HB 423

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: 1
Bill Version: HB 423
(H) Publish Date: 2/13/02

Revision Date/Time (Note if correction)
Title: Gas Pipeline Financing
Sponsor: Rules by Request
Requester: Governor

Dept. Affected:
BRU: Alaska Railroad Corporation
Component: Alaska Railroad Corporation
Component No.:

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services						
Travel						
Contractual			163,000.0			
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	163,000.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Bond Proceeds			163,000.0			
TOTAL	0.0	0.0	163,000.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*
See attached sheet.

Prepared by: Bill O'Leary, Vice President, Finance and Chief Financial Officer
Division: Alaska Railroad Corporation
Phone (907) 265-2516
Date/Time 2/12/02 4:03 PM

Approved by: Deborah B. Sedwick, Commissioner
Agency: Department of Community & Economic Development
Date 2/12/2002

STATE OF ALASKA
2002 LEGISLATIVE SESSION

BILL NO. HB 423

ANALYSIS CONTINUATION

The bill authorizes the issuance of up to $17 billion in revenue bonds by the Alaska Railroad Corporation (ARRC) to pay for 70% of the construction of a natural gas pipeline. Based upon current estimates, ARRC could issue $14,265,000,000 in bonds as early as state Fiscal Year 2005. ARRC will act as a conduit for the issuance of these bonds to allow the debt to be issued as tax exempt. Through modeling, the tax exemption has been shown to reduce the cost of financing the project by over one billion dollars. The Bonds would be solely secured by revenues generated by the pipeline. The Alaska Railroad will bear no liability and have no responsibility for repayment of the bonds.

The projected costs of issuing the bonds determined here will be paid with bond proceeds at closing. Anticipated professional services include those related to financial advisors, attorney's fees (bond counsel, underwriter's counsel, tax counsel, negotiating with producers), rating agencies, underwriters, printing, travel, public notices, and the feasability consultant. ARRC will front certain minor necessary reimbursable costs from corporation revenues.

For purposes of this fiscal note, it is assumed that bonds with a face value of $14.265 billion will be issued in FY 2005. The bonds are expected to be issued with a 25 year term and for modeling purposes carry an interest rate of 6.5%. As the project will not generate revenue while under construction, the first two years of interest payments will be made with bond proceeds. Following construction, annual debt service will begin at approximately $1.3 billion, growing to $1.4 billion in year 6 and then gradually lowering to $800 million in the final year. However, ultimately, issuance amounts, dates, term, interest rate, and other significant variables will be dependent upon the financing structure determined by market conditions at the time of sale of the bonds.

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: 2
Bill Version: CSHB 423(O&G)
(H) Publish Date: 3/27/02

Revision Date/Time (Note if correction):
Dept. Affected: Revenue
Title: Natural Gas Transportation by Alaska Railroad
BRU: Administration & Support
Component: Commissioner's Office
Sponsor: Rules (by request of the Governor)
Requester: House Oil and Gas Committee
Component No. 123

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services						
Travel						
Contractual	60.0	60.0				
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	60.0	60.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	60.0	60.0				
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	60.0	60.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

This legislation would authorize the Alaska Railroad Corporation to issue up to $17 billion in bonds for construction of a natural gas pipeline for the commercialization of North Slope natural gas resources.

Because of the importance of this project to the state's economy and public finances, the complexity of the bond issuance and the large amount of bonds to be sold, it is important that the Alaska Railroad Corporation receive expert advice from the beginning. It also is important that some representative of the Executive Branch be involved in the discussions to ensure that the state's own best interests are represented.

The Department of Revenue proposes to transfer to the Alaska Railroad Corporation, via a Reimburseable Services Agreement, up to $50,000 per year for the first two years to ensure that the corporation can contract with a financial adviser and bond counsel for this project. The Commissioner's Office also requests $10,000 per year to cover the expenses of contracting with the state's financial adviser and bond counsel to make certain that the state's own interests, separate from those of the Railroad Corporation, are adequately considered and protected.

Prepared by: Larry Persily, Deputy Commissioner
Phone 465-5469
Division: Department of Revenue
Date/Time 3/15/02 2:54 PM
Approved by: Wilson Condon, Commissioner
Date 3/15/2002
Agency: Department of Revenue

(Revised 9/2001 OMB)

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: 1
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Title: Gas Pipeline Financing
Sponsor: Rules by Request
Requester: Governor

Dept. Affected:
BRU: Alaska Railroad Corporation
Component: Alaska Railroad Corporation
Component No.:

Expenditures/Revenues (Thousands of Dollars)

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OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
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Travel						
Contractual			163,000.0			
Supplies						
Equipment						
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Grants & Claims						
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CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

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1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
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Bond Proceeds			163,000.0			
TOTAL	0.0	0.0	163,000.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: 0.0
Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

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Full-time						
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ANALYSIS: *(Attach a separate page if necessary)*
See attached sheet.

Prepared by: Bill O'Leary, Vice President, Finance and Chief Financial Officer
Phone (907) 265-2516
Division: Alaska Railroad Corporation
Date/Time 2/12/02 4:03 PM
Approved by: Deborah B. Sedwick, Commissioner
Date 2/12/2002
Agency: Department of Community & Economic Development

FISCAL NOTE #1

STATE OF ALASKA
2002 LEGISLATIVE SESSION

BILL NO. HB 423

ANALYSIS CONTINUATION

The bill authorizes the issuance of up to $17 billion in revenue bonds by the Alaska Railroad Corporation (ARRC) to pay for 70% of the construction of a natural gas pipeline. Based upon current estimates, ARRC could issue $14,265,000,000 in bonds as early as state Fiscal Year 2005. ARRC will act as a conduit for the issuance of these bonds to allow the debt to be issued as tax exempt. Through modeling, the tax exemption has been shown to reduce the cost of financing the project by over one billion dollars. The Bonds would be solely secured by revenues generated by the pipeline. The Alaska Railroad will bear no liability and have no responsibility for repayment of the bonds.

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AHFC 4/9/02

State of Alaska

22nd Legislature - 2nd Session
January 14 - May 14, 2002

State Capitol
Juneau, Alaska 99801-1182

Presentation to the House Finance Committee by Alaska Housing Finance Corporation April 9, 2002

State of Alaska
Alaska Railroad Corporation

Presentation to the Board of Directors
by Alaska Housing Finance Corporation
March 15, 2002

AHFC Team Participants

Alaska Housing Finance Corporation

- Dan Fauske; CEO/Executive Director, AHFC
- Judith DeSpain; Deputy Executive Director, AHFC
- Michael Buller; Chief Administrative Officer, AHFC
- Joe Dubler; CFO/Finance Director, AHFC
- Ken Vassar; Senior Partner, Wohlforth Vassar Johnson & Brecht
- John Wagner; Senior Partner, Kutak Rock
- Steven Kantor; President, Arimax Financial Advisors

AHFC Team

Alaska Housing Finance Corporation

Management and Finance

AHFC Executive Staff

Over 50 years of management experience

AHFC Finance Department

Multi-billion dollar issuer experienced in national and international markets

Financial Advisor

Arimax Financial Advisors

Leading Financial Advisor in Alaska

Legal Team

Wohlforth, Vassar, Johnson & Brecht

Leading Bond Counsel in Alaska

Kutak Rock

One of the nation's leading municipal bond tax firms

Hawkins Delafield&Wood

The nation's largest law firm devoted exclusively to municipal bonds

$13.153 Billion in Bonds Issued by AHFC

Alaska Housing Finance Corporation

- Tax-Exempt Bonds
  - **101 Negotiated Transactions**
  - **25 Competitive Transactions**
  - **$9.017 Billion**
- Taxable Bonds
  - **70 Negotiated Transactions**
  - **$4.136 Billion**

- Short-Term Debt Issuance
  - **$150 Million Euro Commercial Paper Program**
  - **$150 Million Domestic Commercial Paper Program**
  - **Repurchase Agreements in varying amounts**

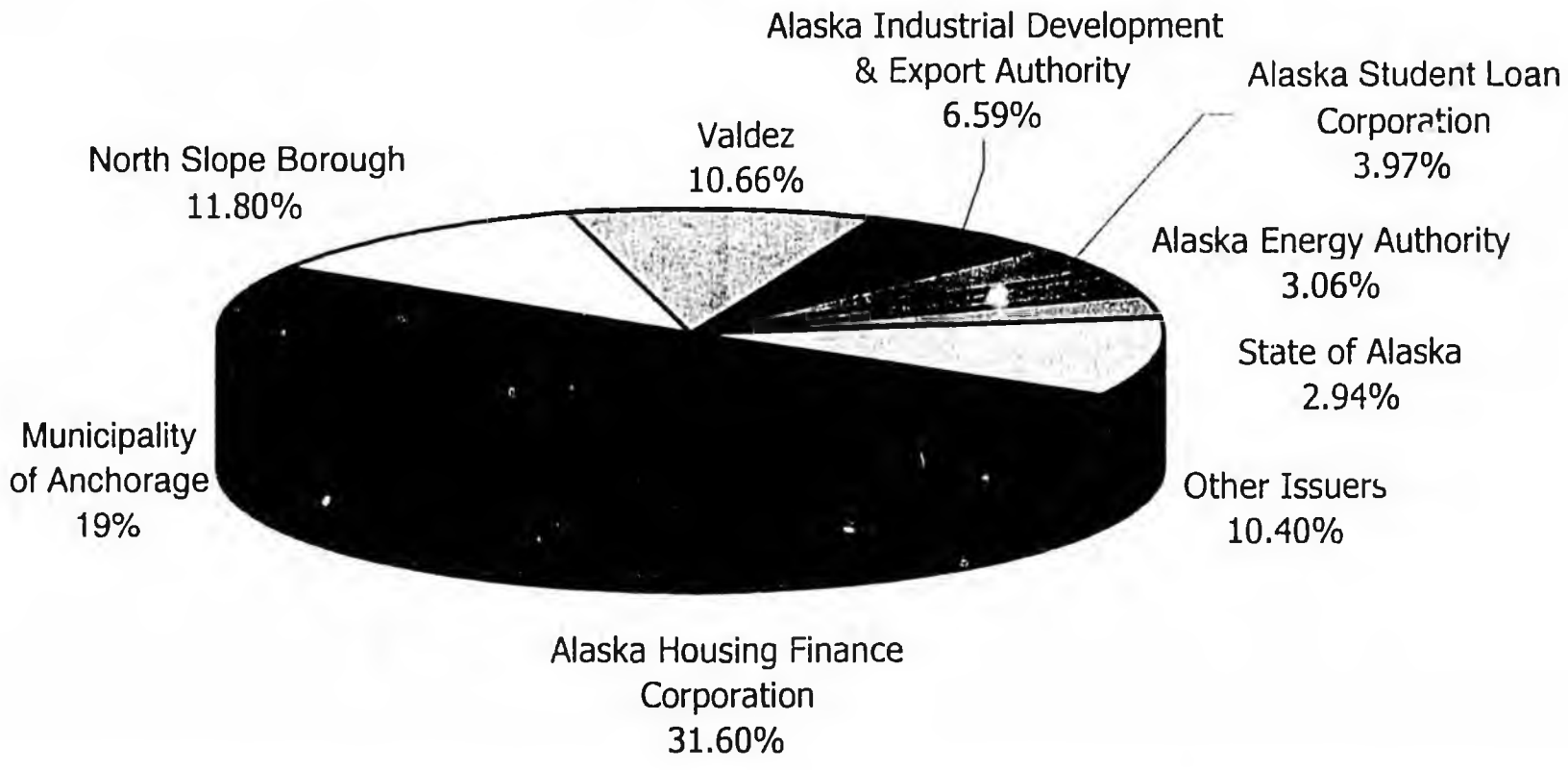
Non-Housing Bonds Issued by AHFC

Alaska Housing Finance Corporation

- Tobacco Settlement Revenue Bonds
  - **$116 million in 2000**
  - **$126 million in 2001**
- University Dormitory Bonds
  - **$33 million in 1997**
- State Capital Project Bonds
  - **$196 million in 1999**
  - **$74 million in 2001**
- Robert B. Atwood Building Bonds
  - **$40 million in 1999**

AHFC has issued more bonds than any other issuer in Alaska

Top Issuers of Tax-Exempt Debt in the State of Alaska
1992 to 2002



The Bond Issuance Process

Alaska Housing
FINANCE CORPORATION

Issues relating to a Tax-Exempt bond issuance:

- Selecting Appropriate Professionals
  - Financial, Tax, Legal, and Financing-Specific Experts
- Performing feasibility analysis
  - Tax, financial and project analysis
- Developing Optimal Finance Structure
  - Coordination with users of project
- Generating Local Support
- Providing Information to the Public
- Responding to Rating Agency concerns/Obtaining a rating

tax changes

- Marketing the Bonds
  - Institutional Investors
  - Retail Investors
- Providing Continuing Disclosure

ALASKA HIGHWAY NATURAL GAS POLICY COUNCIL
Frank Brown and Jim Sampson, Co-Chairs

April 9, 2002

The Honorable Eldon Mulder
Alaska State Legislature
State Capitol, Room 507
Juneau, AK 99801-1182

The Honorable Bill Williams
Alaska State Legislature
State Capitol, Room 511
Juneau, AK 99801-1182

Dear Representatives Mulder and Williams:

We are writing to express our strong support for HB 423, the railroad bonding bill. This bill represents a unique opportunity for the State of Alaska to aid in the advancement of a natural gas pipeline. Authorizing the Alaska Railroad Corporation to issue tax-exempt bonds to help finance a gas line could lower the overall cost of construction, ultimately moving the project one step closer to fruition.

The Alaska Highway Natural Gas Policy Council spent nine months researching the many issues surrounding gas line development, talking to experts and residents around the state. Through this work, the council developed 61 unanimously supported recommendations. One of our key conclusions was to encourage the exploration of "creative financial structures to facilitate all or part of a gas pipeline and/or in-state gas infrastructure, provided such entities finance their activities through private markets."

The railroad's ability to issue tax-exempt bonds to finance industrial development was authored by Senator Ted Stevens and approved by Congress in 1983 with the transfer of the Alaska Railroad from federal to state ownership. Congress reaffirmed the railroad's authority to issue tax-exempt bonds in the Tax Reform Act of 1986.

Estimates prepared by Goldman Sachs and the Department of Revenue suggest the financing plan presented in this bill could increase the economic viability of the gas line project by saving the owners more than $1 billion in today's dollars over the life of the project.

This bill would allow the Alaska Railroad to provide financing for the acquisition, construction, improvement, maintenance, and operation of facilities for the transportation of natural gas resources within and outside the state. However, neither the railroad nor the state would own the gas line nor be liable for the debt.

Advancing the development of an Alaska gas line is a top priority for all Alaskans. The project will mean jobs for Alaskans and much needed revenue for the state. Building a gas line is also economically important to the nation. Lower 48 consumers are probably the greatest beneficiaries from a gas line delivering a steady supply of affordable, environmentally friendly arctic natural gas. The highway gas line would be the largest privately funded project in this nation's history, giving our national economy a sorely needed shot in the arm and putting Americans to work with jobs in construction, manufacturing, and transportation.

At our February meeting, the Natural Gas Policy Council voted unanimously to support the idea encompassed in HB 423. We urge you to take swift action on this bill. It is time for the State of Alaska to think creatively and act aggressively to help make this important project a reality.

Sincerely,

Jim Sampson
Co-Chair

Sincerely,

Frank Brown
Co-Chair

United States Code
Title 45 - Railroads
Chapter 21 - ALASKA RAILROAD TRANSFER

Section 1207. State operation. (a) Laws, authorities, etc., applicable to State-owned railroad with status as rail carrier engaged in interstate and foreign commerce

(1) After the date of transfer to the State pursuant to section1203 of this title, the State-owned railroad shall be a rail carrier engaged in interstate and foreign commerce subject to part A of subtitle IV of title 49 and all other Acts applicable to rail carriers subject to that chapter, including the antitrust laws of the United States, except, so long as it is an instrumentality of the State of Alaska, the Railroad Retirement Act of 1974 (45 U S.C. 231 et seq.), the Railroad Retirement Tax Act (26 U.S.C. 3201 et seq.), the Railway Labor Act (45 U.S.C. 151 et seq.), the Act of April 22, 1908 (45 U.S.C. 51 et seq.) (popularly referred to as the "Federal Employers' Liability Act"), and the Railroad Unemployment Insurance Act (45 U.S.C. 351 et seq.).Nothing in this chapter shall preclude the State from explicitly invoking by law any exemption from the antitrust laws as may otherwise be available

(2) The transfer to the State authorized by section 1203 of this title and the conferral of jurisdiction to the Interstate Commerce Commission pursuant to paragraph (1) of this subsection are intended to confer upon the State-owned railroad all business opportunities available to comparable railroads, including contract rate agreements meeting the requirements of section 10713 of title 49, notwithstanding any participation in such agreements by connecting water carriers.

(3) All memoranda which sanction noncompliance with Federal railroad safety regulations contained in 49 CFR Parts 209-236, and which are in effect on the date of transfer, shall continue in effect according to their terms as "waivers of compliance" (as that term is used in section 20103(d) of title 49).

(4) The operation of trains by the State-owned railroad shall not be subject to the requirement of any State or local law which specifies the minimum number of crew members which must be employed in connection with the operation of such trains.

(5) Revenues generated by the State-owned railroad shall be retained and managed by the State-owned railroad for railroad and related purposes.

(6)(A) After the date of transfer, continued operation of the Alaska Railroad by a public corporation, authority or other agency of the State shall be deemed to be an exercise of an essential governmental function, and revenue derived from such operation shall be deemed to accrue to the State for the purposes of section115(a)(1) of title 26. **Obligations issued by such entity shall also be deemed obligations of the State for the purposes of section103(a)(1) of title 26, but not obligations within the meaning of section 103(b)(2) of title 26.** (B) Nothing in this chapter shall be deemed or construed to affect customary tax treatment of private investment in the equipment or other assets that are used or owned by the State-owned railroad.

(b) Procedures for issuance of certificate of public convenience and necessity; inventory, valuation, or classification of property; additional laws, authorities, etc., applicable As soon as practicable after January 14, 1983, the Interstate Commerce Commission shall promulgate an expedited, modified procedure for providing on the date of transfer a certificate of public convenience and necessity to the State-owned railroad.

No inventory, valuation, or classification of property owned or used by the State-owned railroad pursuant to subchapter V of chapter 107 of title 49 shall be required during the two-year period after the date of transfer. The provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and section 382(b) of the Energy Policy and Conservation Act (42 U.S.C.6362(b)) shall not apply to actions of the Commission under this subsection.

(c) Eligibility for participation in Federal railroad assistance programs The State-owned railroad shall be eligible to participate in all Federal railroad assistance programs on a basis equal to that of other rail carriers subject to part A of subtitle IV of title 49.

(d) Laws and regulations applicable to national forest and parklands; limitations on Federal actions After the date of transfer to the State pursuant to section 1203of this title, the portion of the rail properties within the boundaries of the Chugach National Forest and the exclusive-use easement within the boundaries of the Denali National Park and Preserve shall be subject to laws and regulations for the protection of forest and park values. The right to fence the exclusive-use easement within Denali National Park and Preserve shall be subject to the concurrence of the Secretary of the Interior. The Secretary of the Interior, or the Secretary of Agriculture where appropriate, shall not act pursuant to this subsection without consulting with the Governor of the State of Alaska or in such a manner as to unreasonably interfere with continued or expanded operations and support functions authorized under this chapter.

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 liqueñed 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 soaring

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 dir[illegible]o 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. ◆

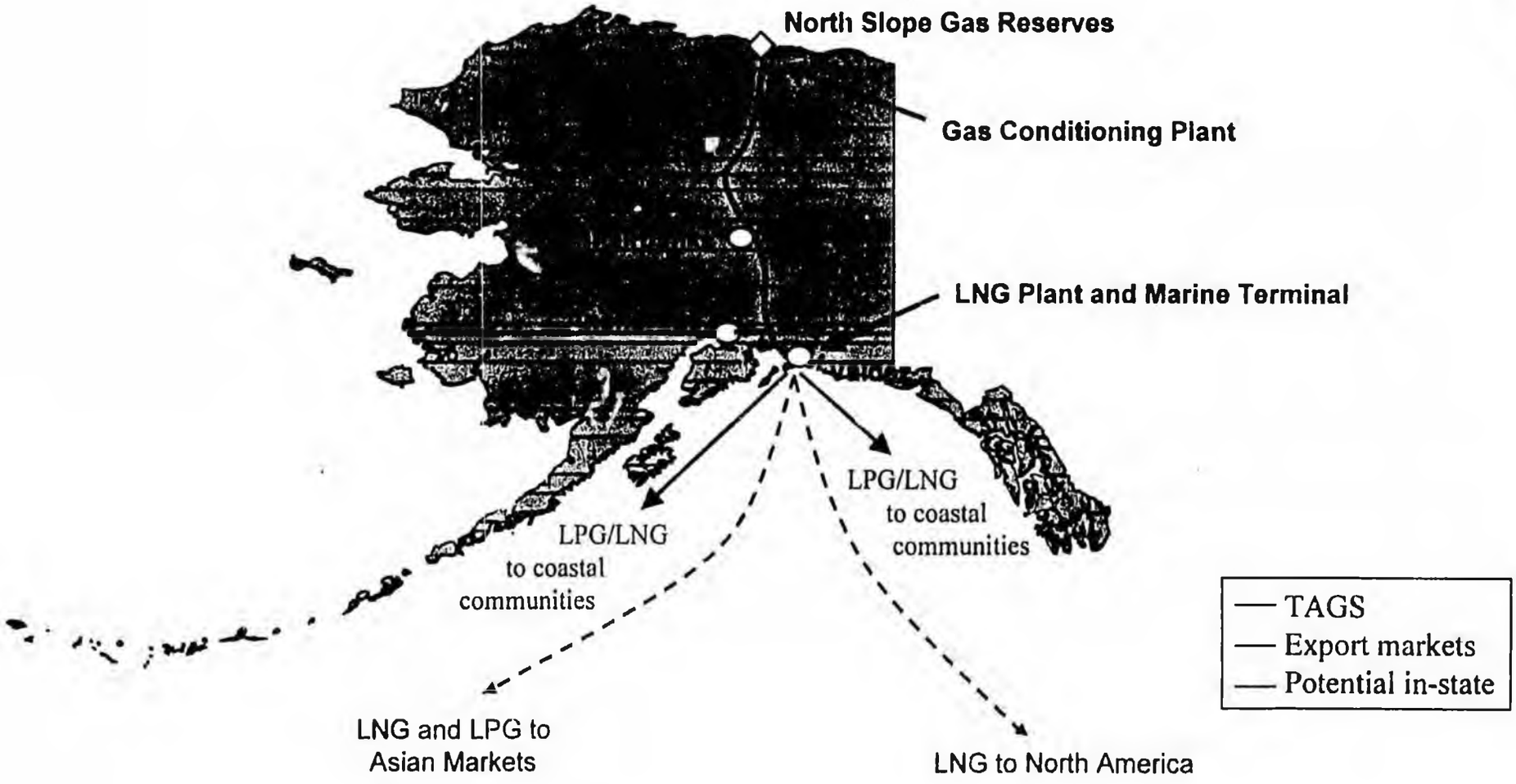
Presentation on the TAGS Small Project

February 2002

Yukon Pacific Corporation

A Business Unit of CSX Corporation

TAGS Route Map



Cover Letter for YPC presentation on the TAGS Small Project configuration

Introduction

Yukon Pacific Corporation is evaluating a configuration of the Trans-Alaska Gas System that is smaller than YPC's current design basis and incorporates the sale of ethane and propane as separate products. YPC has prepared a powerpoint presentation regarding the TAGS Small Project. This letter is intended to accompany the presentation and provide supplement information.

The TAGS Small Project consists of a 7 million metric ton per year (MTA) LNG project with the addition of ethane extraction for an in-state petrochemical industry and propane extraction for sale as liquefied petroleum gas (LPG) to Asia. The initial in-house economic runs for this configuration are producing encouraging results.

Project size and ramp-up

The TAGS Small Project, as currently envisioned, requires a flow rate of 1.4 bscfd.

A premise of YPC's Small Project is that capacity ramp-up can be avoided by serving five relatively small markets simultaneously. These five markets are: 2 MTA of LNG to North America; 5 MTA of LNG to Asia; 60,000 barrels per day of ethane for feed to an in-state petrochemical industry; 75,000 barrels per day of propane as LPG to Asia and 50 mmscfd of utility grade gas for in-state use.

Considering the volumes for the Canadian pipeline proposals, there should be little issue with the assumption that 2 MTA (280 mmscfd) of gas can be placed in the North American market if competitively priced. The 5 MTA of LNG to Asia is about two thirds the size of the 7-8 MTA "market entry project" discussed by the Alaska North Slope LNG Project during testimony before the Alaska Legislature in 2001. The quantity of ethane is approximately the same as feedstock rates to petrochemical projects being proposed for Fairbanks and Alberta. The Asian LPG market appears to be strengthening as evidenced by the upward trend of LPG price in Japan over the last 10 years.

The TAGS pipeline passes through Fairbanks and within 140 miles of the gas infrastructure in South-central Alaska. The 50 mmscfd value of in-state gas use is a somewhat arbitrary value for the combined gas usage of communities along the TAGS pipeline route plus potential sales to Alyeska Pipeline Service Company. The capital costs for the TAGS Small Project do not include any gas sales via a spur line to South-central Alaska although this clearly is a potential market. The size of the TAGS Small Project is small enough that in-state gas usage represents a significant portion of total pipeline flow. The project economics will be enhanced if the actual in-state gas demand exceeds the 50 mmscfd value.

The TAGS Small Project is based upon installation of a 30-inch pipeline. This pipeline is oversized for the 1.4 bscfd throughput required to serve the markets mentioned above. The pipeline capacity can be expanded by about 50 percent with the addition of pipeline compression. The benefits of such an expansion are not included in the economic information in the presentation.

Impact on oil production

A premise of the TAGS Small Project is that hydrocarbons currently contained in the miscible injectant stream at Prudhoe Bay will be made available to a gas project. The Prudhoe Bay Unit has stated that the production of miscible injectant for the Prudhoe Bay Miscible Gas Project may cease by around the year 2010. The PBU has also stated that the CO2 and butane byproducts from the conditioning plant of a gas project can be blended into the MI thereby minimizing or negating impacts on the PBMGP due to a gas project.

A material balance around the conditioning plant proposed for the TAGS Small Project configuration shows that use of the CO2 and butane byproducts can keep the MI project approximately 90% whole on injecant volume. The adverse impact on the PBMGP is expected to be negligible since: 1) this project will be nearing the end of its life by the start-up of the TAGS Small Project, and 2) the byproducts from the gas conditioning plant can be used to maintain the volume of MI regardless of the project life.

Oil loss attributed to a major gas sale appears to be tied to the amount of gas removed from the reservoir and the corresponding drop in reservoir pressure. One would expect significantly less adverse impact on oil with a gas sale of 1.4 bscfd as compared to the 4+ bscfd volumes discussed for the Canadian pipeline projects.

Oil production at Prudhoe Bay is currently constrained by the gas handling capacity of the production facilities. One would anticipate an increase in near term oil production if the rate of field gas off-take were increased. A premise of the TAGS Small Project configuration is that field gas off-take will be increased with the additional gas disposed of via the gas project.

The increase in crude oil production corresponding to the increase of gas off-take will depend upon the marginal gas oil to ratio of the field. The incremental increase of blendable NGL to TAPS should be roughly proportional to the increase in the rate of gas off-take. No credit has been given to the TAGS Small Project for incremental increases of either crude oil or blendable NGL. It is assumed that the benefits of incremental oil production will be addressed in the negotiation of wellhead gas price.

The impacts on oil production due to the TAGS Small Project have not been included in the economic information in the presentation.

Economic assumptions and models

The information in the presentation is based upon a project-wide process simulation; capital and operating costs prepared for YPC by WillBros, Michael Baker Jr and Kellogg Brown & Root; and YPC in-house software designed to parse capital investments by year of construction. YPC has structured our in-house software to interface directly with the front end of a comprehensive economic model developed for YPC by CS First Boston.

The results of economic models are, of course, dependent upon the assumptions used for the various economic parameters and prices. We believe that our capital cost assumptions are generally conservative in that they tend to overstate the costs. We have run our in-house economic model using product pricing assumptions that we believe are moderate to conservative. Our economic results show that the YPC Small Project configuration returns an IRR near the thresholds stated as acceptable by various parties evaluating a major gas project.

Questions and additional information

Questions regarding this letter or the power point presentation should be sent to:

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WAW 2-27-02

Yukon Pacific Corporation

- More than 18 years spent developing a gas project from Alaska's North Slope
- Major permits in place
- State-of-the-art analytical tools for pipeline design
- Detailed economic models

TAGS Small Project is a New Concept

- Concept developed during the 4th quarter of 2001
- Promising economics, but in process of verifying premises.

Going Smaller Instead of Bigger

- TAGS current design basis: 36-inch pipeline for up to 18 MTA of LNG (2.5 bscfd) plus in-state gas sales

- TAGS Small Project basis: 30-inch pipeline for 7 MTA of LNG plus ethane and propane sold as separate products; the pipeline can be expanded in the future

Big Projects Gain Economies of Scale, But Make Entry into Market More Difficult

	bscfd
ANGTS	2.5
Highway Project	4.0
ANGTS - Revised	5.2
Highway Project - Revised	6.0
YPC Small Case	1.4

TAGS Small Project - Basic Concept

- Preferentially market the most valuable gas hydrocarbons on the North Slope (propane and ethane).
- Use a single pipeline to transport a mix of hydrocarbons for separation and sale to various end markets.
- Serve multiple small markets simultaneously thereby enhancing economics by avoiding capacity ramp-up.

Three Products to Six Markets

- Methane
  - LNG to Asia
  - LNG to North America
  - Utility grade gas within Alaska
- Ethane (extract from pipeline gas)
  - Feed to Alaskan petrochemical industry
- Propane (extract in Valdez)
  - LPG (liquefied petroleum gas) to Asia
  - LPG to Alaskan communities

Relative Value of North Slope Reserves (From High to Low Value)

- Crude Oil and Condensate
- Natural Gas Liquids
- Propane
- Ethane
- Methane (Natural Gas)

Market Quantities

	mmscfd	1000 Bbl/day	Million tons/yr
In-state gas	50		0.36
LNG to N. America	280		2
LNG to Asia	710		5
Ethane feedstock		60	1.25
Propane as LPG (*)		75 / 50	2.21
Total			10.8

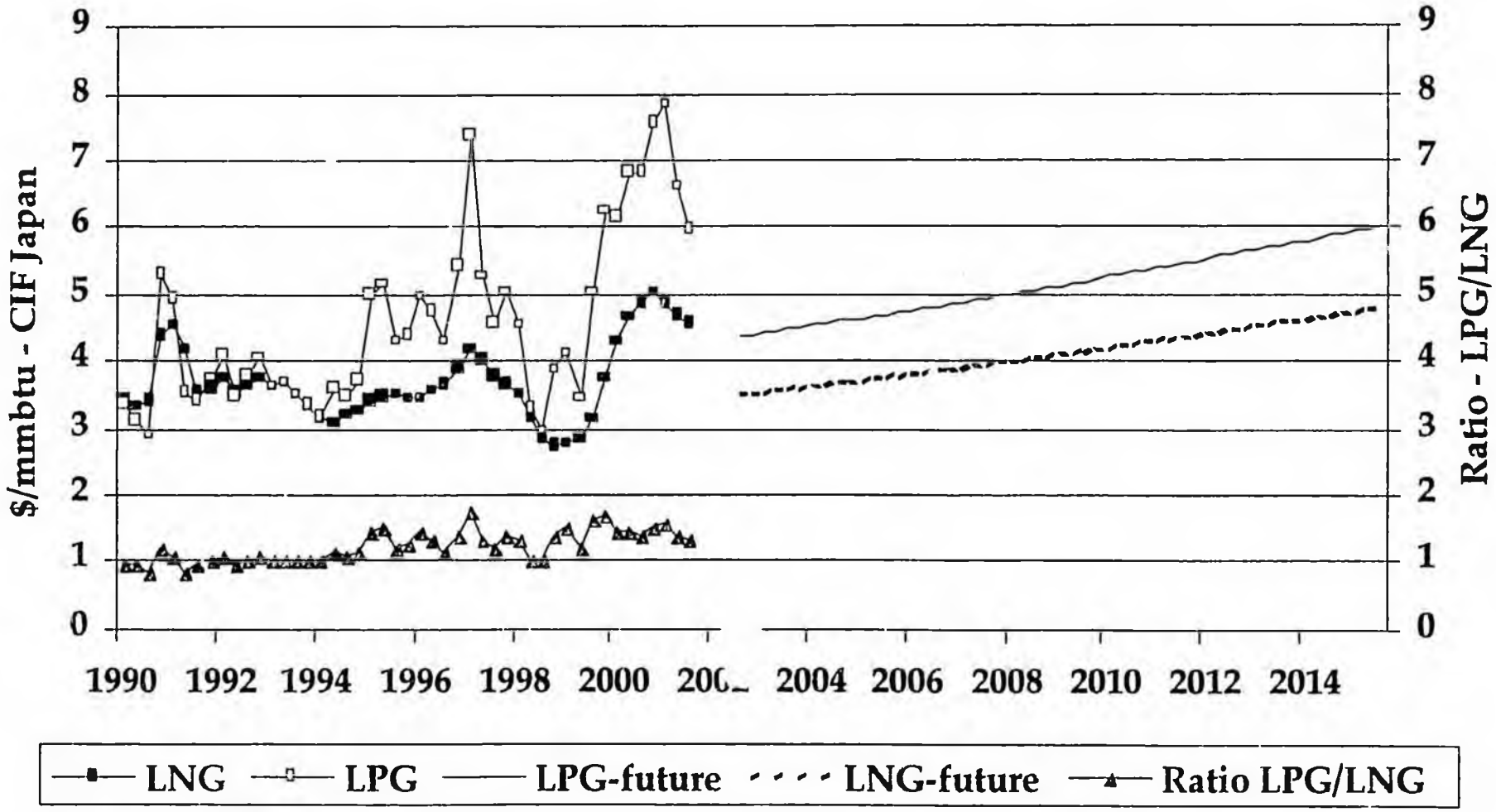
* LPG rate assumed to decline from 75,000 to 50,000 Bbl/day

Why is propane preferable to methane?

- Heating value of propane is 2.5 times that of methane.
- LPG commands a 125% price premium to LNG sold to Japan.
- Each standard cubic foot of propane transported by pipeline will provide more than 3 times the revenue of methane.
- Propane is more easily handled than LNG.

LNG & LPG Prices

(Reference for historical: Sumitomo Corp.)

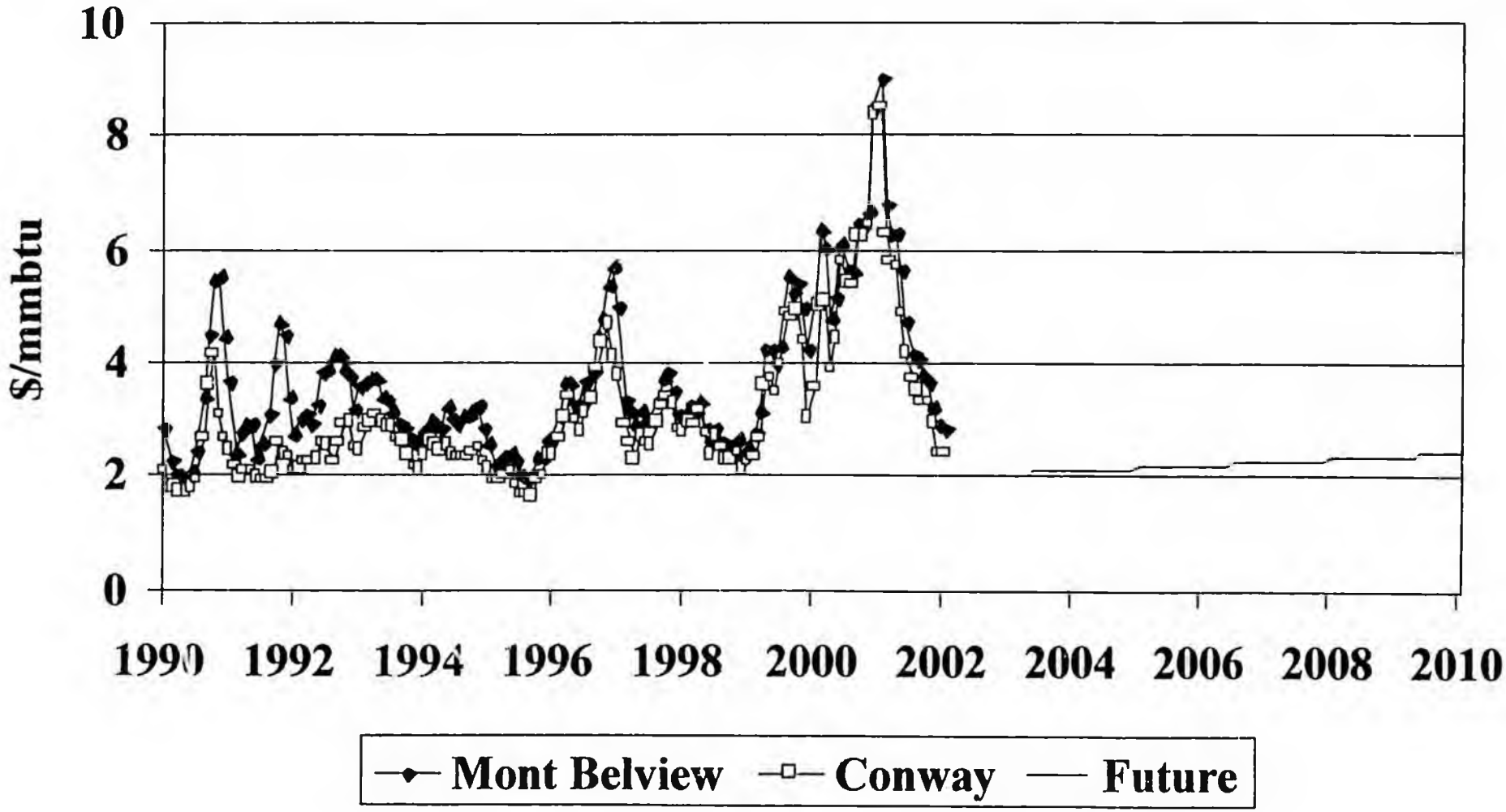


Why is ethane preferable to methane?

- Heating value of ethane is 1.7 times that of methane.
- Ethane is easily removed along with propane.
- Ethane can be sold in-state thereby providing a value-added product for a petrochemical industry in Alaska while minimizing project capital cost.

Ethane Prices in Lower 48

(Reference for historical: Platts)

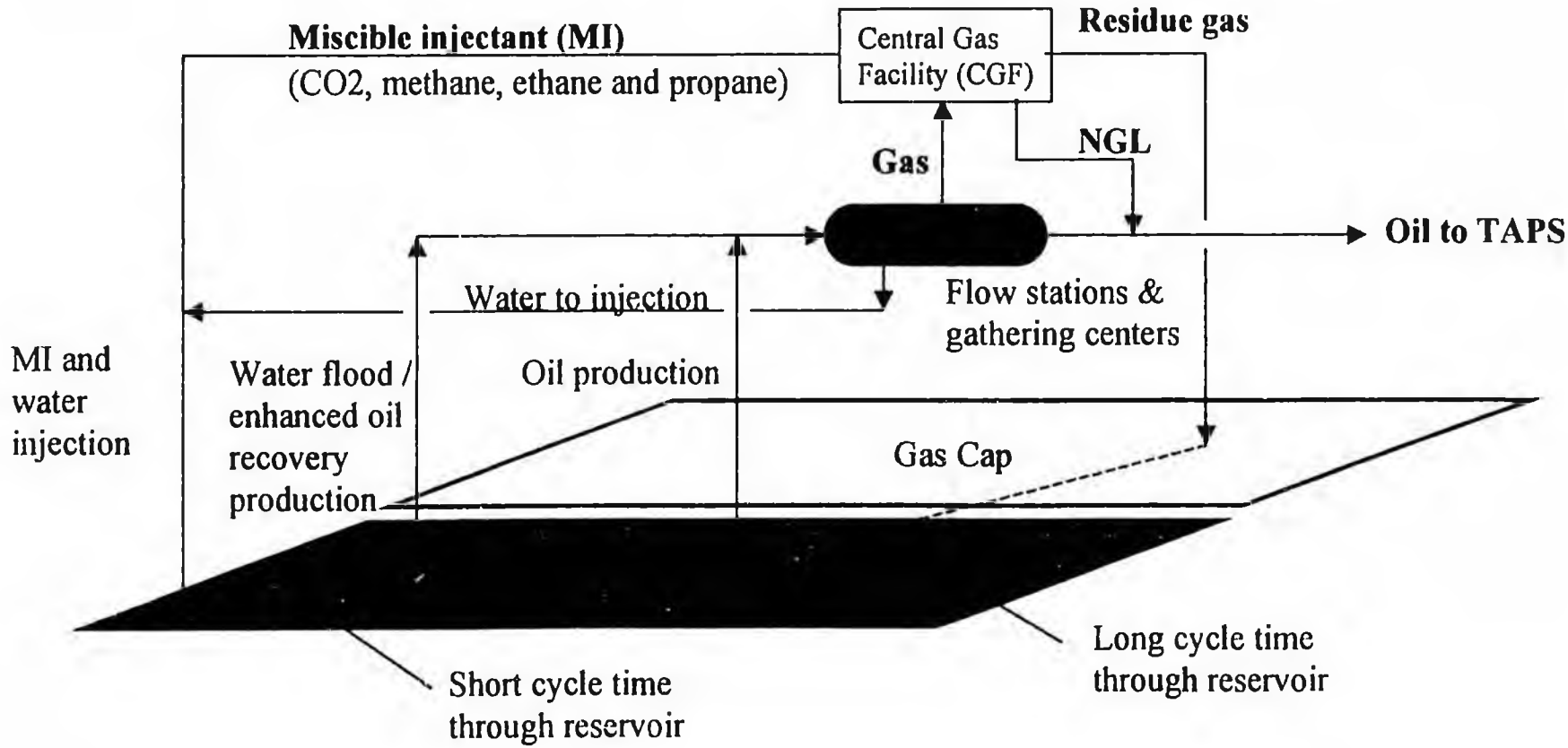


Sources of gas

- NGL rich (raw) field gas
  - Assumed source is from Prudhoe Bay
  - Any gas rich in ethane and propane will do

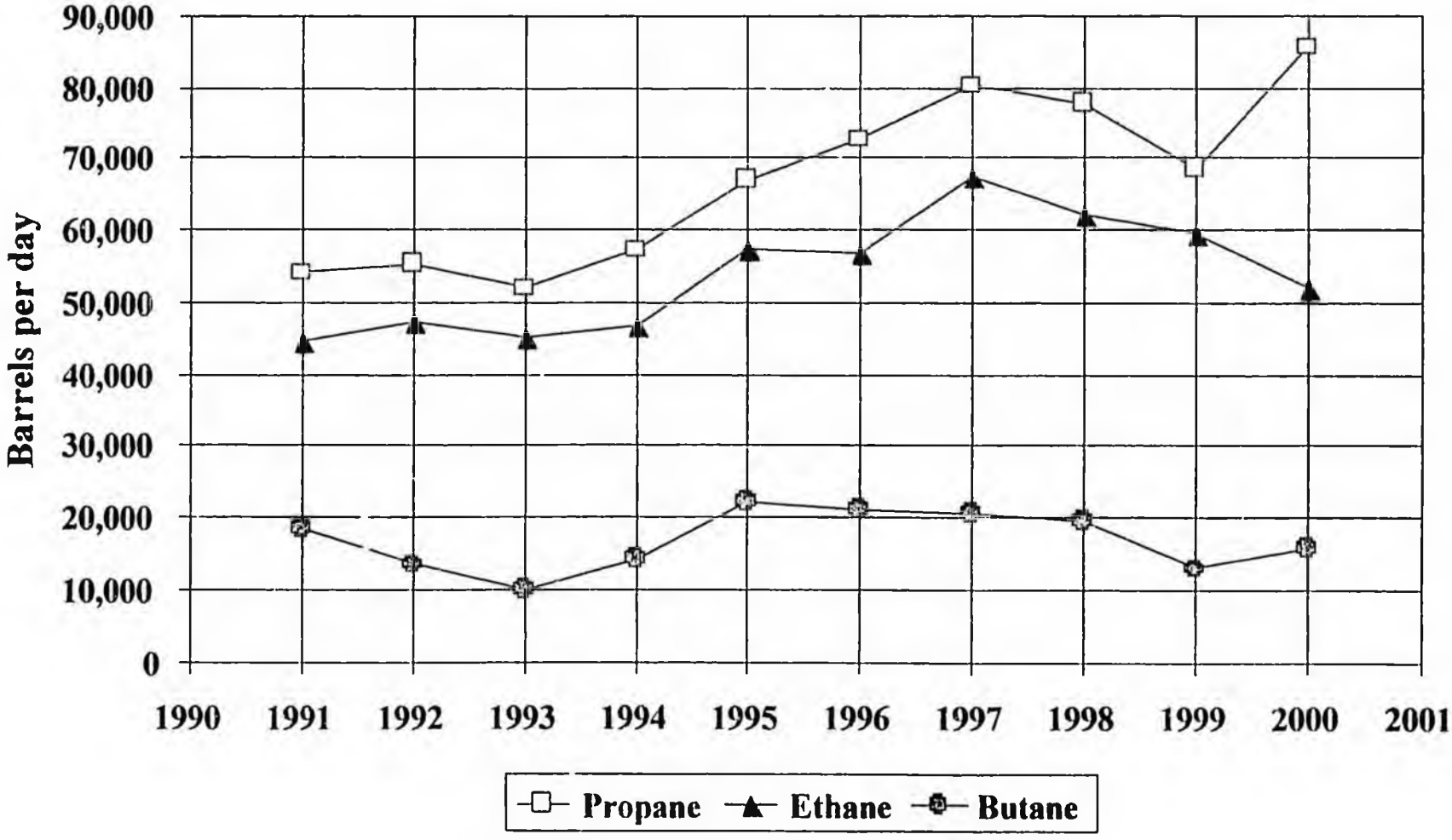
- Miscible injectant at Prudhoe Bay
  - Central Gas Facility concentrates ethane and propane from 8.5 bscfd of field gas
  - Need for MI expected to diminish after 2010
  - CO2 and butane byproducts from TAGS gas conditioning can supplement MI

Over time, ethane and propane concentrations in the Prudhoe Bay miscible injectant have increased due to recycling through the reservoir



Liquids injected as MI at Prudhoe Bay

(Reference: Alaska Oil & Gas Conservation Commission)



Calculation of Stabilizer Overhead

	Total MI 2000	CGF Residue	Stabilizer Overhead Unadjusted	Adjusted
mmscfd	546	96	450	
Mole %				
CO2	20.76	11.55	22.72	22.69
Nitrogen	0.00	0.62	-0.13	0.00
Methane	36.13	80.74	26.61	26.58
Ethane	14.96	5.14	17.05	17.03
Propane	23.86	1.56	28.62	28.58
I-butane	1.77	0.12	2.12	2.12
N-butane	2.09	0.19	2.50	2.49
Pentane+	0.43	0.08	0.50	0.50
Total	100.00	100.00	100.00	100.00

References:

1 – Total MI from Annual Reservoir Surveillance Report, PBU, Jan. through Dec. 2000.

2 – CGF residue gas composition and 450 mmscfd overhead volume from AOGCC hearings on PBU, 1995.

Gas Sources - Composition

	Stabilizer overhead	Raw field gas	Available mmscfd	bbl/day	Destination
mmscfd	450	1,500			
Mole %					
CO2	22.69	12.07	282		MI
Nitrogen	0.00	0.57	9		Gas/LNG
Methane	26.58	76.11	1,261		Gas/LNG
Ethane	17.03	6.11	168	106,900	LNG/petrochem
Propane	28.58	3.07	174	114,200	LPG
I-butane	2.12	0.41	16	12,200	MI
N-butane	2.49	0.83	24	17,700	MI
Pentane+	0.50	0.83	15	12,700	NGL to TAPS
Total	100.00	100.00	1,950		

References:

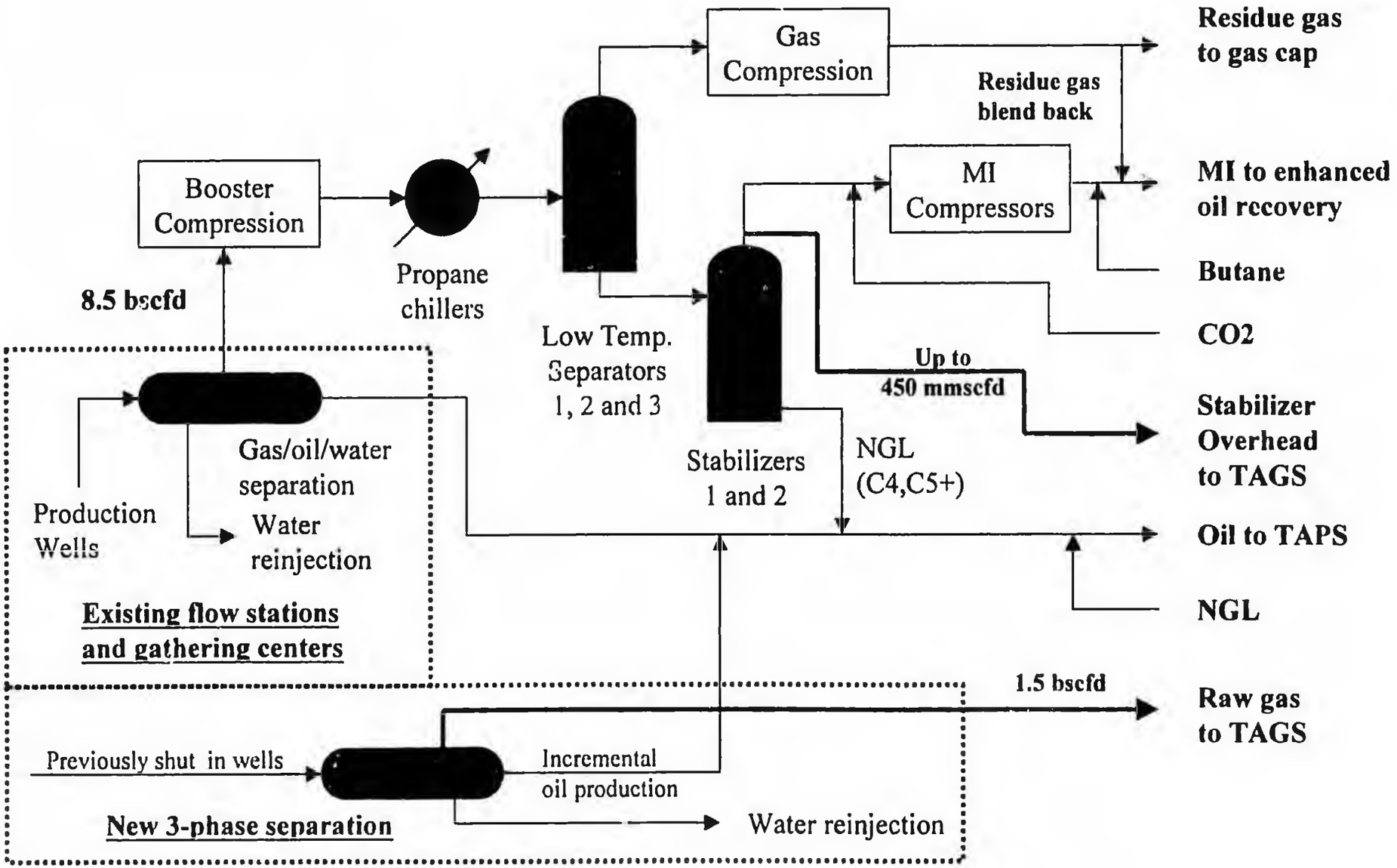
1 – Raw gas composition from AOGCC hearings on PBU, 1995.

Liquids Available from Central Gas Facility

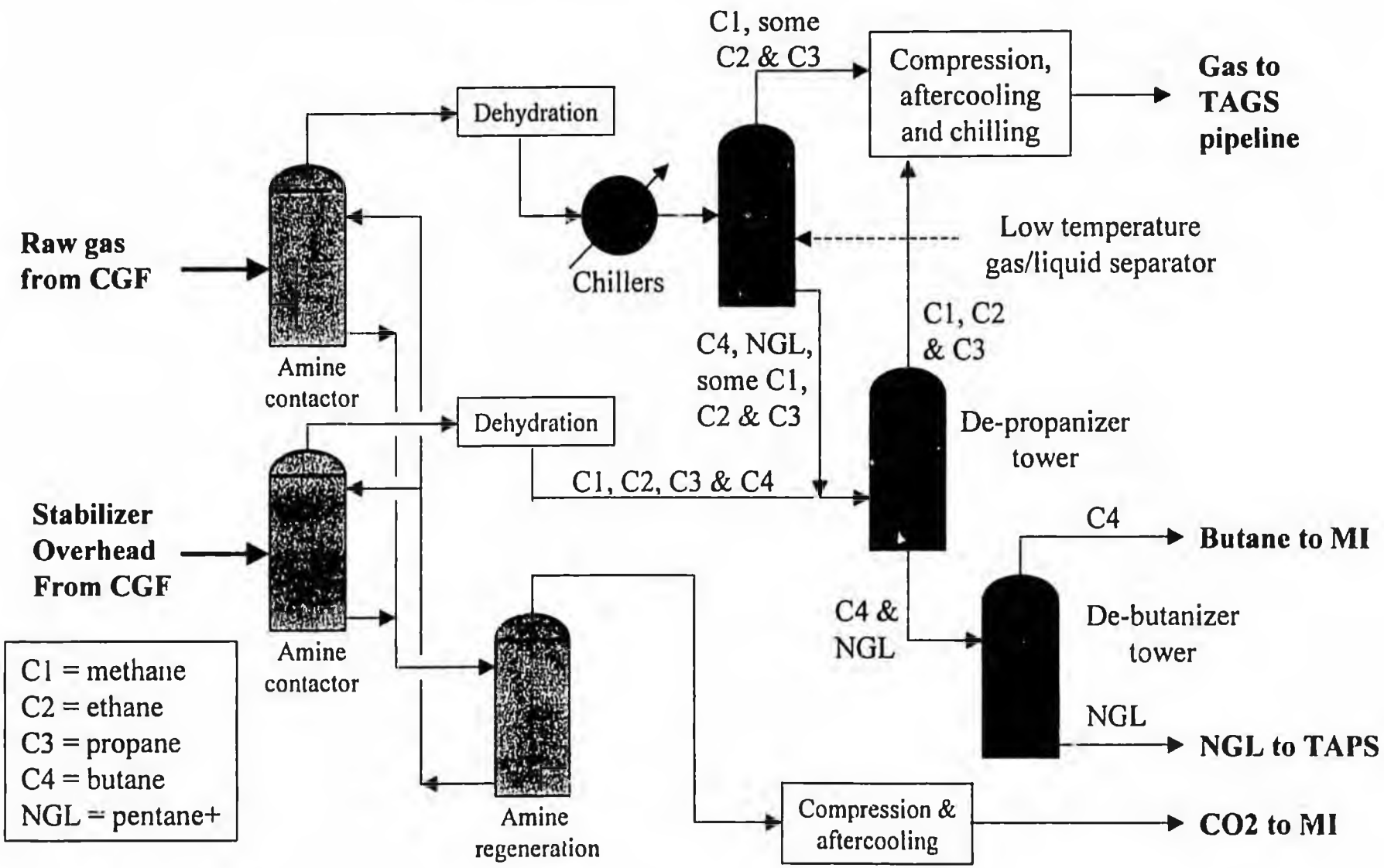
	Stabilizer overhead	Raw field gas	Total
mmscfd	450	1,500	
Bbl/day			
Ethane	48,700	58,200	106,900
Propane	84,100	30,100	114,200

How do we obtain these products with minimal impact on oil production?

Central Gas Facility – modified for TAGS



TAGS - Gas Conditioning Plant



PBU Comment on a Major Gas Sale

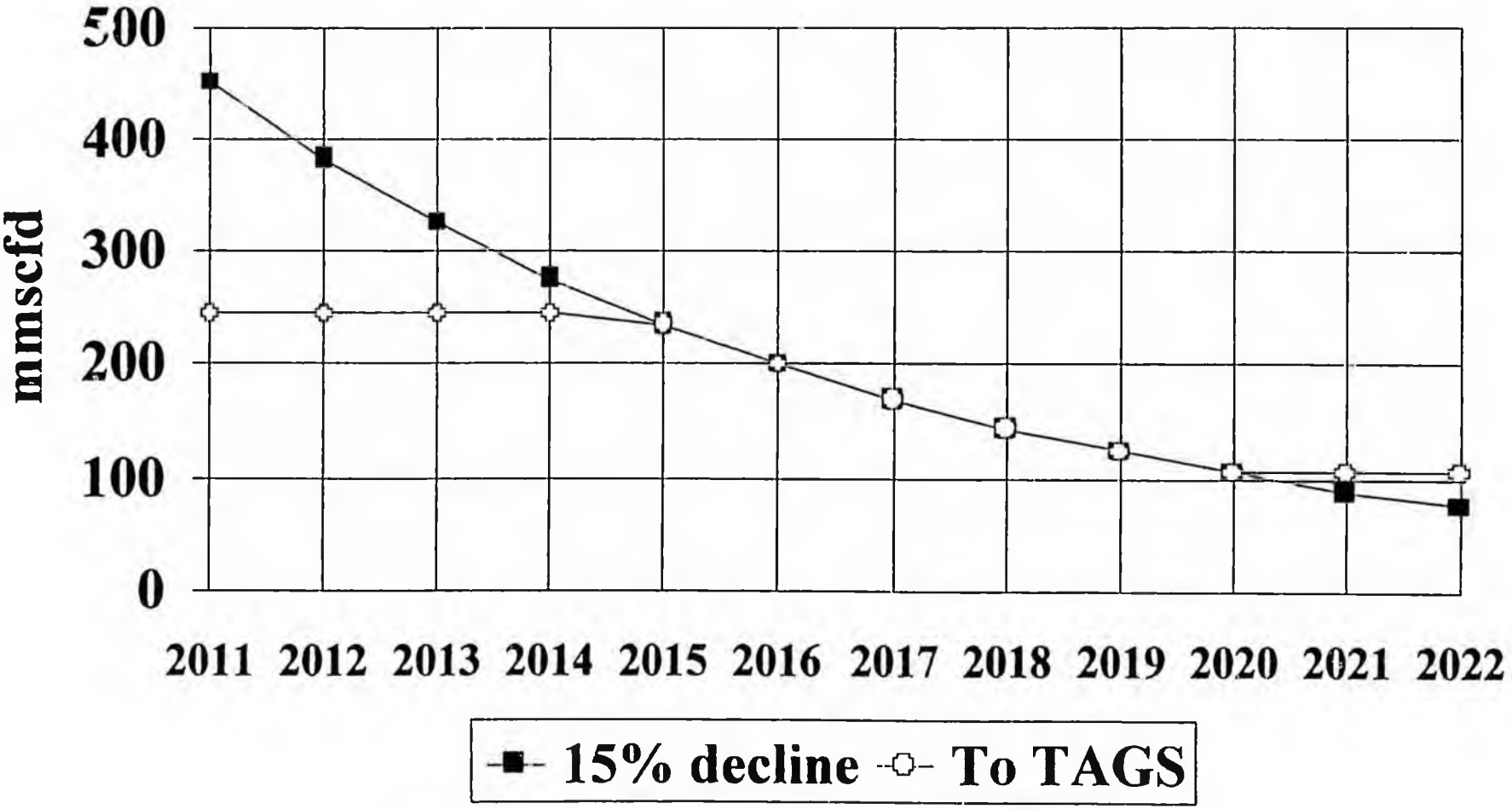
"...That conditioning plant may also reject some butanes, so the CO2 and butane, if that were coming back, may be able actually to help make up for any loss in MI supply due to the need to increase enrichment, due to pressure decline, or due to the loss of the gas stream itself, so in – reality, the impact could range from small to none..."

ARCO, 1991

Reference: AOGCC hearing, PBU – Miscible Gas Project Expansion, 11/20/91

Stabilizer Overhead Flow Rate

(Availability of ethane and propane assumed to drop over time)

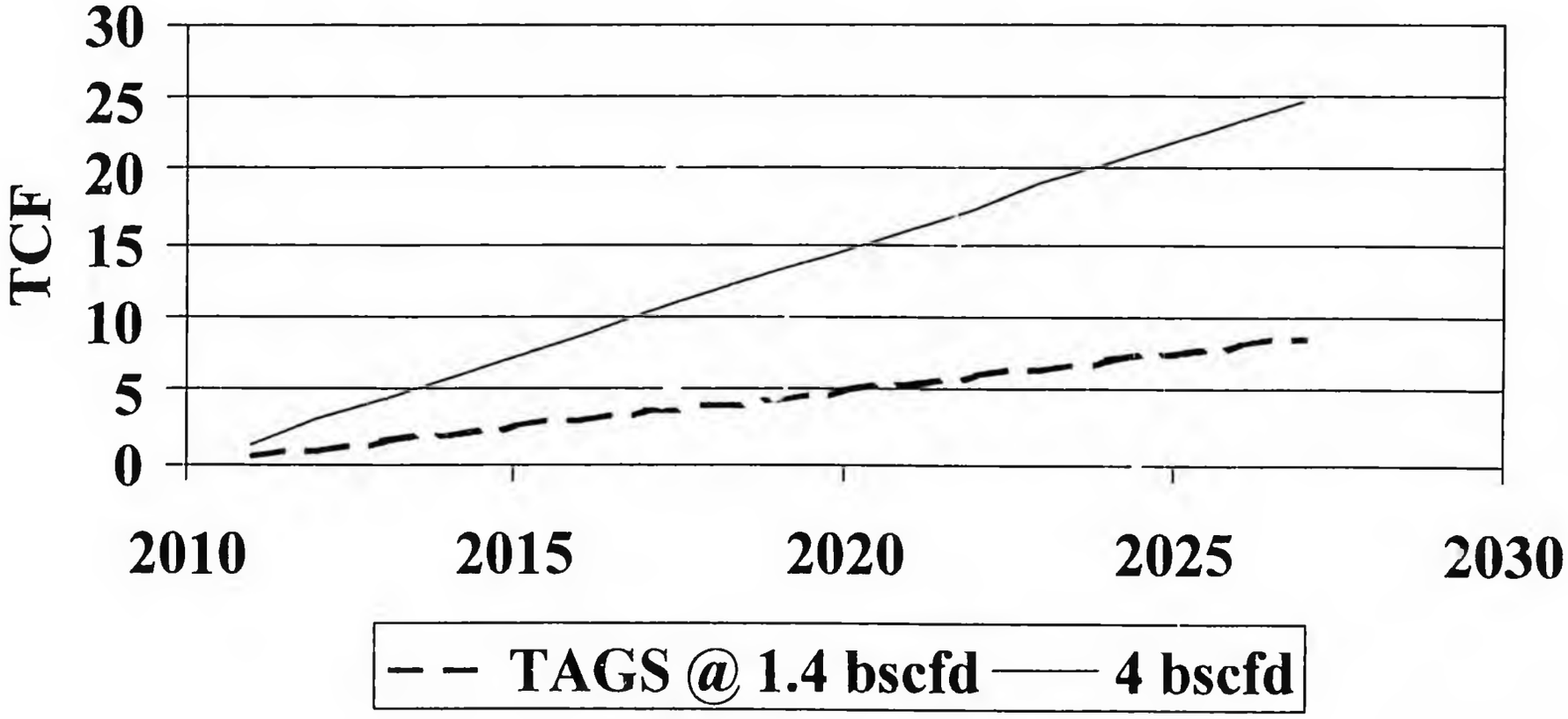


Example: Re-blending of MI

	Excess Overhead	CO2	Butane	CGF Residue	New MI	MI 2000
mmscfd	205	238	31	18	492	546
MMP(*)	2623	4239	-1064	8361	3256	3259
Mole %						
CO2	20.69	100.00		11.55	58.35	20.76
Nitrogen	0.00			0.62	0.02	0.00
Methane	26.58			80.74	14.01	36.13
Ethane	17.03		0.01	5.14	7.27	14.96
Propane	28.58		7.21	1.56	12.40	23.86
I-butane	2.12		33.55	0.12	2.99	1.77
N-butane	2.49		57.23	0.19	4.63	2.09
Pentane+	0.50		2.00	0.08	0.34	0.43
Total	100.00	100.00	100.00	100.00	100.00	100.00

* MMP = minimum miscibility pressure

Larger Gas Projects Increase the Potential for Impact on Oil Production (Cumulative Reservoir Voidage)



Potential Gain In Oil Production

- Crude oil production at Prudhoe Bay is constrained by the ability to handle gas produced with the oil.

- Gas projects could increase crude oil production - example
  - Current Prudhoe Bay gas/oil ratio is 16,000 scf/bbl
  - Assume marginal GOR of 45,000 for new wells
  - Assume 1.5 bscfd raw gas per YPC Small Project
  - Theoretical increase in crude oil = 33,300 bpd

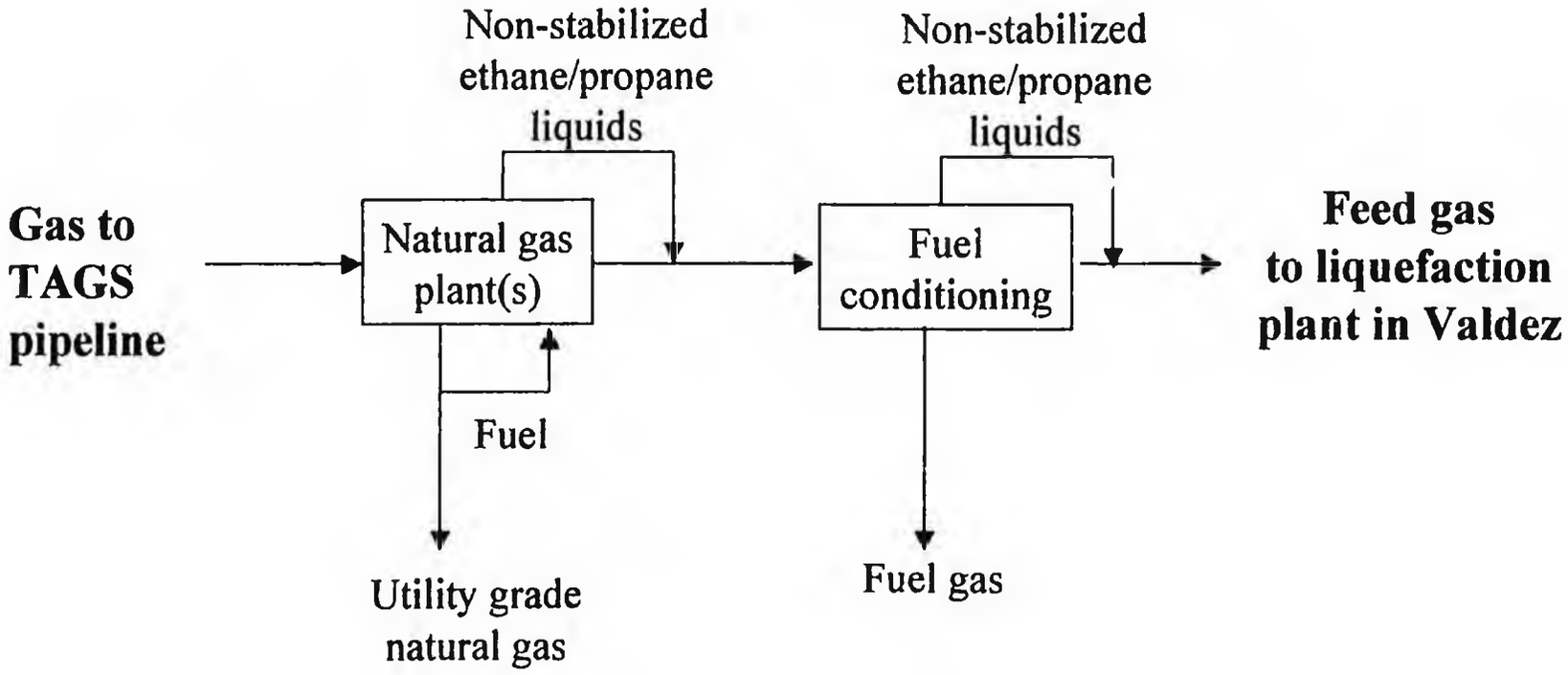
    (1,500,000,000 / 45,000 = 33,333)

- Recovered NGL (C5+) to TAPS = 12,000 bpd

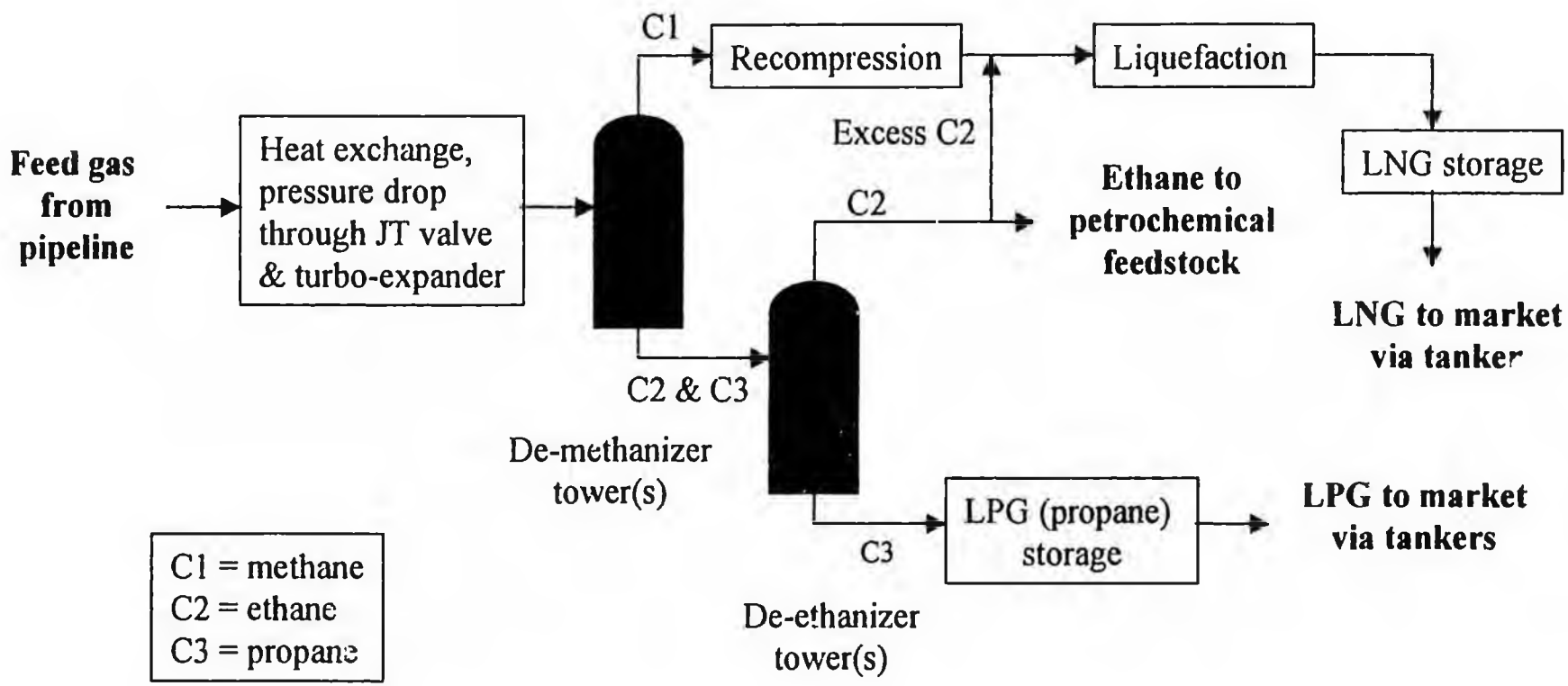
Impacts On Oil Production From TAGS Small Project

- Miscible injectant / EOR: minimal impact expected during remaining life of EOR project.
- Impacts due to drop in reservoir pressure: less drop with smaller project.
- Increasing gas off-take should increase near term oil production (crude oil and NGL).

TAGS – Pipeline, Stations, In-state Gas



TAGS – LPG/LNG/Terminal Facility in Valdez



Market Quantities and Product Prices Used for Economics

	mmscfd	1000 Bbl/day	Million tons/yr	2002 $/mmbtu
In-state gas	50		0.36	2.50
LNG to N. America	280		2	2.75
LNG to Asia	710		5	3.50
Propane as LPG (*)		75 / 50	2.21	4.38
Ethane feedstock		60	1.25	2.00
Total			10.8	

* LPG rate assumed to decline from 75,000 to 50,000 Bbl/day

Capital Costs Estimates

Gas Conditioning Plant	ANS LNG + $500 million for compression and NGL extraction
Pipeline & Stations	Willbros/M.Baker for 36-inch adjusted to 30-inch
LNG/MT	Kellogg Brown & Root + $500 million for C2 & C3 extraction
Tankers	
- 7 LNG (135,000 cu.m.)	$175 million each
- 3 LPG (85,000 cu.m.)	$125 million each

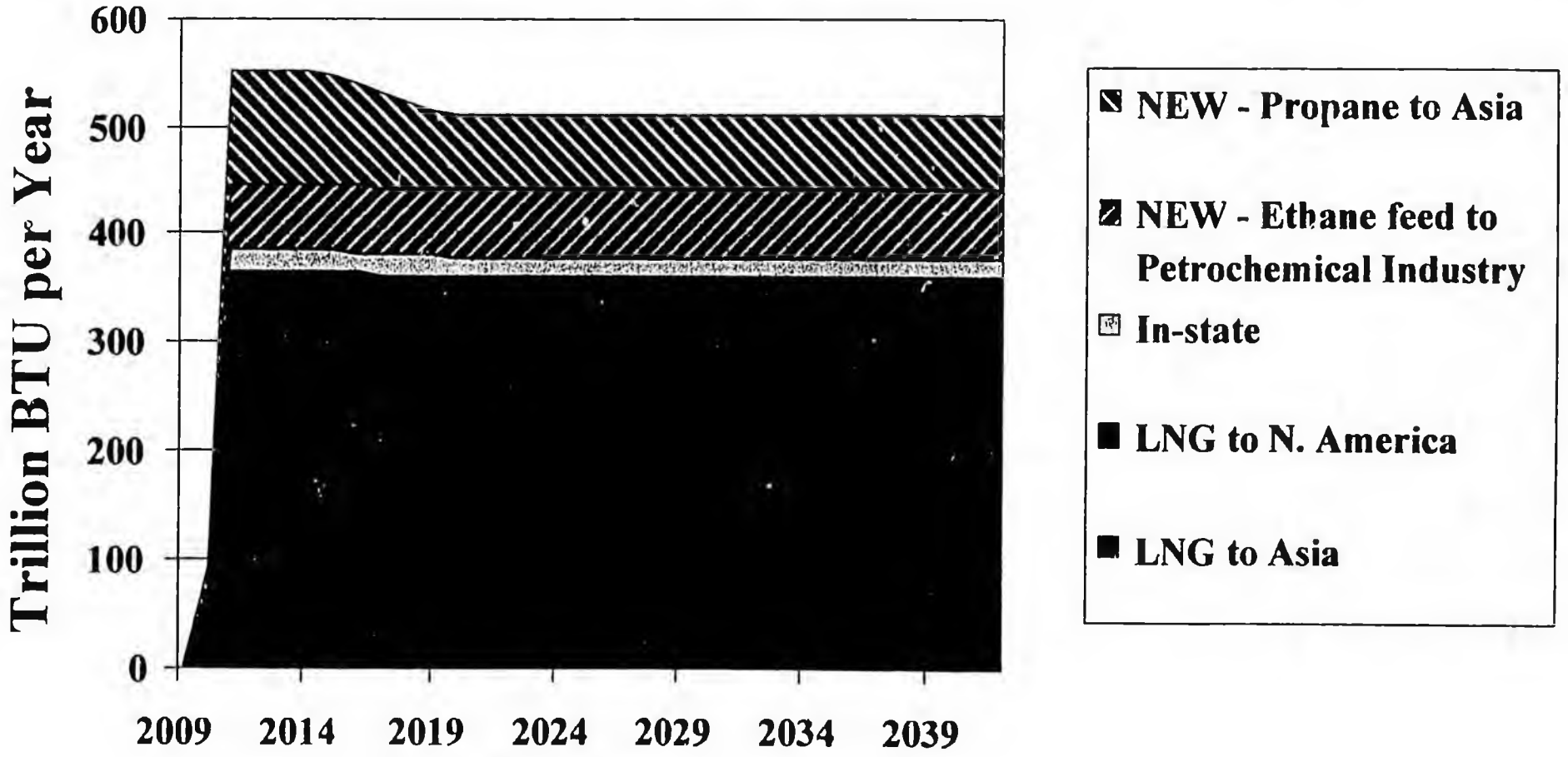
Comparison with Prior Costs Estimate

	ANS LNG group (*)	TAGS Small Case
Bscfd conditioned gas	1.1	1.4
Capital costs ($billion)		
GCP	0.9	1.5 (1.0 + 0.5)
30-inch pipe & stations	2.4	3.3
LNG - Valdez	1.8	3.0 (2.5 + 0.5)
Tankers (7 ANS, 10 TAGS)	1.6	1.6
Misc. & rounding		0.1
Total	6.7	9.5

* Alaska North Slope LNG Project (recently disbanded)

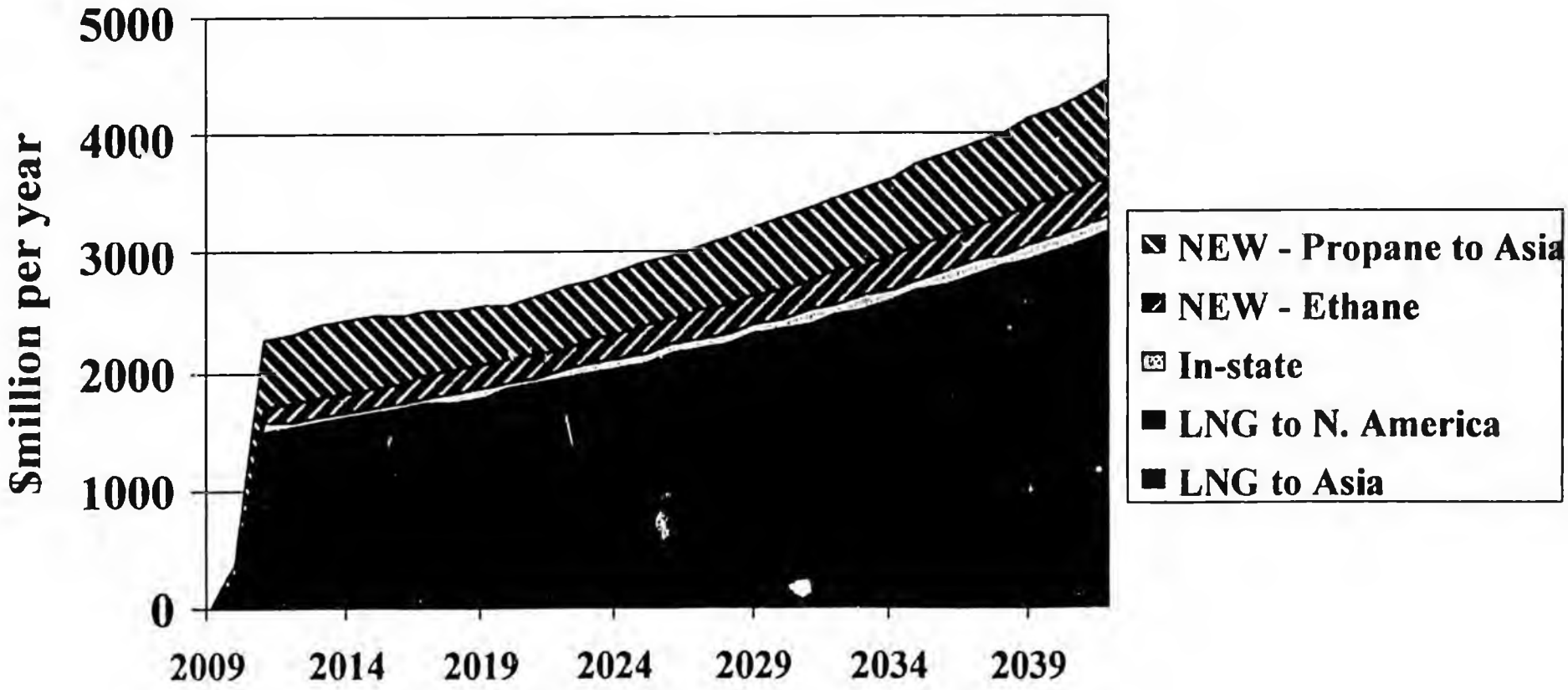
TAGS Small Project

7 MTA of LNG + New Products

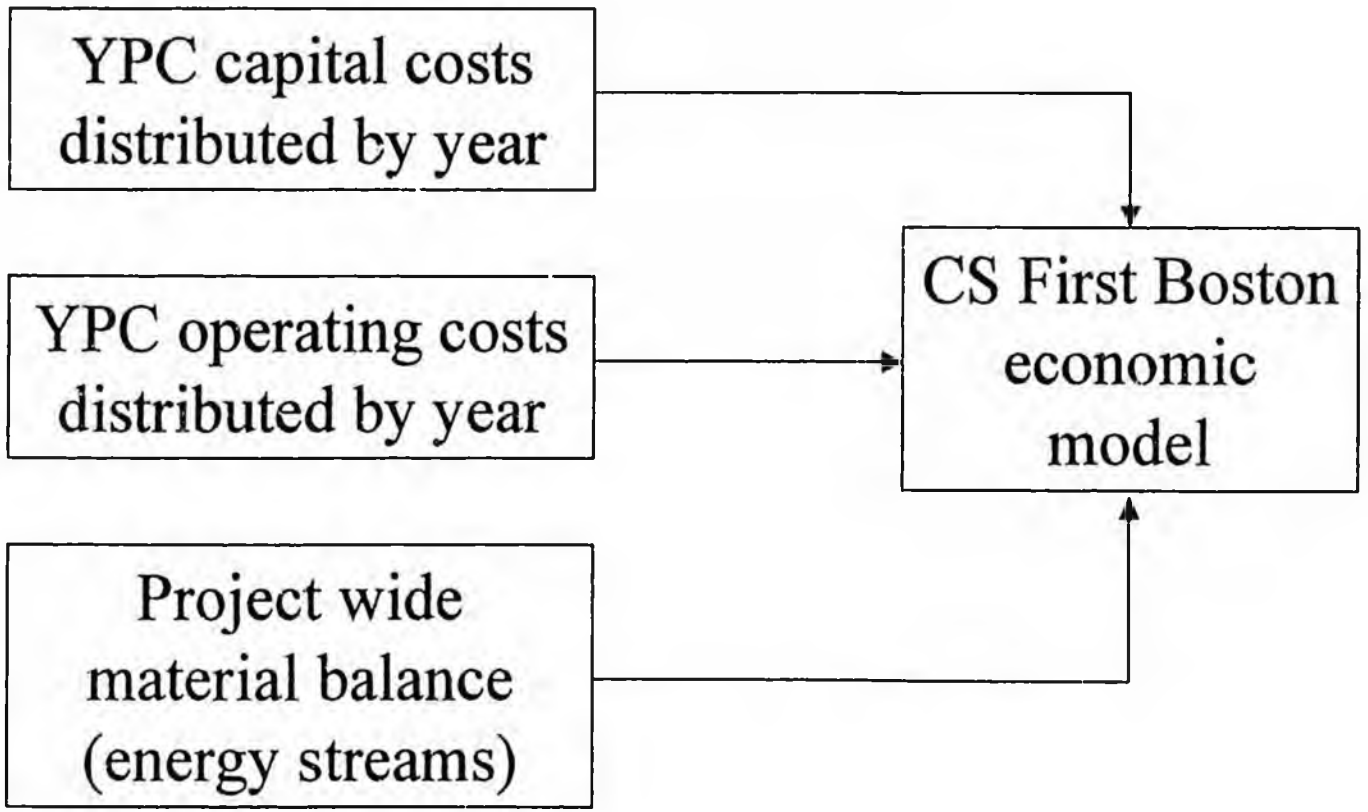


TAGS Small Case - Gross Revenues

7 MTA + New Markets



YPC Economic Model



Economic Premises

- Debt to equity ratio – 75/25
- Interest rate for construction and debt service – 8%
- Inflation – 2.5%
- Gas purchase price - $0.50/mmbtu at inlet to gas conditioning plant (Reference: CERA December, 2001)

TAGS Small Project Economics
Internal Rate of Return (%IRR)

	Infrastructure Only	Including Net Gas Purchase Revenue (*)
15% LPG decline	11.8%	14.8%
No LPG decline	12.7%	15.6%

* Includes gas purchase revenue net after royalty, severance and taxes.

Next Steps

- Determine economics/viability of petrochemical plant.
- Verify LPG market in Asia.
- Obtain data from Prudhoe Bay Unit
  - Forecast of compositions and rates of stabilizer overhead and raw field gas
  - Potential interface with existing equipment
  - Potential increase in near term oil production

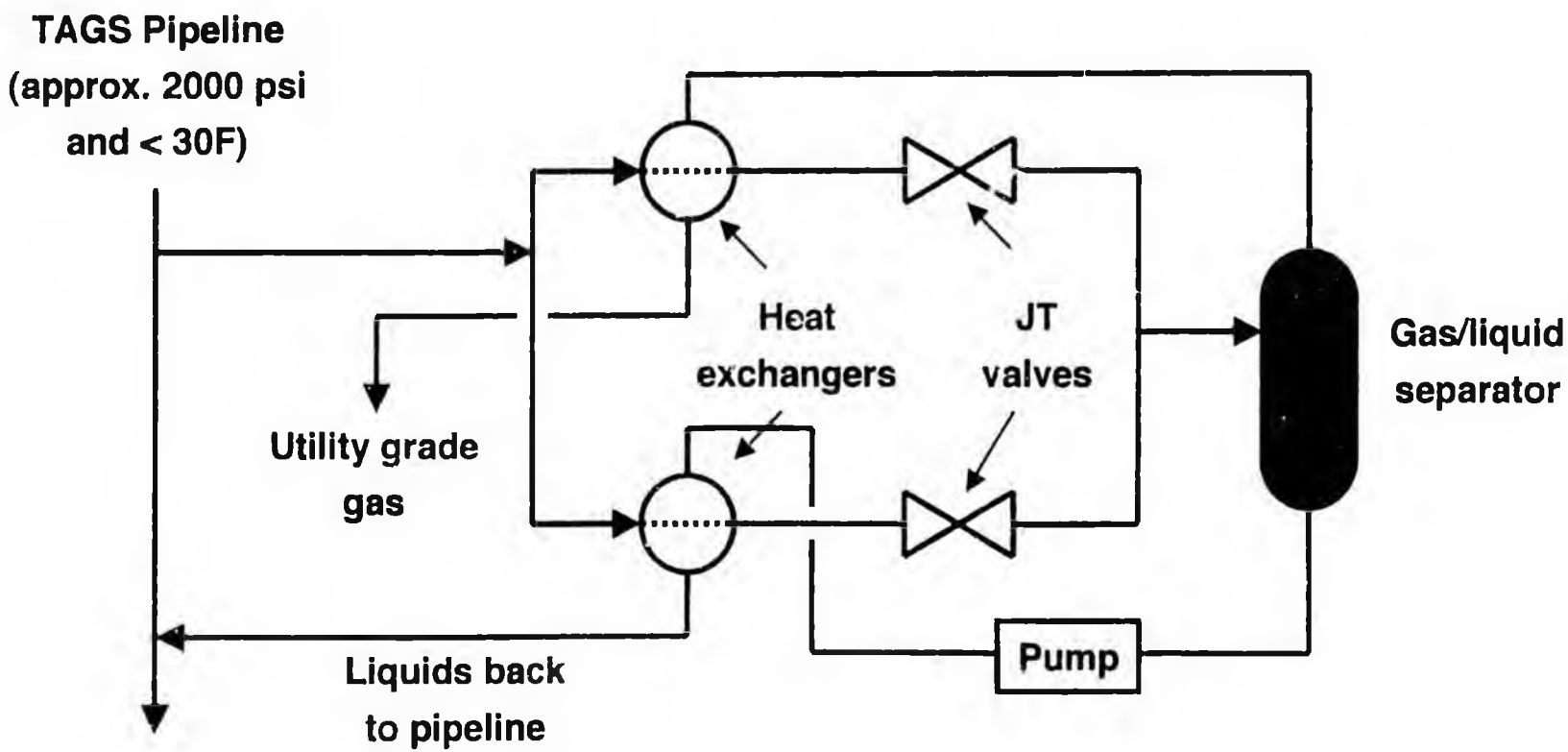
Small Project Now DOES NOT Preclude Other Projects Later!

- The YPC small project requires relatively little of the North Slope methane resource.
- There will be plenty of methane left to supply pipeline projects through Canada to Lower 48.
- There should be no impact on a gas-to-liquids project.

Gas Accessible for In-State use with Minimal Capital Cost

- Conditioned gas will be free of CO2 and dry.
- No further gas pre-treatment required.
- Gas facilities along the pipeline will be simple and inexpensive.

Simplified Schematic of In-State Gas Facility



Why Is YPC Looking at a Smaller Project?

- Lowers capital costs
- Enhances market entry
- Provides means to market most valuable gas components remaining on the North Slope
- Uses enhanced project revenues to establish gas infrastructure/industry within Alaska

Conclusion: Alaska Should Keep Its Options Open

State and/or Federal assistance MUST apply to all projects.

YPC is ready to work with all parties interested in developing Alaska's North Slope gas.

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Director of Project Development

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