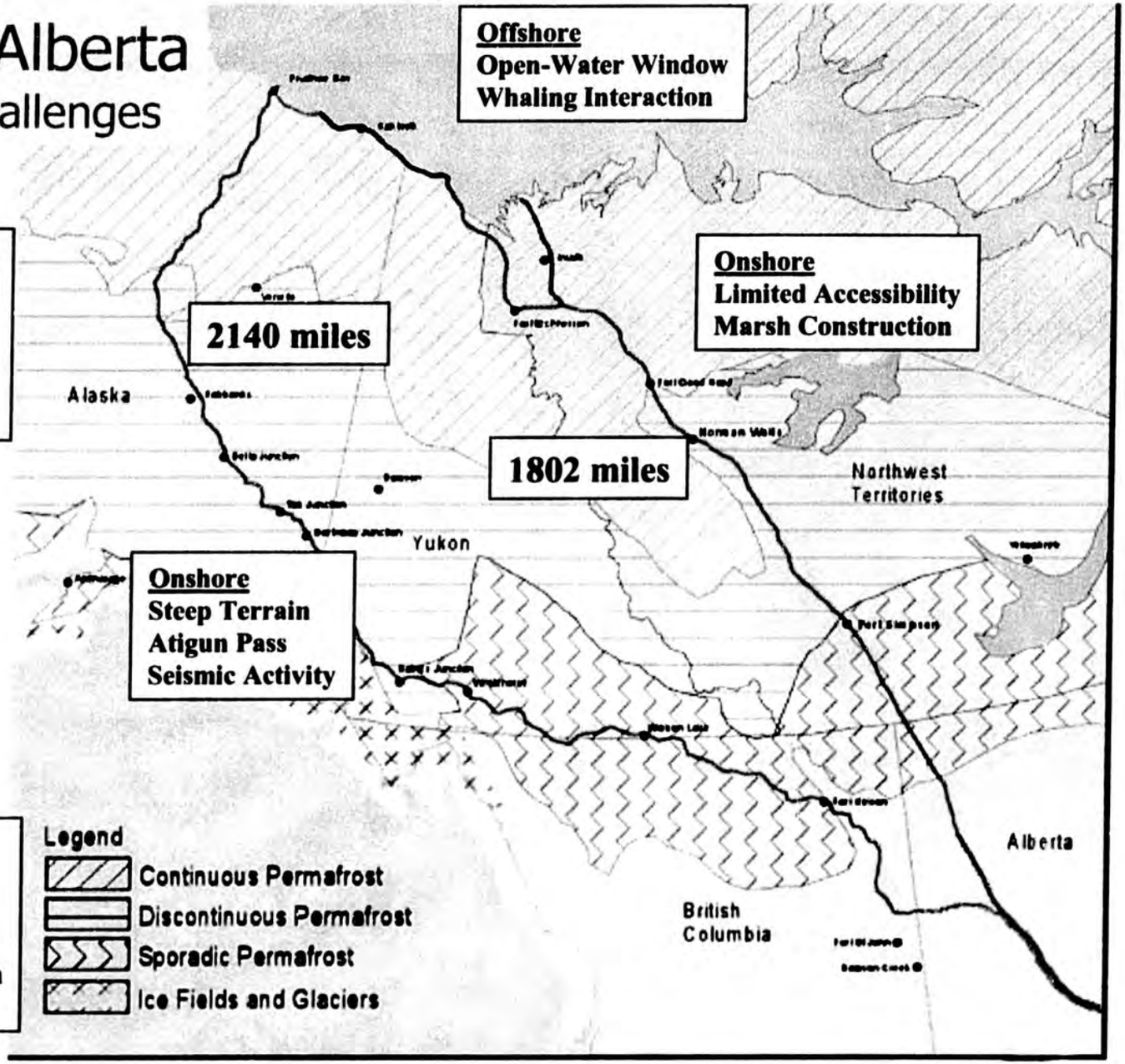
Gas Treatment Plant (GTP)



Alaska to Alberta

Technical Challenges

Common Challenges
Permafrost
River Crossings
Skilled Labor
Pipe Availability
Logistics



Design Basis
52"Pipe
2500 psi
X-80 Carbon Steel
Wall Thickness>1 inch
Buried, Chilled Line

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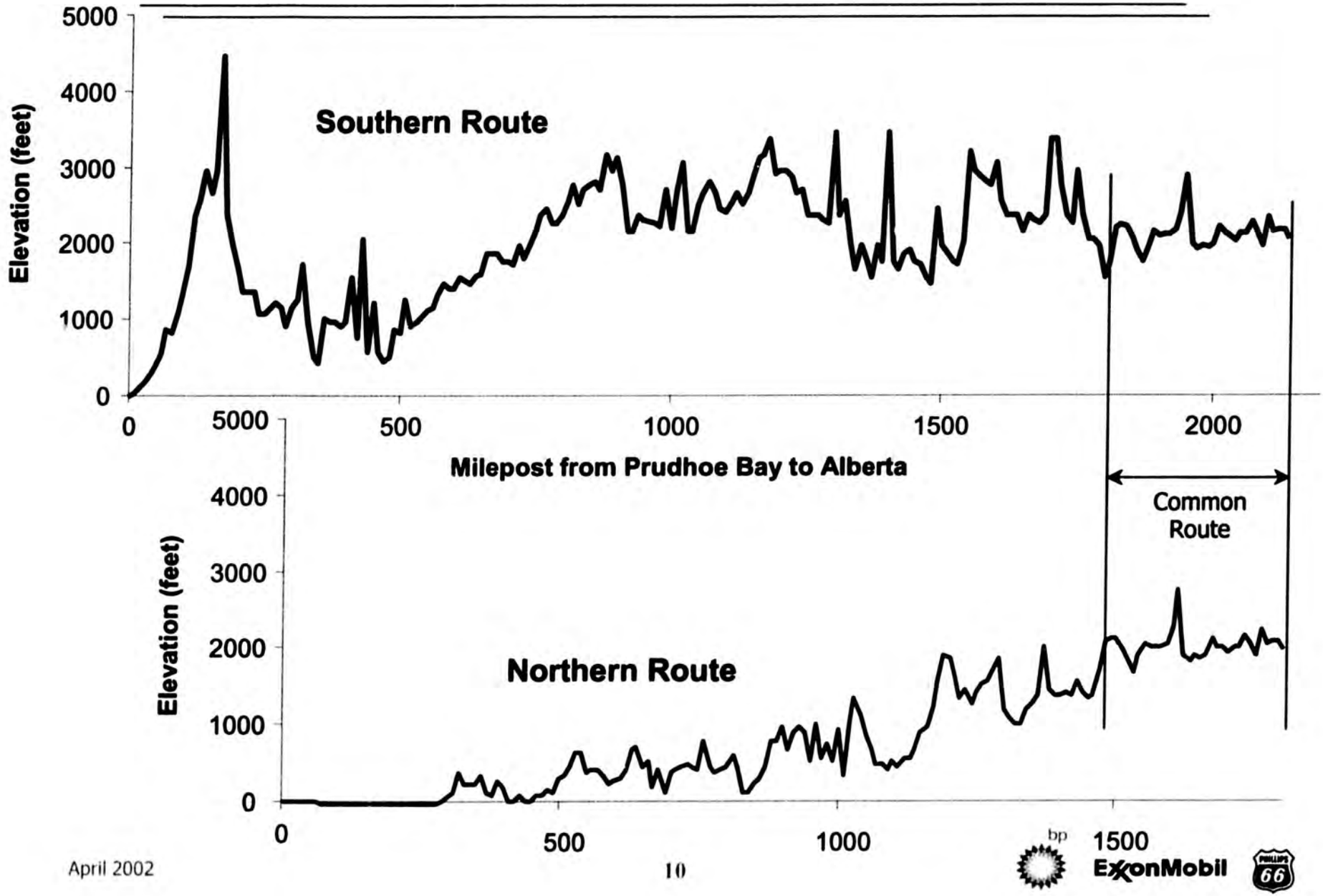
Route Elevation Profiles



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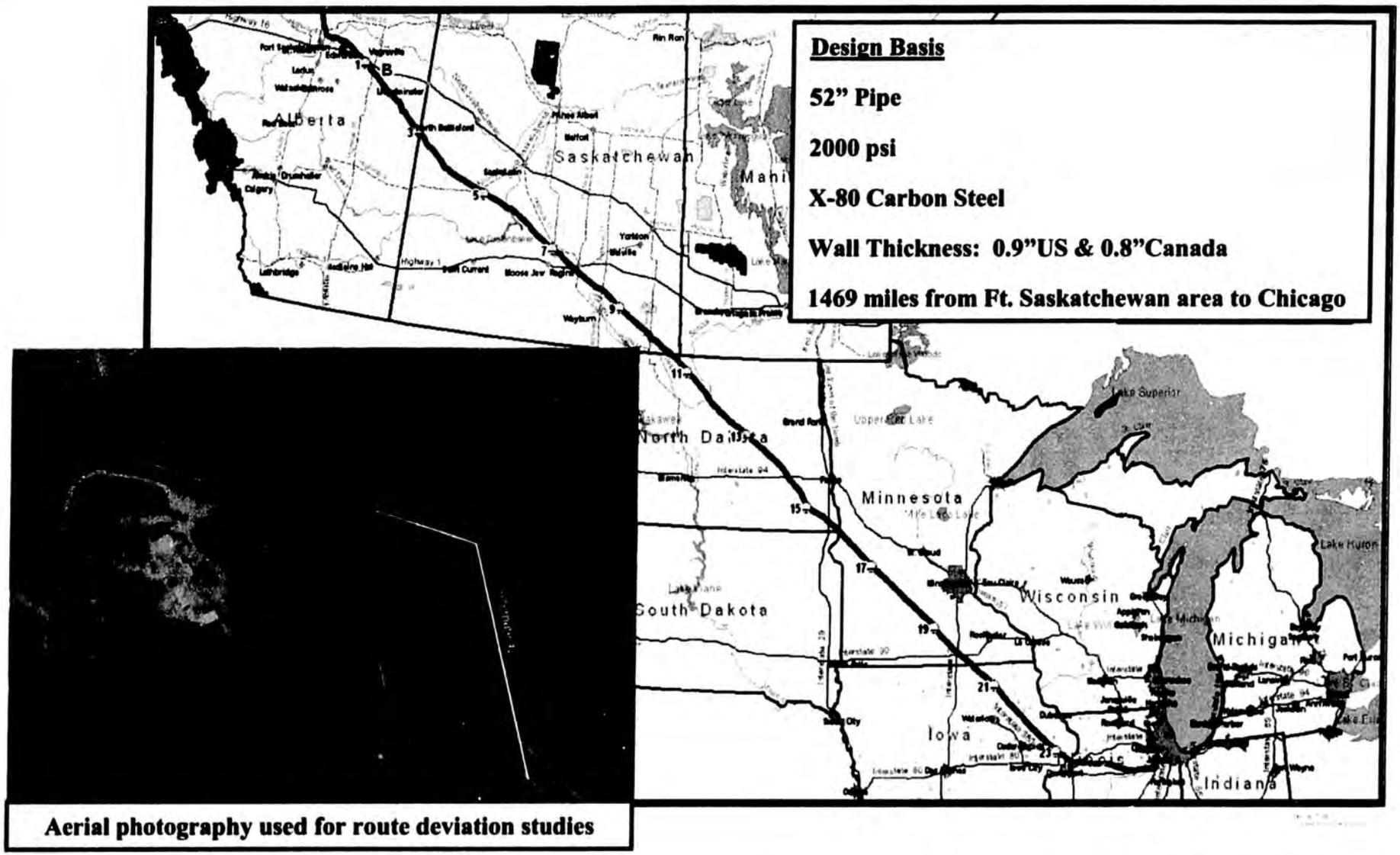
Alberta to Market



Aerial photography used for route deviation studies

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Environmental Field Studies

- Crews of 2 to 5 people mapping / photographing existing conditions
- Helicopters and fixed wing aircraft used for surveys / access
- Field effort exceeded 200,000 staff hours.

- Vegetation & Soils Surveys
- Wildlife, incl Threatened and Endangered Species
- Wetlands, Fisheries, Hydrology & Water Quality
- Cultural & Archaeology Resources
- Marine Mammal Study
- Traditional Knowledge Consultation

Outline of Information

- Overview and Conclusions
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- Wrap-up

Updated Project Feasibility

- Joint project feasibility work results in significantly improved project definition
  - Better understanding of risks and opportunities
- Updated study results indicate the following:
  - Higher capital costs
  - Increased volumes delivered
  - Lower operating costs
  - Reduced fuel consumption
  - Current capital cost estimates have accuracy to approximately +/- 20%
  - Achieving lower costs and less cost uncertainty will require substantial future investment
- Project continues to have significant risks:
  - Regulatory/political risks
  - Fiscal risks
  - Cost risk
  - Long-term prices / Market volatility

} Risk predominantly borne by producers, irrespective of pipeline ownership

Capital Costs / Tolls

	Southern Route	Northern Route
Capital Cost ('01, $billion)		
Gas Treatment Plant	2.6	2.6
Alaska to Alberta	11.6	10.8
Alberta to Market	4.6	4.6
NGL Extraction Facilities	0.6	0.6
Alaska Project Share	***19.4***	***18.6***
Mackenzie Delta Share	-	*1.4*
Uncertainty	***+/- 20%***	***+/- 20%***
Sales Gas Rate (bcfd)		
Alaska	4.3	4.3
Mackenzie Delta	-	1.0
Total	4.3	5.3
Project Toll ($/mcf)		
Gas Treatment Plant	0.41 > 1.77	0.41
Alaska to Alberta	1.36	1.28
Alberta to Market	0.62	0.62
Toll to Market	***2.39***	***2.31***
Range	***1.90 - 2.85***	***1.85 - 2.75***

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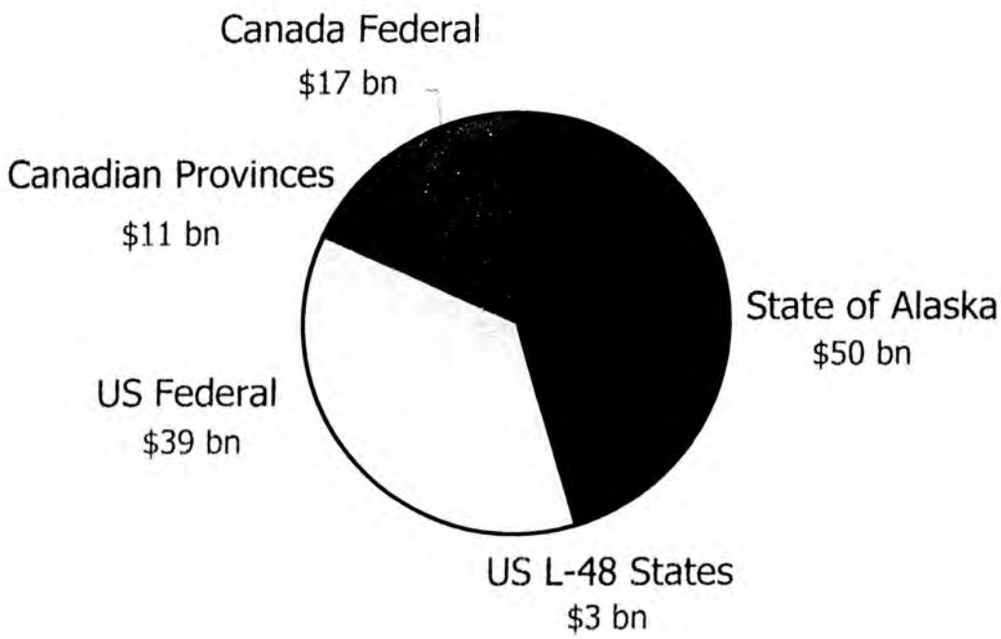
Estimated Government Take

Change 30+ year life

Total Undiscounted Revenue

$120 bn

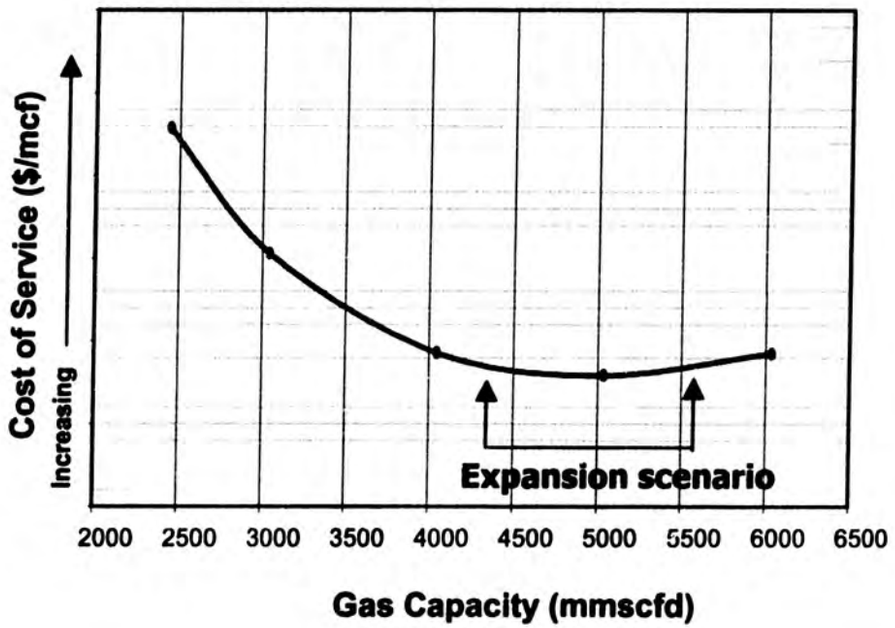


- Revenues are roughly equivalent for Northern and Southern Routes
- Increased government take (vs. Sept. 2001) based on higher system throughput and longer project life
- 51 TCF AK gas reserves produced, including 16 TCF yet-to-be-discovered

bp ExxonMobil Phillips 66

Expansion

- Expandability built into system design
- System debottlenecking likely to yield small volume improvements
- Approximately 1 bcfd expansion with intermediate compression
- Cost effective expansion facilitated by large diameter pipe
- Expansion will provide access to new gas discoveries



Viable Government Framework is Essential

- Establish predictable regulatory / fiscal regime.
  - Enact US enabling regulatory legislation
  - Progress predictable fiscal framework in Alaska
  - Progress clear and predictable regulatory process in Canada
- These initiatives require support from investors, governments, First Nations, Native communities, shippers, marketers and consumers.
  - Creates best possible structure for successful Alaska pipeline
- Significant forward expenditure will require predictable government framework.
  - Significant investment required to further reduce cost and reduce cost uncertainty
  - Governments will play a key role in reducing project cost, schedule risk
  - Avoid mandates
- Once government framework is established, commercially viable pipeline project still must be identified.

U.S. Enabling Regulatory Legislation

<u>What is it?</u>

- Language currently contained in Senate Energy Bill
  - Amendments may add risk/costs
- Available to any sponsor
  - New legislation will not preclude ANGTS Group from proceeding under ANGTA
  - ANGTS Group or any other investors can also proceed under this legislation
- Creates market-driven, expedited regulatory process for <u>any</u> viable project(s)
  - Subject to FERC regulation; fair and reasonable terms; open access
  - Subject to all environmental laws / regulations; 18-month EIS completion
- Creates Office in executive branch to coordinate all related federal agency activity

<u>Why is it needed?</u>

- Provides for federal regulatory certainty
  - Establishes clear process to encourage competitive, market-driven (lowest cost) solutions
  - Allows any number of producer / pipeline partnerships to evolve
  - Current regulatory risk discourages investment
- Expedites environmental review and project authorization
- Provides timely judicial review to reduce uncertainty

Alaska Fiscal Certainty

What is it?

- Provides for certainty in State government take:
  - Predictable disposition of State royalty gas, consistent with firm transportation commitments
  - Clear, simple, predictable gas valuation for royalty / severance tax payments
  - Severance tax rates and Economic Limit Factor (ELF)
  - Ad valorem tax rates and valuation methodology
  - Corporate income taxes
- Ensures stable fiscal terms over life of pipeline project

Why is it needed?

- Potential for fiscal change creates risk that jeopardizes long payout projects
  - Project already holds significant capital, schedule and market risk
  - Stable fiscal environment encourages long-term investment
  - Avoid future disputes over interpretation

Predictable NEB / First Nations Regulatory Prccess

What is it?

- Establishes clear regulatory processes between NEB and First Nations.
- Detailed plans for cooperation among Canadian Federal, Provincial, Territorial and First Nations regulatory authorities.
- Predictable, expedited process that fully complies with all environmental and regulatory laws.

Why is it needed?

- Ensure timely completion of regulatory and environmental assessment process.
- Lack of clear NEB/First Nations permitting process increases project risk.
- Avoid duplication of environmental assessments and conflict among Canadian governmental agencies and First Nations.

Outline of Information

- Overview and Conclusions
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- Wrap-up

Wrap-up

- **Project currently not commercially viable.**
  - Risk/reward balance
- **Viable government framework is essential.**
  - U.S. enabling regulatory legislation
  - Alaska fiscal certainty
  - Predictable Canadian regulatory process
- **Joint team resources have been redeployed.**
- **Companies will collaborate as appropriate on future work**
  - Trenching trials
  - Input to clear / predictable government framework
  - Cost reduction opportunities