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HOUSE RES

ANNEX II

Zones for the Pipeline and the Dempster Line in Canada

- Zone 1 Foothills Pipe Lines (South Yukon) Ltd**
Alaska Boundary to point of interconnection with the Dempster Line at or near Whitehorse
- Zone 2 Foothills Pipe Lines (South Yukon) Ltd**
Whitehorse to Watson Lake
- Zone 3 Foothills Pipe Lines (North B C) Ltd**
Watson Lake to point of interconnection with Westcoast's main pipeline near Fort Nelson
- Zone 4 Foothills Pipe Lines (North B C) Ltd**
Point of interconnection with Westcoast's main pipeline near Fort Nelson to the Alberta-B C border
- Zone 5 Foothills Pipe Lines (Alta) Ltd**
Alberta B C border to point of bifurcation near Caroline, Alberta
- Zone 6 Foothills Pipe Lines (Alta) Ltd**
Caroline, Alta to Alberta-Saskatchewan border near Empress
- Zone 7 Foothills Pipe Lines (Alta) Ltd**
Caroline to Alberta-B C border near Coleman
- Zone 8 Foothills Pipe Lines (South B C) Ltd**
Alberta-B C border near Coleman to B C-United States border near Kingsgate
- Zone 9 Foothills Pipe Lines (Sask) Ltd**
Alberta-Saskatchewan border near Empress to Saskatchewan-United States border near Monchy
- Zone 10 Foothills Pipe Lines (North Yukon) Ltd**
Mackenzie Delta Gas fields in the Mackenzie Delta, N W T, to a point near the junction of the Klondike and Dempster Highways just east of Dawson, Yukon Territory
- Zone 11 Foothills Pipe Lines (South Yukon) Ltd**
A point near the junction of the Klondike and Dempster Highways near Dawson to the connecting point with the Pipeline at or near Whitehorse

ANNEXE II

Zones pour le Pipe-line et la Ligne Dempster au Canada

- Zone 1 Foothills Pipe Lines (South Yukon) Ltd**
De la frontière de l'Alaska au point de raccordement de la Ligne Dempster à Whitehorse ou à proximité de Whitehorse
- Zone 2 Foothills Pipe Lines (South Yukon) Ltd**
De Whitehorse à Watson Lake.
- Zone 3 Foothills Pipe Lines (North B C) Ltd**
De Watson Lake au point de raccordement de la canalisation principale de la Westcoast, à proximité de Fort Nelson
- Zone 4 Foothills Pipe Lines (North B C) Ltd**
Du point de raccordement de la canalisation principale de la Westcoast, à proximité de Fort Nelson, à la frontière entre l'Alberta et la Colombie-Britannique
- Zone 5 Foothills Pipe Lines (Alta) Ltd**
De la frontière entre l'Alberta et la Colombie-Britannique au point de bifurcation à proximité de Caroline (Alberta)
- Zone 6 Foothills Pipe Lines (Alta) Ltd**
De Caroline (Alberta) à la frontière entre l'Alberta et la Saskatchewan, à proximité d'Empress
- Zone 7 Foothills Pipe Lines (Alta) Ltd**
De Caroline à la frontière entre l'Alberta et la Colombie-Britannique, à proximité de Coleman
- Zone 8 Foothills Pipe Lines (South B C) Ltd**
De la frontière entre l'Alberta et la Colombie-Britannique, à proximité de Coleman, à la frontière entre la Colombie-Britannique et les États-Unis à proximité de Kingsgate
- Zone 9 Foothills Pipe Lines (Sask) Ltd**
De la frontière entre l'Alberta et la Saskatchewan, à proximité d'Empress, à la frontière entre la Saskatchewan et les États-Unis, à proximité de Monchy
- Zone 10 Foothills Pipe Lines (North Yukon) Ltd**
Des gisements de gaz du delta du Mackenzie, dans le delta ou Mackenzie, Territoires du Nord-Ouest, à un point situé à proximité du carrefour des autoroutes du Klondike et de Dempster, à l'est de Dawson (territoire du Yukon)
- Zone 11 Foothills Pipe Lines (South Yukon) Ltd**
D'un point à proximité du carrefour des autoroutes du Klondike et de Dempster, à proximité de Dawson, au point de raccordement du Pipe-line à Whitehorse ou à proximité de Whitehorse

ANNEX III*

Cost Allocation in Zone 11

The cost of service in Zone 11 shall be allocated to United States shippers on the following basis:

(i) There will be calculated, in accordance with (iii) below, a percentage for Zones 1—9 in total by dividing the actual capital costs by filed capital costs and multiplying by 100. If actual capital costs are equal to or less than 135% of filed capital costs, then United States shippers will pay 100% of the cost of service in Zone 11. If actual capital costs in Zones 1—9 are between 135% and 145% of filed capital costs, then the percentage paid by United States shippers will be adjusted between 100% and 66 2/3% on a straight-line basis, except that in no case will the portion of cost of service paid by United States shippers be less than the proportion of the contracted volumes of Alaskan gas at the Alaska-Yukon border to the same volume of Alaskan gas plus the contracted volume of Northern Canadian gas. If the actual capital costs are equal to or exceed 145% of filed capital costs, the portion of the cost of service paid by United States shippers will be not less than 66 2/3% or the proportion as calculated above whichever is the greater.

(ii) There will be calculated a percentage for the cost overrun on the Dawson to Whitehorse lateral (Zone 11). After determining the dollar value of the overrun, there will be deducted from it:

(a) the dollar amount by which actual capital costs in Zones 1, 7, 8 and 9 (carrying Alaskan gas only) are less than 135% of filed capital costs referred to in (iii) below;

(b) in each of Zones 2, 3, 4, 5 and 6 the dollar amount by which actual capital costs are less than 135% of filed capital costs referred to in (iii) below, multiplied by the proportion that the U.S. contracted volume bears to the total contracted volume in that Zone.

If the actual capital costs in Zone 11, after making this adjustment, are equal to or less than 135% of filed capital costs, then no adjustment is required to the percentage of the cost of service paid by United States shippers as calculated in (i) above. If, however, after making this adjustment, the actual capital cost in Zone 11 is greater than 135% of the filed capital cost, then the proportion of the cost of service paid by United States shippers will be a fraction (not exceeding 1) of the percentage of the cost of service calculated in (i) above where the numerator of the fraction is 135% of the filed capital cost and the denominator of the fraction is actual capital cost less the adjustments from (a) and (b) above. Notwithstanding the adjustments outlined above, in no case will the percentage of the actual cost of service borne by United States shippers be less than the greater of 66 2/3% or the proportion of the contracted volumes of Alaskan gas at the Alaska-Yukon border to the same volume of Alaskan gas plus the contracted volume of Northern Canadian gas.

* Amended by addendum set out following this Annex.

ANNEXE III*

Répartition des coûts dans la Zone 11

Les coûts de service dans la Zone 11 seront imputés aux expéditeurs américains sur la base suivante :

(i) On calculera, conformément au sous-alinéa (iii) ci-dessous, un pourcentage pour les Zones 1 à 9 globalement en divisant les coûts réels d'investissement par les coûts d'investissement déposés et en multipliant le résultat par 100. Si les coûts réels d'investissement sont égaux ou inférieurs à 135 % des coûts d'investissement déposés, les expéditeurs américains paieront 100 % des coûts de service dans la Zone 11. Si les coûts réels d'investissement dans les Zones 1 à 9 représentent entre 135 % et 145 % des coûts d'investissement déposés, le pourcentage des coûts défrayés par les expéditeurs américains sera ajusté entre 100 % et 66 2/3 %, sur la base d'une ligne droite, sauf que la portion des coûts de service défrayés par les expéditeurs américains ne sera en aucun cas inférieur à la proportion des volumes de gaz de l'Alaska à la frontière entre le Yukon et l'Alaska établie par contrat par rapport au même volume de gaz de l'Alaska ajouté au volume de gaz du Nord canadien établi par contrat. Si les coûts réels d'investissement sont égaux ou supérieurs à 145 % des coûts d'investissement déposés, la portion des coûts de service défrayés par les expéditeurs américains sera d'au moins 66 2/3 % ou la proportion calculée ci-dessus, le taux le plus élevé étant retenu.

(ii) On calculera le pourcentage du dépassement de devis pour le raccordement de Dawson à Whitehorse (Zone 11). Après avoir déterminé le montant du dépassement on en déduira :

a) pour les Zones 1, 7, 8 et 9 (transportant le gaz de l'Alaska seulement) le montant en dollars par lequel les coûts réels d'investissement sont inférieurs à 135 % des coûts d'investissement déposés mentionnés à l'alinéa (iii) ci-dessous;

b) dans chacune des Zones 2, 3, 4, 5 et 6, le montant en dollars par lequel les coûts réels d'investissement sont inférieurs à 135 % des coûts d'investissement déposés mentionnés à l'alinéa (iii) ci-dessous, multiplié par le rapport entre le volume prévu par contrat pour les États-Unis et le volume total prévu par contrat pour cette zone.

Si les coûts réels d'investissement dans la Zone 11 après ce rajustement, sont égaux ou inférieurs à 135 % des coûts d'investissement déposés, il n'y a pas lieu de rajuster le pourcentage des frais de service défrayés par les expéditeurs américains selon le calcul mentionné à l'alinéa (i) ci-dessus. Si, toutefois, après rajustement, les coûts réels d'investissement dans la Zone 11 sont supérieurs à 135 % des coûts d'investissement déposés, la part des coûts de services défrayés par les expéditeurs américains sera une fraction (n'excedant pas 1) du pourcentage des frais de services calculés en vertu de l'alinéa (i) ci-dessus où le numérateur est 135 % des coûts d'investissement déposés et le dénomina-

* Modifiée par l'addendum reproduit ci-dessous.

(iii) The "filed capital cost" to be applied to determine cost overruns for the purpose of cost allocation in (i) and (ii) above will be:

**Filed Capital Cost:
Estimates for the Pipeline
in Canada (millions of
Canadian dollars)**

The Pipeline in Canada (Zone 1-9)*

48" — 1 260 lb pressure pipeline —	3 873
or 48" — 1 680 lb pressure pipeline —	4 418
or 54" — 1 120 lb pressure pipeline —	4 234

teur est constitué des coûts réels d'investissement moins les ajustements prévus aux sous-alinéas a) et b) ci-dessus. Nonobstant les ajustements mentionnés ci-dessus, le pourcentage des coûts de service réels imputables aux expéditeurs américains ne sera en aucun cas inférieur à 66 2/3 % ou au rapport entre les volumes de gaz de l'Alaska à la frontière entre le Yukon et l'Alaska établis par contrat et le même volume de gaz de l'Alaska ajouté au volume de gaz du Nord canadien par contrat, le plus élevé de ces deux pourcentages étant retenu.

(iii) Les «coûts d'investissement déposés» qui serviront à calculer les dépassements de devis aux fins de la répartition des coûts prévue aux alinéas (i) et (ii) ci-dessus seront :

**Estimations des «coûts
d'investissement déposés»
pour le Pipe-line au Canada
(en millions de dollars
canadiens)**

Le Pipe-line au Canada* (Zones 1 à 9)

48 pouces — pression manométrique de 1 260 livres —	3 873
ou 48 pouces — pression manométrique de 1 680 livres —	4 418
ou 54 pouces — pression manométrique de 1 120 livres —	4 234

* These filed capital costs include and are based upon (a) a 1,260 psi, 48-inch line from the Alaska-Yukon border to the point of possible interconnection near Whitehorse; (b) a 1,260 psi, 48-inch, or 1,680 psi, 48-inch, or 1,120 psi, 54-inch line from the point of possible interconnection near Whitehorse to Caroline Junction; (c) a 42-inch line from Caroline Junction to the Canada-United States border near Monchy, Saskatchewan; and (d) a 36-inch line from Caroline Junction to the Canada-United States border near Kingsgate, British Columbia. These costs are escalated for a date of commencement of operations of January 1, 1983.

* Ces coûts d'investissement déposés comprennent et sont fondés sur a) une canalisation de 48 pouces (pression manométrique de 1 260 livres au pouce carré) à partir de la frontière entre l'Alaska et le Yukon jusqu'au point éventuel de raccordement à proximité de Whitehorse à Caroline Junction; b) une canalisation de 48 pouces (pression manométrique de 1 260 livres au pouce carré); ou de 48 pouces (pression manométrique de 1 680 livres au pouce carré); ou de 54 pouces (pression manométrique de 1 120 livres au pouce carré) à partir du point éventuel de raccordement à proximité de Whitehorse; c) une canalisation de 42 pouces de Caroline Junction à la frontière canado-américaine à proximité de Monchy en Saskatchewan; et d) une canalisation de 36 pouces de Caroline Junction à la frontière canado-américaine à proximité de Kingsgate en Colombie-Britannique. Ces coûts sont indexés en fonction de la date du début de l'exploitation du Pipe-line le 1^{er} janvier 1983.

Filed Capital Cost
Estimates for the Pipeline
in Canada (millions of
Canadian dollars)

Estimations des coûts
d'investissement déposés
pour le Pipe-line au Canada
(en millions de dollars
canadiens)

Zone 11 of the Dempster Line*

30" —	Section of Dempster line from Whitehorse to Dawson—	549
or 36" —	Section of Dempster line from Whitehorse to Dawson—	585
or 42" —	Section of Dempster line from Whitehorse to Dawson—	705

Zone 11 de la Ligne Dempster*

30 pouces —	Tronçon de la Ligne Dempster de Whitehorse à Dawson —	549
ou 36 pouces —	Tronçon de la Ligne Dempster de Whitehorse à Dawson —	585
ou 42 pouces —	Tronçon de la Ligne Dempster de Whitehorse à Dawson —	705

Details for Zones 1-9 are shown in the following table:

Filed Capital Costs for the Pipeline in Canada

Zone	48 1 260 psi \$ million (Canadian)	48" 1 680 psi \$ million (Canadian)	54" 1 120 psi \$ million (Canadian)
1	707	707	707
2	721	864	805
3	738	850	803
4	380	488	456
5	677	859	813
6	236	236	236
7	126	126	126
8	83	83	83
9**	205	205	205
Total Zones 1-9	3 873	4 418	4 234

* The costs are escalated to a date of commencement of operations of January 1 1985

** The last compression station in Zone 9 includes facilities to provide compression up to 1 440 psi

Les détails pour les Zones 1 à 9 figurent dans le tableau suivant :

Coûts d'investissement déposés pour le Pipe-line au Canada

Zone	48 pouces 1 260 livres au pouce carré (en millions de dollars canadiens)	48 pouces 1 680 livres au pouce carré (en millions de dollars canadiens)	54 pouces 1 120 livres au pouce carré (en millions de dollars canadiens)
1	707	707	707
2	721	864	805
3	738	850	803
4	380	488	456
5	677	859	813
6	236	236	236
7	126	126	126
8	83	83	83
9**	205	205	205
Total Zones 1 à 9	3 873	4 418	4 234

* Les coûts sont indexés à la date du début de l'exploitation, le 1^{er} janvier 1985

** La dernière station de compression dans la Zone 9 inclut des installations pour fournir une compression jusqu'à 1 440 livres au pouce carré

It is recognized that the above are estimates of capital costs. They do not include working capital, property taxes or the provision for road maintenance in the Yukon Territory (not to exceed \$30 million Canadian).

If at the time construction is authorized, both Governments have agreed to a starting date for the operation of the Pipeline different from January 1, 1983, then the capital cost estimates shall be adjusted for the difference in time using the GNP price deflator from January 1, 1983. Similarly at the time construction is authorized for the Dempster Line, if the starting date for the operation agreed to by the Canadian Government is different from January 1, 1985 then the capital cost estimate shall be adjusted for the difference in timing using the GNP price deflator from January 1, 1985. The diameter of the pipeline in Zone 11, for purposes of cost allocation, may be 30", 36", or 42", so long as the same diameter pipe is used from the Delta to Dawson (Zone 10).

The actual capital cost for purposes of this Annex shall be the booked cost as of the date "leave to open" is granted plus amounts still outstanding to be accrued on a basis to be approved by the National Energy Board. Actual capital costs shall exclude working capital, property taxes and direct charges for road maintenance of up to \$30 million Canadian in the Yukon as specifically provided herein.

For purposes of this Annex, actual capital costs will exclude the effect of increases in cost or delays caused by actions attributable to the U.S. shippers, related U.S. pipeline companies, Alaskan producers, the Prudhoe Bay deliverability or gas conditioning plant construction and the United States or State Governments. If the appropriate regulatory bodies of the two countries are unable to agree upon the amount of such cost to be excluded, the determination shall be made in accordance with the procedures set forth in Article IX of the Transit Pipeline Treaty.

The filed capital costs of facilities in Zones 7 and 8 will be included in calculations pursuant to this Annex only to the extent that such facilities are constructed to meet the requirements of U.S. shippers.

Il est reconnu que les coûts d'investissement mentionnés ci-dessus sont des estimations. Ils ne comprennent pas le capital d'exploitation, les impôts fonciers ou les fonds nécessaires à l'entretien des routes dans le territoire du Yukon (ne devant pas dépasser 30 millions de dollars canadiens).

Si au moment où la construction est autorisée, les deux Gouvernements ont convenu d'une date pour le début de l'exploitation du Pipe-line autre que le 1^{er} janvier 1983, les estimations des coûts d'investissement seront ajustées en fonction de cette nouvelle date au moyen de l'indice d'ajustement au PNB à compter du 1^{er} janvier 1983. De même, lorsque sera donnée l'autorisation de construire la Ligne Dempster, si la date de début d'exploitation acceptée par le Gouvernement du Canada n'est pas le 1^{er} janvier 1985, l'estimation des coûts d'investissement sera rajustée pour la même raison, au moyen de ce même indice à compter du 1^{er} janvier 1985. Aux fins de la répartition des coûts, le diamètre du Pipe-line dans la Zone 11 pourra être de 30, 36 ou 42 pouces, pourvu que le diamètre du Pipe-line entre le Delta et Dawson (Zone 10) soit le même.

Aux fins de la présente Annexe, les coûts réels d'investissement seront les coûts arrêtés à la date d'autorisation de mise en service, plus les montants en souffrance devant être calculés sur une base qu'approuvera l'Office national de l'énergie. Les coûts réels d'investissement ne comprendront pas le capital d'exploitation, ni les impôts fonciers, ni les charges directes au titre de l'entretien des routes dans le territoire du Yukon jusqu'à concurrence de 30 millions de dollars canadiens, en conformité des dispositions expresses dans les présentes.

Aux fins de la présente Annexe, on exclura du calcul des coûts réels d'investissement l'effet des hausses de prix ou des retards attribuables aux expéditeurs américains, aux sociétés de pipe-lines américaines qui leur sont liées, aux producteurs de l'Alaska, à la capacité de livraison ou à la construction d'une usine de traitement du gaz à Prudhoe Bay et aux Gouvernements des États-Unis ou de l'État. Si les organismes réglementaires appropriés des deux pays ne peuvent s'entendre sur le montant des coûts à exclure, le montant sera fixé en vertu des procédures énoncées à l'Article IX du Traité sur les pipe-lines de transit.

Les coûts d'investissement déposés des installations dans les Zones 7 et 8 seront inclus dans les calculs conformément à la présente Annexe seulement dans la mesure où de telles installations sont construites pour satisfaire les exigences des expéditeurs des États-Unis.

ADDENDUM

(Resulting from an exchange of notes dated June 6, 1978 between the Governments of Canada and the United States of America)

The filed capital costs specified in Annex III shall be deemed to include all normal pipeline costs incurred in constructing gas pipeline facilities in Canada, except those specifically excluded in the provisions of the Annex, and include such items as an allowance for funds used during construction. The filed capital

ADDENDUM

(Origine: échange de notes du 6 juin 1978 entre les gouvernements du Canada et des États-Unis d'Amérique)

Les coûts d'investissement déposés, précisés à l'annexe III sont réputés comprendre tous les frais pipeliniers normaux engagés dans la construction d'installations de pipe-lines de gaz au Canada, sauf ceux expressément exclus dans les dispositions de l'annexe, et comprennent des articles tels qu'une allocation

costs in Annex III shall also be deemed to include an allowance on and recovery of regulatory monitoring costs

The following additions shall be made to the tabulations contained in Part (iii) of Annex III:

(A) To the table captioned: "Filed Capital Costs" Estimates for the Pipeline in Canada (millions of Canadian dollars): The Pipeline in Canada (Zones 1-9)", insert as line four the following phrase:

"or 56" — 1,080 lb pressure pipeline — 4,325"

(B) Footnote 1, subpart (b) to the said table shall be modified to read in its entirety:

"(b) a 1,260 psi, 48-inch; or 1,680 psi, 48-inch; or, 1,120 psi 54-inch; or 1,080 psi 56-inch line from the point of possible interconnection near Whitehorse to Caroline Junction."

(C) To the table captioned: "Filed Capital Costs for the Pipeline in Canada", add an additional column as follows:

"56"
1,080 psi
\$ million
<u>(Canadian)</u>
707
817
874
427
850
236
126
83
205
<u>4,325"</u>

ANNEX IV

Direct Charges by Public Authorities

- *1 Crossing damages (roads, railroad crossings, etc.; this item is usually covered in the crossing permit)
- *2 Road damages caused by exceeding design load limits
- *3 Required bridge reinforcements caused by exceeding design load limits

* In the case of these items and all other road-related charges by public authorities total charges in the Yukon Territory shall not exceed \$30 million Canadian

au titre des fonds utilisés pendant la construction Les coûts d'investissement déposés de l'annexe III sont aussi réputés comprendre une allocation au titre des frais d'inspection réglementaire et de récupération

Les ajouts suivants sont apportés aux tableaux que renferme la Partie (iii) de l'annexe III :

A) Au tableau intitulé: «Estimations des coûts d'investissement déposés» pour le Pipe-line au Canada (en millions de dollars canadiens): Le Pipe-line au Canada (Zones 1 à 9), s'ajoute en quatrième ligne le passage suivant :

«ou 56 pouces — pression manométrique de 1 080 livres — 4 325»

B) La partie b) de la note infrapaginale 1 à laquelle renvoie ledit tableau se lit maintenant en entier comme suit :

b) une canalisation de 48 pouces (pression manométrique de 1 260 livres au pouce carré); ou de 48 pouces (pression manométrique de 1 680 livres au pouce carré); ou de 54 pouces (pression manométrique de 1 120 livres au pouce carré); ou de 56 pouces (pression manométrique de 1 080 livres au pouce carré) à partir du point éventuel de raccordement à proximité de Whitehorse jusqu'à Caroline Junction;

C) Au tableau intitulé: «Coûts d'investissement déposés pour le Pipe-line au Canada», s'ajoute la colonne suivante :

«56 pouces
1 080 livres au pouce carré
<u>(en millions de dollars canadiens)</u>
707
817
874
427
850
236
126
83
205
<u>4 325»</u>

ANNEXE IV

Charges directes imposées par les autorités publiques

- *1 Dommages causés par les croisements (routes, voies ferrées etc). Ce point figure habituellement dans le permis de croisement
- *2 Dommages aux routes causés par un dépassement des limites techniques de poids
- *3 Renforcement nécessaire de ponts entraîné par un dépassement des limites techniques de poids

* Pour ces points et toute autre charge imposée par les autorités publiques et liée à la voirie, la somme des charges totales dans le territoire du Yukon ne dépassera pas 30 millions de dollars canadiens

4	Airfield and airstrip repairs	4	Réparations aux terrains et pistes d'atterrissage
5	Drainage maintenance	5	Entretien du système de drainage
6	Erosion control	6	Contrôle de l'érosion
7	Borrow pit reclamation	7	Récupération de ballastières
8	Powerline damage	8	Dommmages causés aux lignes à haute tension
9	Legal liability for fire damage	9	Responsabilité juridique pour les dommages causés par le feu
10	Utility system repair (water sewer, etc.)	10	Réparations des services d'utilité publique (eau, égouts, etc.)
11	Camp waste disposal	11	Évacuation des déchets des campements
12	Camp site reclamation	12	Régénération du site des campements
13	Other items specified in environmental stipulations	13	Autres points régis par des dispositions réglementaires ayant trait à l'environnement
14	Costs of surveillance and related studies as required by regulatory bodies or applicable laws	14	Coût de la surveillance et des études connexes telles que requises par les organismes réglementaires ou les lois pertinentes

ANNEX V

Statement by the Government of the Province of Alberta

The Government of the Province of Alberta agrees in principle to the provisions contained in the Canada-United States Pipeline Treaty of January 28, 1977, and furthermore, Alberta is prepared to cooperate with the Federal Government to ensure that the provisions of the Canada-United States Treaty, with respect to non-interference of throughput and non-discriminatory treatment with respect to taxes, fees, or other monetary charges on either the Pipeline or throughput, are adhered to. Specific details of this undertaking will be the subject of a Federal-Provincial Agreement to be negotiated when the Canada-United States protocol or understanding has been finalized.

Statement by the Government of the Province of Saskatchewan

The Government of Saskatchewan is willing to cooperate with the Government of Canada to facilitate construction of the Alcan Pipeline through southwestern Saskatchewan and, to that end, the Government of Saskatchewan expresses its concurrence with the principles elaborated in the Transit Pipeline Agreement signed between Canada and the United States on January 28, 1977. In so doing, it intends not to take any discriminatory action towards such pipelines in respect of throughput, reporting requirements, and environmental protection, pipeline safety, taxes, fees or monetary charges that it would not take against any similar pipeline passing through its jurisdiction. Further details relating to Canada-Saskatchewan relations regarding the Alcan Pipeline will be the subject of Federal-Provincial agreements to be negotiated after a Canada-United States understanding has been finalized.

ANNEXE V

Déclaration du Gouvernement de la province de l'Alberta

Le Gouvernement de la province de l'Alberta souscrit en principe aux dispositions contenues dans le Traité canado-américain sur les pipe-lines signé le 28 janvier 1977 et est disposé de plus à coopérer avec le Gouvernement fédéral pour assurer le respect des dispositions dudit Traité en ce qui a trait à la non-interférence avec la continuité du débit et au traitement non discriminatoire en matière de taxes, de droits ou d'autres charges monétaires s'appliquant au Pipe-line ou au débit. Les modalités de cet engagement feront l'objet d'un accord fédéral-provincial qui sera négocié après la conclusion du protocole ou de l'entente entre le Canada et les États-Unis.

Déclaration du Gouvernement de la province de la Saskatchewan

Le Gouvernement de la province de la Saskatchewan est disposé à coopérer avec le Gouvernement du Canada afin de faciliter la construction du Pipe-line Alcan sur la partie sud-ouest de son territoire et, à cette fin, le Gouvernement de la Saskatchewan souscrit aux principes énoncés dans l'Accord sur les pipe-lines de transit signé par le Canada et les États-Unis le 28 janvier 1977. Ce faisant, le Gouvernement de la Saskatchewan entend ne prendre à l'égard dudit Pipe-line aucune mesure discriminatoire concernant le débit, les exigences en matière de rapport, la protection de l'environnement, la sécurité du Pipe-line, les taxes, droits ou autres charges monétaires qu'il ne prendrait à l'égard de tout autre pipe-line semblable traversant son territoire. Les autres modalités régissant les relations entre le Canada et la Saskatchewan relatives au Pipe-line Alcan feront l'objet d'accords fédéraux-provinciaux qui seront négociés après la conclusion d'une entente entre le Canada et les États-Unis.

Statement by the Government of the Province of British Columbia

The Government of the Province of British Columbia agrees in principle to the provisions contained in the Canada-United States Pipeline Treaty of January 28, 1977, and furthermore British Columbia is prepared to cooperate with the Federal Government to ensure that the provisions of the Canada-United States Treaty, with respect to non-interference of throughput and non-discriminatory treatment with respect to taxes, fees or other monetary charges on either the Pipeline or throughput, are adhered to. Specific details of this undertaking will be the subject of a Federal-Provincial Agreement to be negotiated as early a date as possible. Such agreement should guarantee that British Columbia's position expressed in its telex of August 31 is protected.

1977-78, c 20, Sch I

SCHEDULE II

(Section 21)

COMPANIES

Foothills Pipe Lines (South Yukon) Ltd
Foothills Pipe Lines (North B C) Ltd
Foothills Pipe Lines (South B C) Ltd
Foothills Pipe Lines (Alta) Ltd
Foothills Pipe Lines (Sask) Ltd

1977-78, c 20, Sch II

SCHEDULE III

(Sections 21 and 22)

TERMS AND CONDITIONS

Ownership of Pipeline

1 The pipeline shall be the property of and shall be operated by the company

Design and Construction

2 Subject to condition 18, the company shall cause the pipeline to be designed, manufactured, located, constructed, installed and operated in accordance with those specifications, drawings and other information or data set forth in the applications of Foothills Pipe Lines (Yukon) Ltd, the Alberta Gas Trunk Line (Canada) Limited, Westcoast Transmission Company Limited, and Alberta Natural Gas Company Limited and in the submission of The Alberta Gas Trunk Line Company Limited to the Board, as amended during the Hearing and in the undertakings given by those companies during the Hearing or as ordered, directed or approved by the designated officer and no design, specifica-

Déclaration du Gouvernement de la province de la Colombie-Britannique

Le Gouvernement de la province de la Colombie-Britannique souscrit en principe aux dispositions contenues dans le Traité canado-américain sur les pipe-lines signé le 28 janvier 1977 et est disposé de plus à coopérer avec le Gouvernement fédéral pour assurer le respect des dispositions dudit Traité en ce qui a trait à la non-interférence avec la continuité du débit et au traitement non discriminatoire en matière de taxes, de droits ou d'autres charges monétaires s'appliquant au Pipe-line ou au débit. Les modalités de cet engagement feront l'objet d'un accord fédéral-provincial qui sera négocié dans les meilleurs délais. Un tel accord devrait garantir la protection de la position exprimée par la Colombie-Britannique dans son télégramme du 31 août.

1977-78, ch. 20, ann I

ANNEXE II

(article 21)

COMPAGNIES

*Foothills Pipe Lines (South Yukon) Ltd
Foothills Pipe Lines (North B C) Ltd
Foothills Pipe Lines (South B C) Ltd
Foothills Pipe Lines (Alta) Ltd
Foothills Pipe Lines (Sask) Ltd*

1977-78, ch. 20, ann. II

ANNEXE III

(articles 21 et 22)

MODALITÉS

Propriété du pipe-line

1 Le pipe-line appartient à la compagnie et est exploité par cette dernière

Conception et construction

2 Sous réserve de la modalité n° 18, la compagnie doit s'assurer que le pipe-line est conçu, fabriqué, situé, mis en place, installé et exploité conformément aux spécifications, dessins et autres renseignements ou données, portés à la demande faite à l'Office par la *Foothills Pipe Lines (Yukon) Ltd*, l'*Alberta Gas Trunk Line (Canada) Limited*, la *Westcoast Transmission Company Limited* et l'*Alberta Natural Gas Company Limited* et au mémoire qui lui a été présenté par l'*Alberta Gas Trunk Line Company Limited*, si qu'ils ont été modifiés au cours de l'Audience et souscrits à titre d'engagement au cours de l'Audience, ou tels qu'ils ont été ordonnés, prescrits ou approuvés par le fonctionnaire dési-

tion location drawing or other information or data shall be varied except as ordered, directed or approved by the designated officer

3 Without limiting the generality of condition 2 the company shall submit to the designated officer

- (a) information satisfactory to him in support of final detailed design, including the results of field tests and experiments and analyses thereof;
- (b) the final detailed design of each section or part of the pipeline for his approval;
- (c) before construction commences detailed construction specifications and procedures, as well as inspection procedures satisfactory to the designated officer; and
- (d) a schedule for project control, using a scheduling system acceptable to the Agency which schedule shall
 - (i) govern the company's activities that can reasonably be anticipated in connection with the project,
 - (ii) include schedules for regulatory reviews and approvals and
 - (iii) be updated at thirty day intervals or as otherwise requested by the Agency

4 The company shall not commence construction of a section or part of the pipeline until the designated officer has given the approval of the final design of that section or part as required by paragraph (b) of condition 3

5 The company shall file with the designated officer, forthwith after execution, every contract between the company and the principal construction contractors and every substantive amendment thereto

6 Every contract referred to in condition 5 shall contain a clause requiring the construction contractor to file with the company, forthwith after execution of that contract,

- (a) a copy of every collective agreement between the construction contractor and a union that is in effect as of the day the contract referred to in condition 5 is entered into;
- (b) a copy of every amendment to a collective agreement referred to in paragraph (a);
- (c) a copy of every collective agreement and amendment thereto that is entered into subsequent to a collective agreement referred to in paragraph (a) during the term of the contract referred to in condition 5,

and the company shall file a copy of every such collective agreement and amendment thereto with the designated officer forthwith after the copy is filed with the company

gné et il ne sera fait aucune modification aux conceptions, spécifications, emplacements, dessins, renseignements ou données, si ce n'est dans la mesure où le fonctionnaire désigné l'ordonne, le prescrit ou l'approuve

3 Sans que soit limitée la portée générale de la modalité n° 2, la compagnie présente au fonctionnaire désigné :

- a) les renseignements qu'il estime satisfaisants pour étayer la conception finale et détaillée, y compris la teneur des essais sur le terrain et l'analyse de leurs résultats;
- b) la conception finale et détaillée de chaque section ou partie du pipe-line pour son approbation;
- c) avant le début des travaux, les spécifications et modalités détaillées de construction et les modalités d'inspection qui satisfont le fonctionnaire désigné;
- d) un plan d'exécution pour le contrôle du projet, établi selon une méthode acceptable pour l'Administration et qui doit :
 - (i) régir toutes les activités de la compagnie relatives au projet que l'on peut raisonnablement prévoir,
 - (ii) comprendre des plans concernant les examens et approbations réglementaires,
 - (iii) être mis à jour tous les trente jours ou autrement comme le demande l'Administration.

4 La compagnie ne peut entreprendre la construction d'une section ou d'une partie du pipe-line avant d'avoir obtenu à leur égard l'approbation visée à l'alinéa b) de la modalité n° 3

5 Dès leur signature la compagnie dépose auprès du fonctionnaire désigné tout contrat passé avec ses principaux entrepreneurs en construction et toute modification de fond qui y est apportée

6 Chaque contrat visé à la modalité n° 5 doit contenir une clause portant que l'entrepreneur en construction doit déposer auprès de la compagnie, dès la signature de ce contrat :

- a) une copie des conventions collectives auxquelles sont parties l'entrepreneur et un syndicat, en vigueur le jour de la signature du contrat visé à la modalité n° 5;
- b) une copie des modifications apportées aux conventions collectives visées à l'alinéa a);
- c) une copie des conventions collectives postérieures à celles visées à l'alinéa a), ainsi que leurs modifications, pendant la durée du contrat visé à la modalité n° 5.

La compagnie doit déposer une copie de ces conventions et de leurs modifications au bureau du fonctionnaire désigné immédiatement après le dépôt de la copie auprès de la compagnie.

Social Economic and Environmental Matters

7 The company shall, in respect of social and economic matters and environmental, fisheries and agricultural concerns comply with the undertakings given by Foothills Pipe Lines (Yukon) Ltd, The Alberta Gas Trunk Line (Canada) Limited, Westcoast Transmission Company Limited, and Alberta Natural Gas Company Ltd and in the submission of The Alberta Gas Trunk Line Company Limited to the Board, as amended during the Hearing or such orders or directions as may be made or given by the designated officer

8 Prior to the approval of the final detailed design of each section or part of the pipeline, the company shall submit to the designated officer

(a) the results of such further studies in respect of social and economic matters, environmental, fisheries and agricultural concerns as may be ordered or directed by the designated officer; and

(b) the recommendations of its environmental consultants for the protection of fisheries, farm lands and the environment

Manpower and Procurement

9 With respect to the use of Canadian labour,

(a) the company shall submit to the Minister, on or before a date to be fixed by him, a detailed manpower plan designed to ensure the maximum possible use of Canadian labour in the planning, construction and operation of the pipeline;

(b) subject to any amendment approved by the Minister, the manpower plan referred to in paragraph (a), when approved by the Minister constitutes the company's manpower plan, and the company shall comply therewith

10 With respect to Canadian participation and content,

(a) the company shall design a program for the procurement of all goods and services for the pipeline that ensures that

(i) Canadians have a fair and competitive opportunity to participate in the supply of goods and services for the pipeline.

(ii) the level of Canadian content is maximized so far as practicable, with respect to the origin of products, services and their constituent components,

(iii) maximum advantage is taken of opportunities provided by the pipeline to establish and expand suppliers in Canada that can make a long term contribution to the Canadian industrial base, and

(iv) maximum advantage is taken of opportunities provided by the pipeline to foster research, development and technological activities in Canada;

Questions sociales économiques et écologiques

7. En ce qui a trait aux questions sociales, écologiques et économiques, et à celles qui portent sur les pêcheries et l'agriculture, la compagnie est tenue de se conformer aux engagements pris par la *Foothills Pipe Lines (Yukon) Ltd*, l'*Alberta Gas Trunk Line (Canada) Limited*, la *Westcoast Transmission Company Limited* et l'*Alberta Natural Gas Company Ltd* et à ceux contenus dans le mémoire que l'*Alberta Gas Trunk Line Company Limited* a présenté à l'Office, sous réserve des modifications apportées à l'Audience et des ordres émanant du fonctionnaire désigné

8 Avant l'approbation du projet final de chaque section ou partie du pipe-line, la compagnie soumet au fonctionnaire désigné :

a) le résultat des autres études que peut exiger ou demander le fonctionnaire désigné relativement aux questions sociales, écologiques et économiques et à celles qui ont trait aux pêcheries et à l'agriculture;

b) les recommandations de ses experts-conseils pour la protection des pêcheries des terres agricoles et de l'environnement

Main-d'œuvre et fourniture de biens et services

9. En ce qui a trait à l'emploi de main-d'œuvre canadienne :

a) la compagnie soumet à l'approbation du ministre, à la date qu'il fixe ou avant, un plan de recrutement détaillé qui visera à favoriser au maximum l'utilisation de la main-d'œuvre canadienne pour la planification, la construction et l'exploitation du pipe-line;

b) une fois approuvé, mais sous réserve de toute modification qui pourrait y être apportée avec l'assentiment du ministre, le plan visé à l'alinéa a) lie la compagnie

10 En ce qui a trait à la participation et au contenu canadiens :

a) la compagnie établira son programme d'achat de tous les biens et services nécessaires au projet de sorte que :

(i) les Canadiens puissent avoir l'occasion de participer équitablement à la fourniture des biens et services destinés au pipe-line,

(ii) le contenu canadien soit optimisé, dans la mesure du possible, quant à l'origine des produits, des services et de leurs parties composantes,

(iii) les possibilités qu'offre le pipe-line de créer ou de développer, au Canada, des entreprises durables de fourniture de biens et services, soient exploitées au maximum,

(iv) les occasions qu'offre le pipe-line de promouvoir la recherche et le développement, ainsi que les activités technologiques au Canada, soient exploitées au maximum;

(b) the company shall submit to the Minister, in such detail as may be required by the Minister and on or before a date to be fixed by him, a report setting out

- (i) the program referred to in paragraph (a), and
- (ii) the procedures that the company proposes to follow in order to implement that program including such procedures as the Minister may require respecting prior approval by the designated officer in respect of proposed contracts or classes of contracts specified by the Minister and including procedures to ensure to the Minister's satisfaction that proposed contracts for the supply of goods or services from outside Canada will not involve unfair trade practices;

(c) subject to any amendment approved by the Minister, the report referred to in paragraph (b), when approved by the Minister constitutes the company's procurement policy and procedures and the company shall comply therewith; and

(d) prior to the submission and approval of the report referred to in paragraph (b), the company shall make no major purchases without prior approval of the Minister

11 The company shall provide the Minister and the Board prior to the execution thereof, with copies of every proposed contract for the procurement of goods or services that require the prior approval of the designated officer under the procedures referred to in condition 10(b)(ii)

Financing

12 (1) The company shall, before the commencement of construction of the pipeline,

(a) file with the Minister and the Board evidence that the company has been incorporated in Canada and is not a non-eligible person within the meaning of the *Foreign Investment Review Act*, chapter 46 of the Statutes of Canada, 1973-74, as that expression was defined in that Act on April 13, 1978;

(b) establish to the satisfaction of the Minister and the Board that financing has been obtained for that portion of the pipeline hereinafter referred to as the prebuilt sections, that will be used for the transmission of Canadian natural gas to the United States prior to the completion of the pipeline;

(c) establish to the satisfaction of the Minister and the Board that financing of that portion of the pipeline other than the prebuilt sections, hereinafter referred to as the northern section, can be obtained to enable the pipeline to be completed before the end of 1985 and that protection can be provided against risk of noncompletion of the pipeline and interruption of construction on a basis acceptable to the Minister and the Board; and

(d) file with the Minister and the Board documents relating to the financing obtained for the prebuilt sections and

b) la compagnie soumet à l'approbation du ministre, de la façon détaillée et à la date qu'il fixe ou avant, un rapport exposant :

- (i) le programme mentionné à l'alinéa a),
- (ii) les modalités d'application de ce programme, notamment les procédures que le ministre exige relativement à l'approbation préalable par le fonctionnaire désigné des contrats projetés ou des catégories de contrats que spécifie le ministre et notamment les procédures visant à assurer à la satisfaction de ce dernier que les contrats projetés pour la fourniture de biens et services en provenance de l'étranger ne donneront pas lieu à des pratiques commerciales déloyales;

c) sous réserve de toute modification qui pourrait y être apportée avec l'assentiment du ministre, le rapport visé à l'alinéa b) constitue, une fois approuvé par le ministre la politique d'achat de la compagnie et ses modalités d'application, et celle-ci doit s'y conformer;

d) avant le dépôt et l'approbation du rapport visé à l'alinéa b), la compagnie ne peut faire aucun achat important qui n'ait été au préalable autorisé par le ministre

11 La compagnie fournit au ministre et à l'Office, avant leur signature, la copie des contrats projetés de fourniture de biens et services requérant l'approbation préalable du fonctionnaire désigné en vertu des procédures visées à la modalité 10b)(ii)

Financement

12 (1) La compagnie doit, avant d'entreprendre la construction du pipe-line :

a) déposer auprès du ministre et de l'Office une preuve attestant qu'elle a été constituée au Canada et qu'elle ne constitue pas une personne non admissible au sens de la *Loi sur l'examen de l'investissement étranger*, chapitre 46 des Statuts du Canada de 1973-74, en date du 13 avril 1978;

b) prouver, à la satisfaction du ministre et de l'Office, qu'elle s'est assuré le financement de la partie du pipe-line désignée ci-après sous le nom de «trçons construits à l'avance», qui servira à transporter du gaz naturel canadien vers les États-Unis avant l'achèvement du pipe-line;

c) établir, à la satisfaction du ministre et de l'Office, qu'elle peut obtenir le financement des parties du pipe-line autres que les tronçons pré-construits, désignées ci-après sous le nom de «tronçon nord», de manière à pouvoir achever le pipe-line avant la fin de 1985, et qu'elle peut offrir une garantie jugée acceptable par le ministre et l'Office contre le risque d'un non-achèvement du pipe-line et d'une interruption de la construction;

d) déposer auprès du ministre et de l'Office des documents concernant le financement obtenu pour les tronçons

such documents shall include all relevant contracts and instruments

(2) The company shall before commencing construction of that portion of the pipeline other than the prebuilt sections,

(a) establish to the satisfaction of the Minister and the Board that financing has been obtained for the northern section and such financing includes protection against risk of noncompletion of the pipeline and interruption of construction on a basis acceptable to the Minister and the Board;

(b) file with the Minister and the Board all documents relating to the financing of the pipeline not already filed pursuant to paragraph 12(1)(d); and

(c) provide evidence to the Minister and the Board that debt instruments issued in connection with the financing of the pipeline do not contain a provision requiring the consent of the holders of those debt instruments to the financing of the construction of the Dempster Line referred to in the Agreement or any other provision, apart from normal trust indenture provisions generally applicable in the pipeline industry, that would prohibit, limit or inhibit the financing of the construction of the Dempster Line

13 The company shall file with the Minister and the Board forthwith after execution contracts between producers and shippers and between shippers and the company and substantive amendments to those contracts

14 The company shall provide the Minister and the Board, in a form satisfactory to the Minister and the Board and on a quarterly basis, information on the

(a) costs incurred and projected in respect of the pipeline;

(b) financing of the pipeline; and

(c) progress of the planning and construction of, and procurement for, the pipeline

15 The Minister and the Board shall have access to all financial records of the company for audit purposes

16 The company shall

(a) submit to the Minister and the Board detailed costs estimates based on the final design of each section or part of the pipeline in a form satisfactory to the Board; and

(b) provide, before operation commences, an operations and safety manual satisfactory to the Board

General

17 Prior to commencing the construction of any section or part of the pipeline, the company shall provide the

construits à l'avance, ces documents devant comprendre tous les contrats et titres pertinents

(2) La compagnie doit, avant d'entreprendre la construction des parties du pipe-line autres que les tronçons construits à l'avance :

a) établir, à la satisfaction du ministre et de l'Office qu'elle s'est assuré le financement du tronçon nord et que ce financement comprend une protection jugée acceptable par le ministre et l'Office contre le risque d'un non-achèvement du pipe-line et d'une interruption de la construction;

b) déposer auprès du ministre et de l'Office tous les documents se rapportant au financement du pipe-line qui n'ont pas déjà été déposés en vertu de l'alinéa (1)d);

c) fournir une preuve attestant que les titres de dette émis dans le cadre du financement du pipe-line ne renferment aucune clause selon laquelle la construction de la Ligne Dempster dont il est question dans l'Accord nécessite le consentement des détenteurs de titres de dette, ni aucune autre disposition, à part les clauses normales d'acte fiduciaire généralement applicables à l'industrie des pipe-lines, qui empêcherait, limiterait ou interdirait le financement de la construction de la Ligne Dempster

13 La compagnie dépose auprès du ministre et de l'Office dès leur passation, les contrats liant soit les producteurs et les expéditeurs, soit les expéditeurs et la compagnie et les modifications de fond qui y sont apportées

14 La compagnie doit fournir au ministre et à l'Office, en la forme qu'ils jugent satisfaisante et sur une base trimestrielle, des renseignements sur :

a) les frais engagés et ceux qui sont envisagés relativement au pipe-line;

b) le financement du pipe-line;

c) l'avancement de la planification et des travaux de construction du pipe-line, et la fourniture des biens et services relativement au pipe-line

15 Le ministre et l'Office peuvent consulter tous les dossiers financiers de la compagnie aux fins de vérification

16 La compagnie doit :

a) soumettre au ministre et à l'Office, en la forme que ce dernier approuve, l'estimation détaillée des coûts fondée sur la conception finale de chaque section ou partie du pipe-line;

b) fournir, avant le début des travaux, un manuel d'exploitation et de sécurité qui satisfait l'Office

Dispositions générales

17 Avant le début de la construction de toute section ou partie du pipe-line, la compagnie doit prouver à la satisfac-

Minister and the Board with such proof as the Minister and the Board consider appropriate that the company has obtained all necessary regulatory approvals

18. The company shall cause the pipe for the pipeline to be of such specifications including diameter, wall thickness and maximum allowable operation pressures as may be approved by the Minister and the Board

19. When the company ascertains the lands of a landowner that may be required for the purposes of a section or part of the pipeline, the company shall serve a notice in a manner and in a form to be determined by the designated officer on the landowner, which notice shall set out the location of the offices of the Agency and the right of the landowner within thirty days of being served to make representations to the Agency respecting the final route of the pipeline for its consideration prior to its approval of the final detailed route

Remote Communities

20. The company shall in implementing paragraph 3(b) of the Agreement, construct laterals from the pipeline and make arrangements for the supply of gas to remote communities in the Yukon Territory and the provinces through which the pipeline passes where the communities can be economically served and have applied to the appropriate authority for such service and that authority has approved such application, except that in the Yukon Territory, Foothills Pipe Lines (South Yukon) Ltd shall make a financial contribution in respect of providing gas

(a) to the communities of Beaver Creek, Burwash Landing, Destruction Bay, Haines Junction, Whitehorse, Teslin, Upper Liard and Watson Lake in an amount not to exceed a total cost of 2.5 million dollars; and

(b) to other remote communities an amount not to exceed the lesser of

- (i) the product of 2,500 dollars multiplied by the number of customers in the communities and
- (ii) a total cost of 2.5 million dollars

Dempster Line

21. When the Dempster Line referred to in the Agreement is to be connected to the pipeline or when additional pipeline capacity is needed to meet the contractual requirements of United States or Canadian shippers, the company shall expand the capacity of the pipeline, subject to the regulatory requirements of the Board, and to any agreement that may be entered into between Her Majesty in right of Canada and the company, in an efficient manner to permit the connection of the Dempster Line or to meet those contractual requirements, as the case may be

1977-78, c 20, Sch III; SI/80-132; SI/83-44

tion du ministre et de l'Office qu'elle a obtenu toutes les autorisations réglementaires nécessaires

18. La compagnie doit s'assurer que les canalisations du pipe-line répondent aux spécifications approuvées par le ministre et l'Office, notamment en ce qui concerne les diamètres, l'épaisseur des parois et les pressions opératoires maximales admissibles

19. Lorsque la compagnie détermine quelles terres d'un propriétaire peuvent être requises aux fins d'une section ou partie du pipe-line, elle doit signifier au propriétaire, de la façon et en la forme établies par le fonctionnaire désigné, un avis indiquant le lieu où se trouvent les bureaux de l'Administration et le droit qu'a le propriétaire de présenter à l'Administration, dans les trente jours de la signification, des observations au sujet du tracé définitif du pipe-line pour qu'elle les examine avant d'approuver le tracé définitif détaillé

Agglomérations éloignées

20. Avant de mettre en exécution l'alinéa 3b) de l'Accord, la compagnie doit, sans qu'il ne lui en coûte rien, construire des canalisations latérales du pipe-line et prendre les dispositions nécessaires pour fournir du gaz aux collectivités éloignées du territoire du Yukon et des provinces que traverse le pipe-line, lorsqu'elles peuvent être desservies économiquement et que la demande qu'elles ont fait en ce sens a été approuvée par les autorités compétentes. Toutefois, au territoire du Yukon, la Foothills Pipe Lines (South Yukon) Ltd. doit contribuer financièrement à approvisionner en gaz :

a) les collectivités de Beaver Creek, Burwash Landing, Destruction Bay, Haines Junction, Whitehorse, Teslin, Upper Liard et Watson Lake jusqu'à concurrence de 2,5 millions de dollars;

b) les autres collectivités éloignées, jusqu'à concurrence du moins élevé des montants suivants :

- (i) le produit de 2 500 dollars par le nombre de clients des collectivités,
- (ii) 2,5 millions de dollars au total

La Ligne Dempster

21. Au moment de raccorder au pipe-line la Ligne Dempster visée à l'Accord, ou lorsqu'il faudra augmenter la capacité du pipe-line pour répondre aux besoins contractuels des expéditeurs des États-Unis ou du Canada, la compagnie augmentera efficacement la capacité, sous réserve des exigences réglementaires de l'Office, et de toute convention qu'elle peut conclure avec Sa Majesté du chef du Canada, de manière à réaliser le raccordement ou à répondre aux besoins contractuels, selon le cas.

1977-78, cb 20, ann III; TR/80-132; TR/83-44

HB

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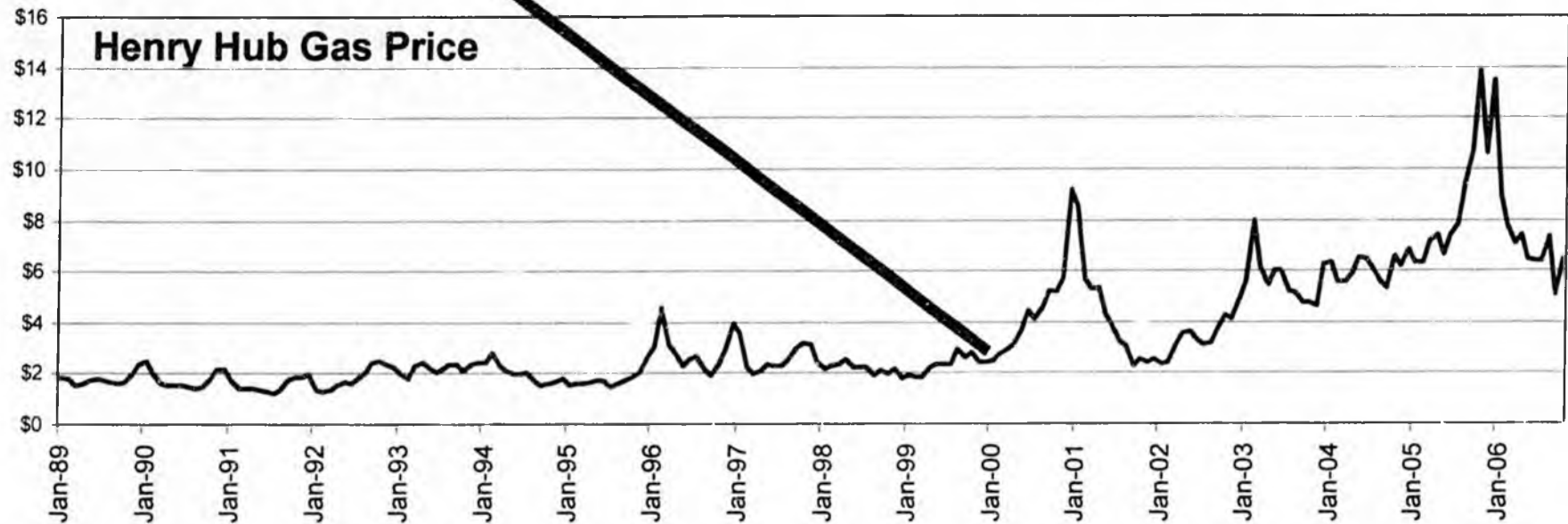
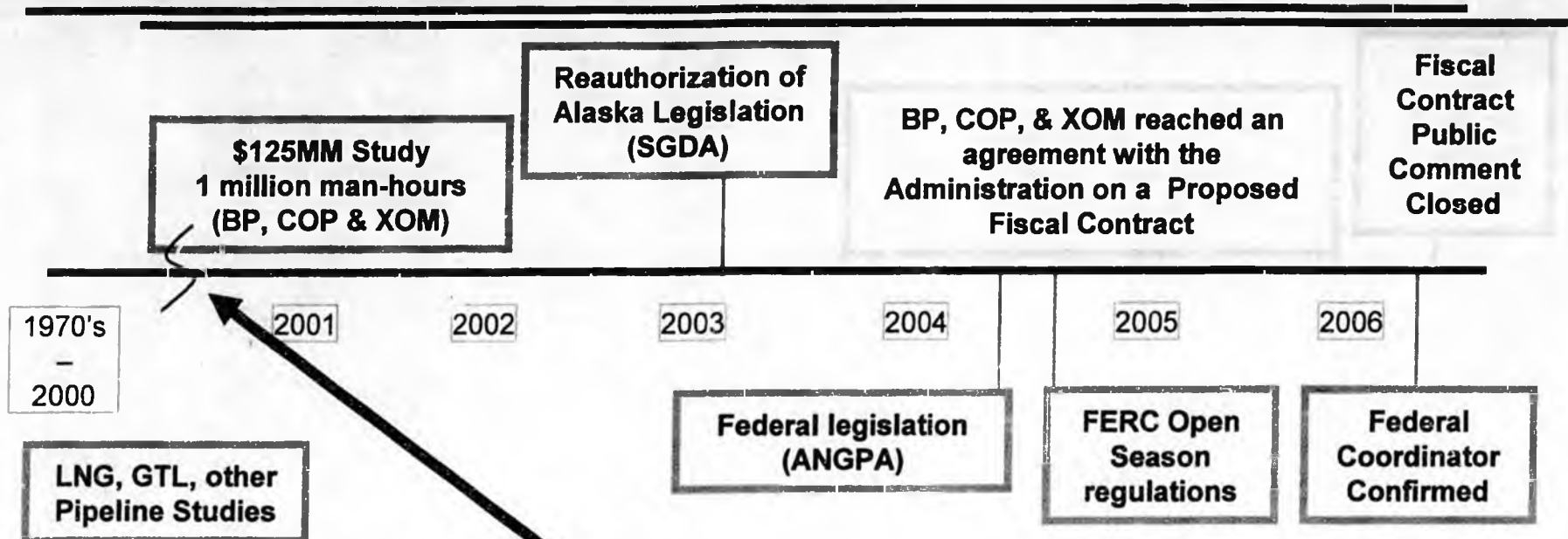
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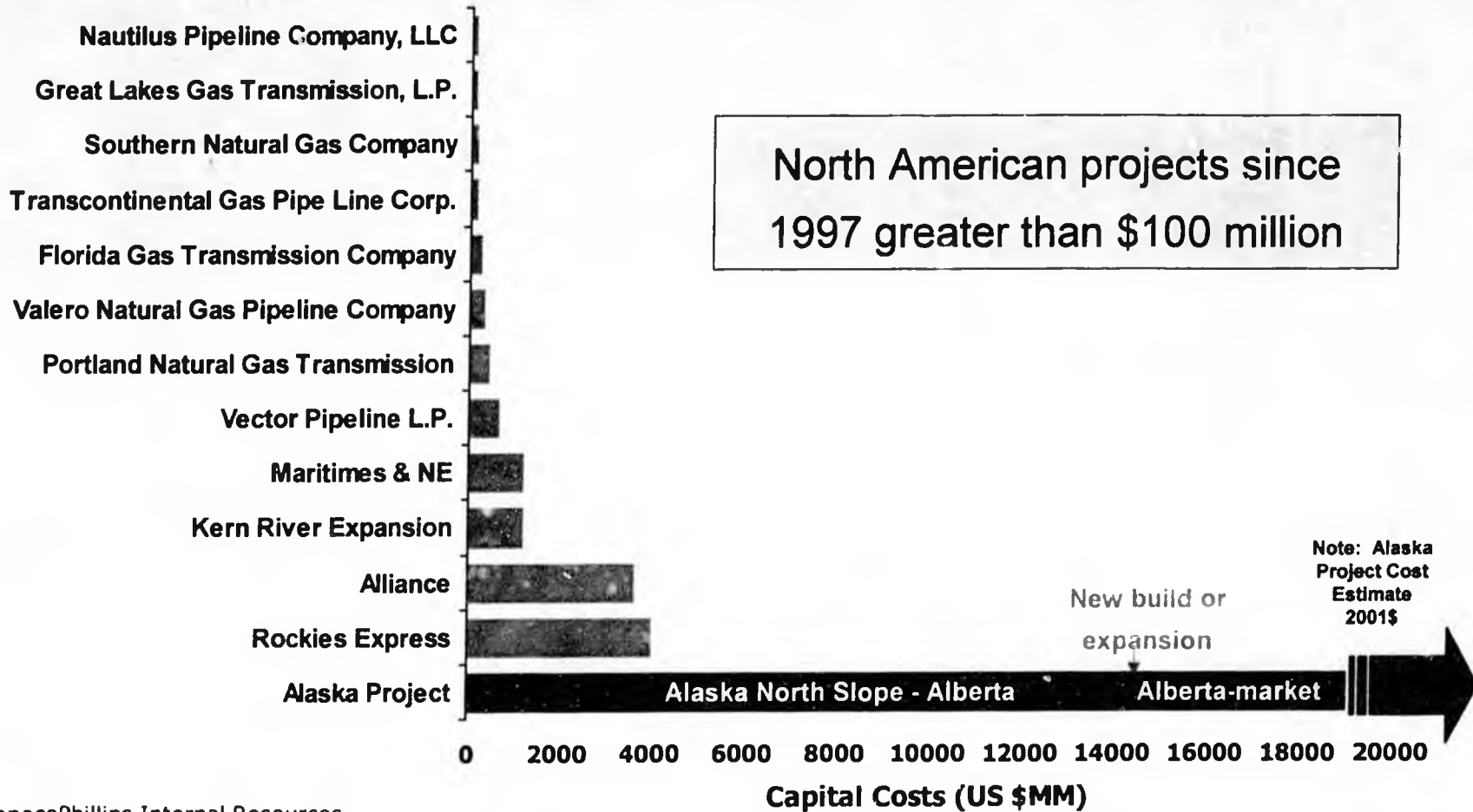
House Resources Committee
April 16, 2007

Wendy D. King
ANS Gas Development Team

Alaska Gas Pipeline Project



What makes the Alaska Project Different?



North American projects since 1997 greater than \$100 million

Alaska Gas Pipeline will be much larger / more difficult than other US/CAN pipelines. Size brings additional risk.

Source: ConocoPhillips Internal Resources

Alaska Gas Pipeline Project Risks

- **Cost**

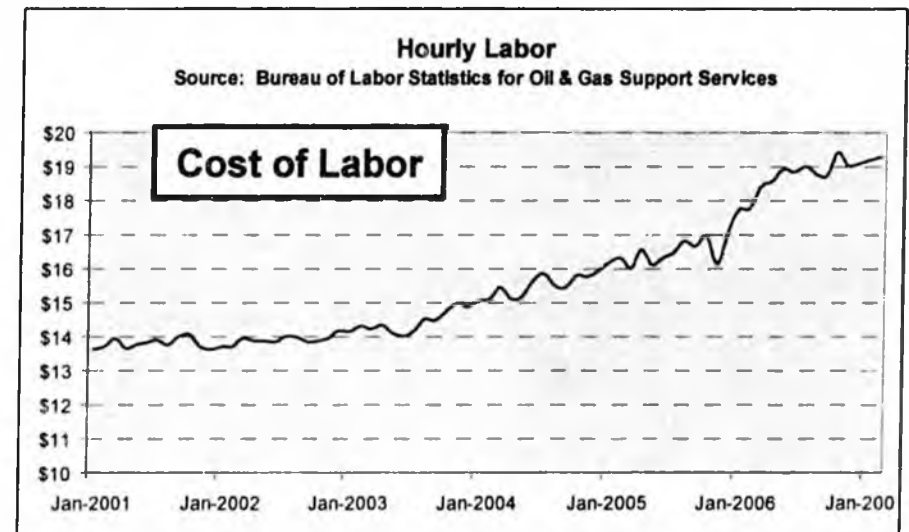
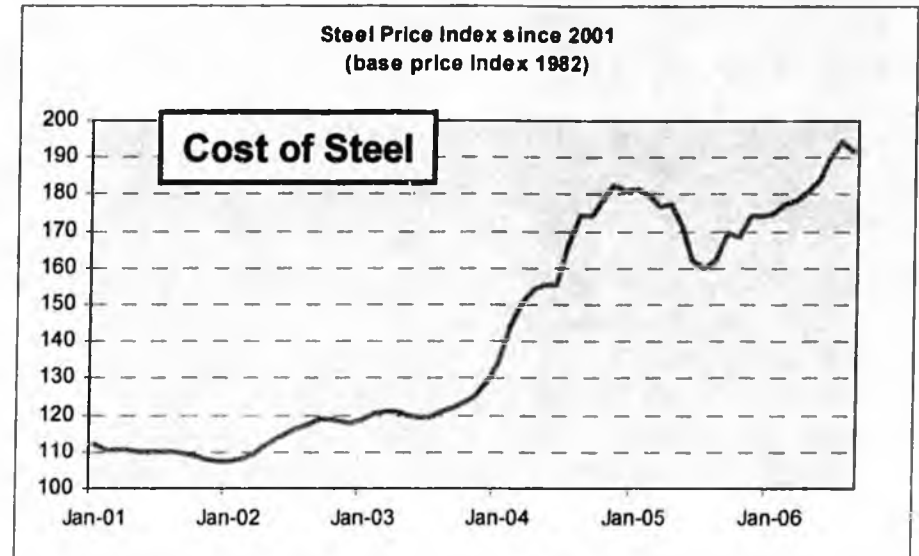
- Since 2001, steel prices have nearly doubled
- Labor costs continue to rise
- Previous \$20 billion cost estimate would be significantly higher today

- **Prices**

- Natural Gas Supply & Demand
- Volatility

- **Other Risks and Uncertainties**

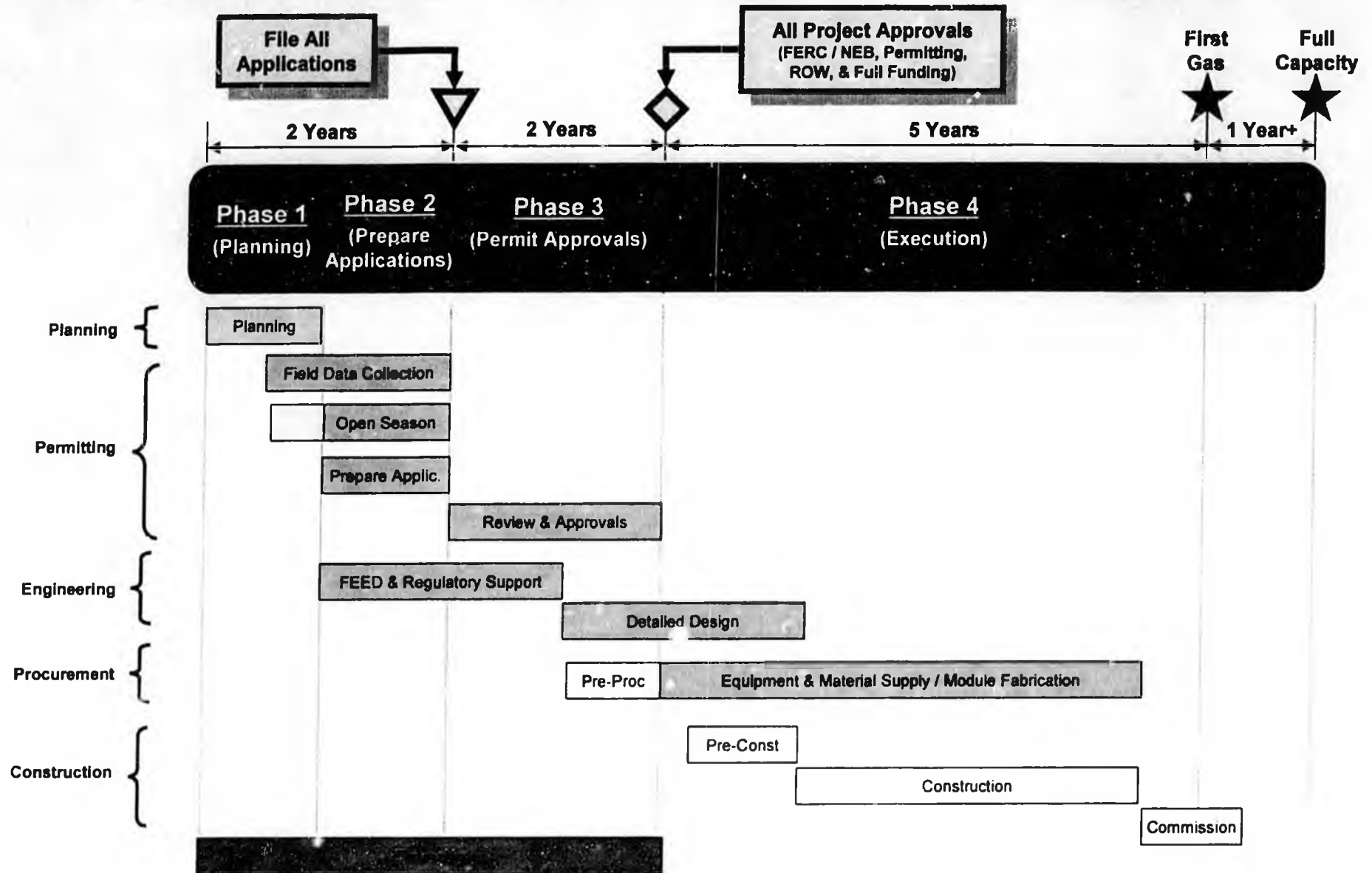
- World-scale logistics
- World-scale material procurement
- Labor availability
- Weather
- Reserves and Deliverability



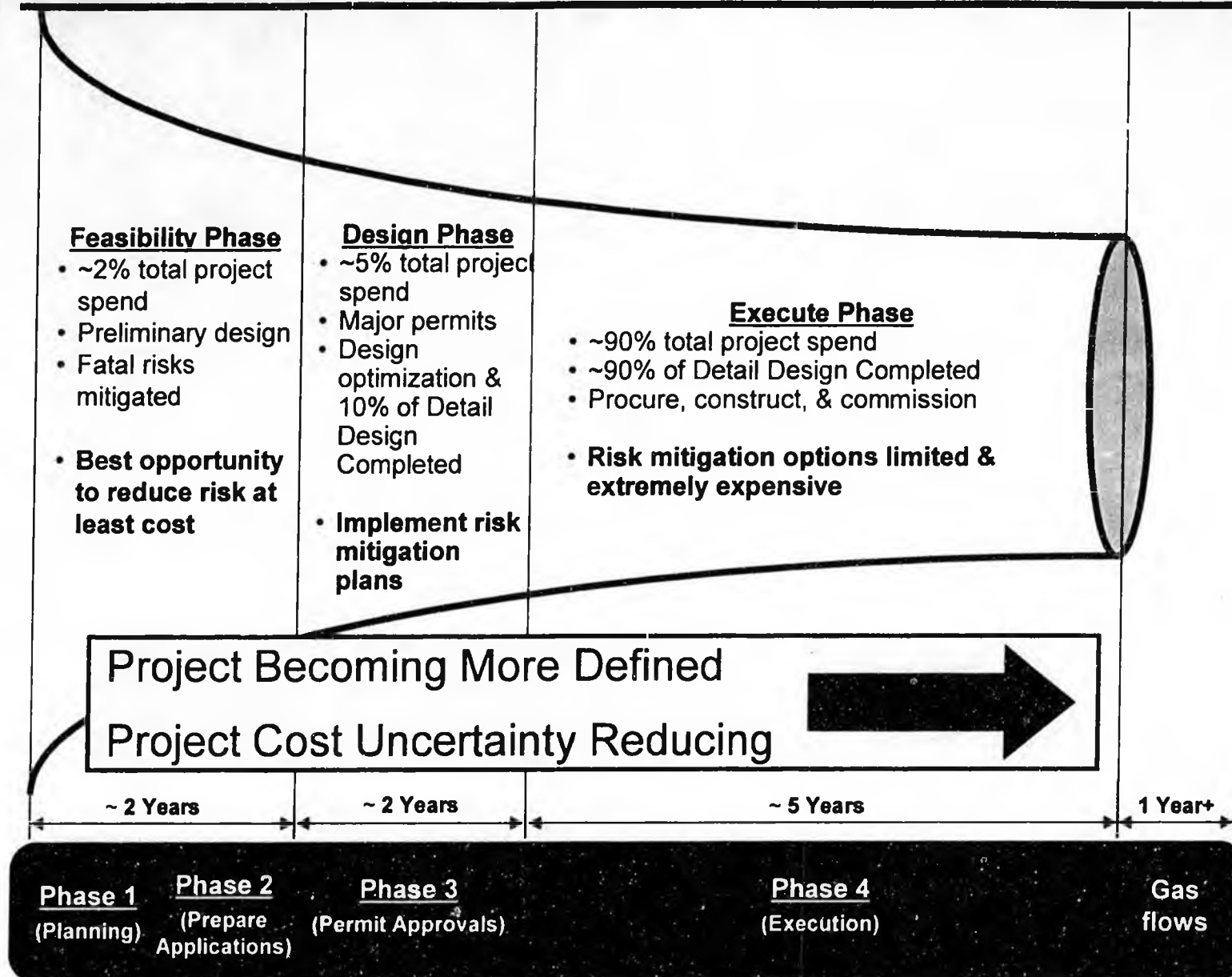
Why an Open Season?

- Why shipping commitments?
 - Shippers agree to ship gas, or pay demand charges for fixed term
 - Allows pipeline company to repay its debt and obtain a return on its equity contribution
 - Commitments allow pipeline company to obtain financing – the commitments serve as collateral for the financing
- Why is Open Season critical?
 - Allows open access to pipeline
 - Demonstrates no discrimination
 - Required by ANTPA – Sec. 103(e)
 - Establishes the demand for capacity, which impacts size, design, and cost of the pipeline
 - Also supports determination of whether project is viable commercially and can get financing

Success Case Project Timeline



Front End Loading and Cost Estimates



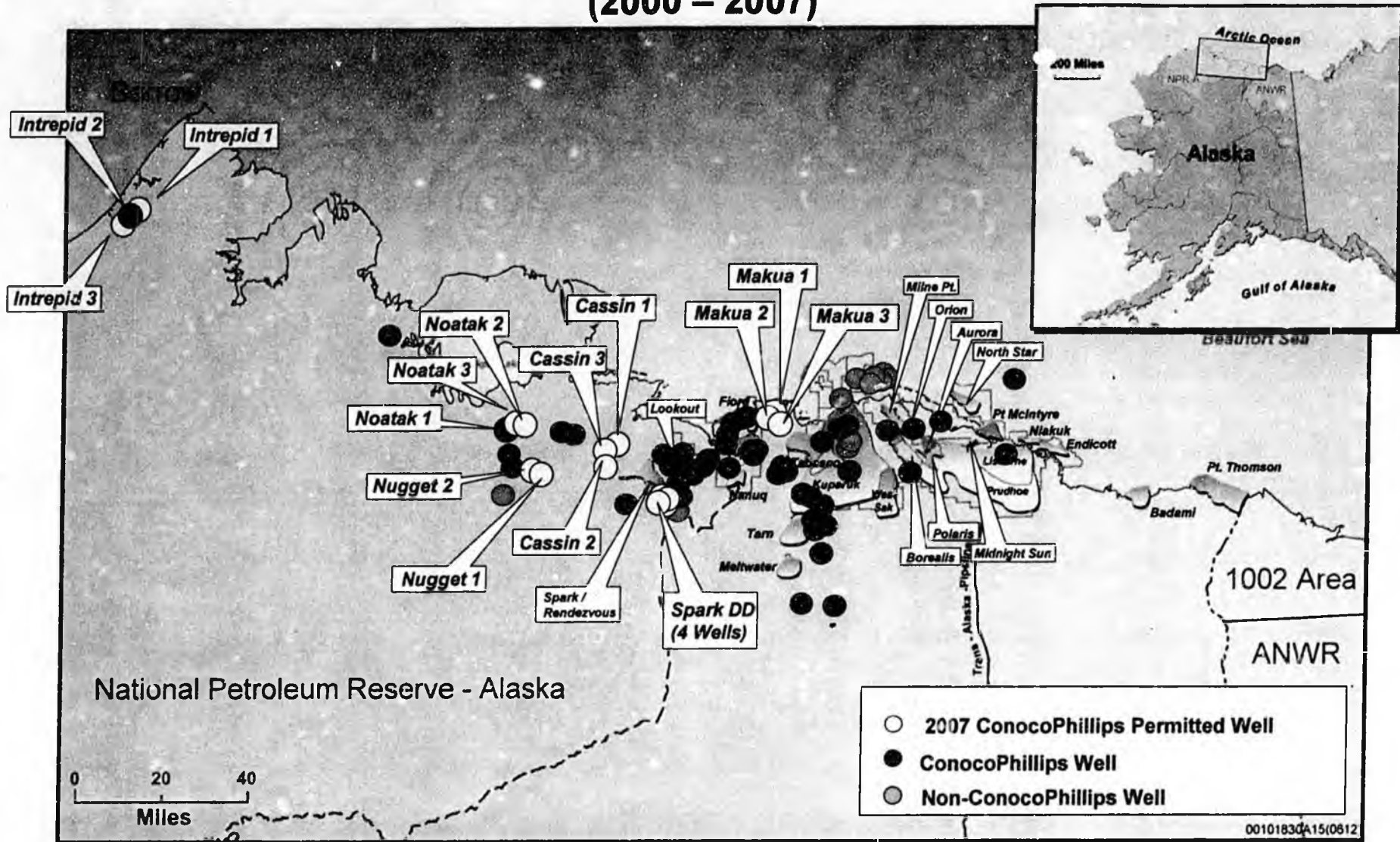
Proposed AGIA

Initial Concerns:

- AGIA structure hinders competition and creative alternatives
 - Licensed Project Assurances clause creates significant barriers to alternatives and competition
 - State could pick the wrong winner and be tied up for over a decade
 - AGIA 'bid requirements' are too narrow, prescriptive, and could result in subsidization that may not even be in the State's interests
- Resource terms not adequately addressed - clearly 'not a negotiation'
 - Long term firm shipping commitments are key to a successful pipeline project

ConocoPhillips Exploration on North Slope

(2000 – 2007)



Order 2005 on Rolled-in Rates

*“In conclusion, to provide guidance to potential shippers in advance of the initial open season that is the subject of this rule, the Commission intends to harmonize both objectives (rate predictability for initial shippers and reductions of barriers to future exploration and production) in designing rates for future expansions of any Alaska natural gas transportation project. It is consistent with our guiding principle that competition favors all of the Commission’s customers, as well as with the objectives of the Act, **to adopt rolled-in treatment up to the point that would cause there to be a subsidy of expansion shippers by initial shippers, if any subsidy were to be found.**”*

– page 44, 18 CFR Part 157, Order No. 2005, 2/9/05

ANS Exploration Potential

	Acres	Range (5 – 95%)	State Royalty?	State Taxes?
State lands* (onshore & offshore)	15 million	24 – 45 TCF unassociated	Yes	Yes
Private lands* (mostly native)		3 – 6 TCF associated		Yes
Federal onshore				
ANWR (1002 Area)	19 million (1.5 million)	0 – 20 TCF	Shared Federal Royalty	Yes
NPRA	23 million	39 – 83 TCF	Shared Federal Royalty	Yes
Federal OCS				
Beaufort Sea		1 – 72 TCF		
Chukchi Sea		10 – 210 TCF		

* Includes Foothills acreage

Source: USGS assessments for State (2005), ANWR (1998), NPRA (2002), Chukchi (2006), Beaufort (2006)

Suggested Changes to AGIA

- Convert AGIA 'bid requirements' to 'bid variables'
 - Allow proposals to include other commitments and inducements
 - Allow resource-owner applicants to propose packages with resource terms
 - Foster greater quantity and quality of proposals
- Amend exclusivity provisions to protect Alaska's options
 - Avoid treble damages which might penalize Alaska for prudent actions
 - AGIA impairs State's ability to agree resource terms in the future
 - State coordinator/streamlined permitting should be available to any project
 - Similar structure to Alaska Natural Gas Pipeline Act (ANGPA)

MEMORANDUM

STATE OF ALASKA

ALASKA OIL AND GAS CONSERVATION COMMISSION

TO: Chair John K. Norman DATE: February 28, 2007
Commissioner Daniel Seamount
Commissioner Cathy P. Foerster

FROM: Jane Williamson *Jane Williamson* SUBJECT: Prudhoe Major Gas Sales
Sr. Reservoir Engineer Study

Blaskovich Services, Inc. (BSI) and Commission staff recently completed a study of the impact of a future Major Gas Sale (MGS) on oil and gas recovery from the Prudhoe Oil Pool. The following is provided as a summary of major findings and conclusions from this study.

Foreward – Historical Review and Study Purpose

In 1977, the Commission set the maximum allowable Prudhoe Oil Pool annual gas offtake rate at 2.7 billion standard cubic feet per day (BSCF/D), which contemplated an annual average gas pipeline delivery sales rate of 2.0 BSCF/D. This allowable, set out in Rule 9 of Conservation Order 341D, was approved without benefit of production history. The Commission recognized that the rates may be changed as production data and additional reservoir data became available.

Over the past five years, there has been significant activity concerning a potential major gas sale. BPXA, Exxon-Mobil, and ConocoPhillips commissioned a \$125 million dollar study to determine the conceptual feasibility of a gas pipeline. The tentative plan resulting from this study was for a 4.3 BSCF/D pipeline, with capacity to expand to 5.6 BSCF/D. The Prudhoe Bay Unit, Prudhoe Oil Pool is the only North Slope developed field with significant gas reserves (estimated at more than 24 trillion cubic feet (TCF)) and is of primary importance for any decision concerning the pipeline. Pt. Thomson, with over 8 TCF of gas and several hundred million barrels of gas condensate and oil, was assumed to also provide a supply of gas for the pipeline. The companies and the State of Alaska have devoted significant resources to negotiate fiscal terms to build the pipeline. Based on these efforts, the Commission became concerned that no application for modification to the Prudhoe gas offtake rule had been submitted.

As a result of a Commission inquiry and several public hearings, the Commission published a report on December 5, 2005 concluding that there was a need to comprehensively revisit the question of the appropriate gas offtake limits in light of several decades of reservoir development and information that has become available since 1977. Because delay in the Commission's decision-making could disrupt the timetable for a potential gas pipeline project, the Commission adopted a proactive approach to ensure there would be an adequate factual basis for its eventual decision on

allowable gas offtake. The Prudhoe Working Interest Owners (WIO) and the Commission therefore agreed to principles allowing the Commission consultants and staff to access their reservoir simulation and other relevant engineering studies for the purpose of analyzing gas offtake rates and gas sales startup timing for the Prudhoe Oil Pool. Blaskovich Services, Inc. (BSI) was commissioned to provide reservoir engineering consultation in this study.

This work-study officially began in late January 2006. A brief summary follows:

Summary of 2006 Commission Audit Results

The Prudhoe WIO full field reservoir simulator was used as the primary tool in this evaluation. In addition to runs made assuming no gas sales, simulation runs were made at various gas sales rates (1.0-5.6 BSCF/D) and gas sales startup dates (2015, 2019, and 2024). Some simulation cases were run to test the impact of other factors such as changes in waterflood operation, fuel usage, CO₂ offtake, and some drilling/workover variations. We also evaluated the effect of varying assumptions for end of the field life (EOFL).

Throughout our analysis, we searched for major factors that would affect the trends in total hydrocarbon recovery as a function of gas offtake rates and timing. We were not searching for "the" optimum development strategy. We did not value one type of energy resource (e.g., liquids or gas) over another, but equated them using their relative energy content in units of barrels of oil equivalent (BOE). Based on our analysis of currently available data, we have reached the following major conclusions.

- A major gas sale at Prudhoe represents approximately an additional 4 billion BOE recovery.
- The latest WIO model needs improvements in its ability to predict future field performance. Model errors are increasing with time. Nevertheless, it is the best tool currently available. It should be suitable for comparing directional trends in energy recovery during a gas sale.
- Increased oil capture prior to gas sales can increase hydrocarbon recovery and result in recovery trends that are less sensitive to either gas offtake rates or gas sales startup dates. This was the only mitigation option evaluated that significantly improved trends in BOE recovery.
- End of field life (EOFL) is a major source of uncertainty in determining the gas sale strategies that will maximize energy recovery.
 - Comparison of model reserves predictions at the same date for EOFL tended to favor an earlier, higher rate gas sale. We found the time limit EOFL approach to be inappropriate because ending energy production rates could be vastly different between the high rate, early startup case and the low rate, delayed startup case.

- o Model results based on equivalent EOFI rate limits consistently show that total energy recovery is substantially decreased with an earlier, higher rate gas sale. We believe that rate limits are more reasonable than time limits for comparison of gas sales model predictions. However, exclusive use of rate limits is flawed because the risks of wells and field infrastructure failures with age are ignored.
- Well, facilities and infrastructure failures can significantly increase the risk of lost hydrocarbons. The longer that gas sale is delayed, the greater the risk of well and facilities failure resulting in premature field shutdown. Furthermore, near term failures will defer production and may result in more reserves loss with early gas sales. Diligent efforts to maintain, repair, and replace aging wells and facilities will help to mitigate risks and maximize recovery under any sales scenario.

Recommendations

The Commission has not received a request for a new gas offtake rule. At this time, we cannot recommend a specific gas offtake rate and sales startup timing. The Prudhoe WIO model evaluations and studies that have been shared with us are not sufficient to justify an allowable above that specified in Rule 9, CO 341D. An early, high rate gas sale could result in the loss of a substantial volume of hydrocarbons. However, even greater volumes may be at risk if gas sales are indefinitely delayed and Prudhoe wells and infrastructure fail before these reserves can be recovered.

We are concerned that Rule 9 does not specifically require a plan for such a major change in the Prudhoe Oil Pool depletion strategy. The ultimate impact of gas sales on hydrocarbon recovery cannot be appraised in the absence of a proposed development plan that identifies the start date, sales rate and liquid loss mitigation efforts. Although the start-up for gas sales is a minimum of 8 years away, many decisions that affect the project will be made earlier. Depletion planning should be required prior to commitments to sell gas so that the Commission is adequately informed and assured that other factors do not exist that would justify or require action by the Commission.

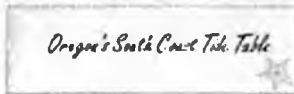
Regardless of the timing of their submittal, the Prudhoe WIOs need to develop near-term strategies to prepare the field for gas sales with focus on methods to increase the capture of oil prior to gas sales and to ensure facility and well downtime is minimized. On a regular basis, the Commission needs to be kept informed of the progress of the depletion planning efforts, including review of study plans, reservoir study results and other relevant information that may impact the Commission's ultimate decisions concerning gas sales offtake. The exchange of information in the past year was very successful and a similar mechanism of exchange should be considered during the depletion planning stage.

We wholeheartedly appreciate the cooperation of the Working Interest Owners over the past year, particularly that of the BP technical representatives who worked with us in this endeavor.

This report reflects the evaluation and opinions only of the authors and does not necessarily reflect those of the Prudhoe Owners or other Commission staff.

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NEWS

Another setback for proposed LNG terminal

Friday, April 13, 2007 12:19 PM PDT

SANTA BARBARA, Calif. (AP) - A second state agency has rejected elements of a proposed liquefied natural gas terminal off the coast of Southern California, another significant setback for the \$800 million project.

The California Coastal Commission, which is charged with regulating coastal development, determined Thursday the proposal did not meet existing coastal laws. The unanimous decision followed an earlier one Monday by the State Lands Commission, which refused to grant a lease for pipelines essential to the project.

"It's one of those multi-headed monsters that has to be killed repeatedly," said Mark Massara, an attorney for the Sierra Club, which opposes the project.

Australian-based BHP Billiton LNG International Inc. is seeking to bring chilled gas from overseas to California by tanker. The gas would be heated, piped ashore and then pumped out to customers. BHP officials say the facility would provide a reliable source of low-polluting energy.

Meanwhile, Gov. Arnold Schwarzenegger began examining the proposal as part of a 45-day review period that began last week. The governor, who has veto power over the proposal, said at a news conference Wednesday that he believes natural gas is worth considering.

Patrick Cassidy, a spokesman for BHP, declined to say whether the company would appeal the Coastal Commission decision or file a lawsuit against the State Lands Commission. He said the company will need time to assess their next step.

A host of celebrities who live in Malibu, including Pierce Brosnan and Halle Berry, have protested the facility. Brosnan's wife - environmentalist Keely Shaye Smith - attended the commission hearing and said the project should be stopped.

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"I think they have to know when to cut their losses," she said.

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Monday, April 16, 2007

Serving the South Coast of Oregon

At



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Backbone II
P.O. Box 101700, Anchorage, AK 99510-1700

Comments on the AGIA legislative hearings
and two suggested amendments

April 16, 2007

Representative JOHNSON Fax (907) 465 3872

Dear Representative:

We have been watching the hearings on AGIA closely, and we offer the following thoughts:

First, thank you for the attention you are giving this important matter and the questions you are asking to bring out the true interests of the participants.

It has been fascinating to see the producers answer your questions in an open and transparent process. What we hear them saying is that they are against exclusivity because a licensee will be picked based on specific criteria important to Alaska.

This is the height of hypocrisy, since they strongly supported the exclusivity granted them by the previous administration. Although they are trying to dress it up a little, they are clearly arguing to return to the exclusive arrangement they had under the Stranded Gas Act. That would be a disaster for Alaska.

The producers are also saying that they must have fiscal certainty for 35 to 45 years on oil and gas, or they will not commit their gas to the project. We think that would be highway robbery, and it is also almost certainly unconstitutional. Even Pedro Van Meurs said, "You don't have to be a 'banana republic' to get a gasline project."

Although the producers keep saying that they are the only ones who can build an Alaskan gasline, that is patently untrue. You have already heard testimony from several credible applicants that they can build this project using the federal loan guarantees. All they lack is access to a gas supply. The producers have stated that they can and will sell their gas to a third party, and we think that is a clear path to the best gasline project.

We also question whether allowing the producers to own the gasline is a good idea. Look at the current situation with the trans-Alaska oil line, where the RCA

and the State Superior Court have found the producers overcharging on their tariff by 59%. The federal government also recognized this problem, and in the initial Natural Gas Transportation Act, the producers were prohibited from owning the gasline. However they convinced President Reagan to overturn this requirement.

The bottom line is that Alaska has options, and we support the process laid out in AGIA which will allow competition for providing the maximum benefits to Alaska.

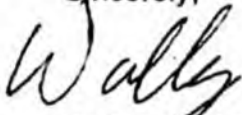
We suggest two amendments that will strengthen AGIA:

1. An evaluation criterion should be added that gives credit to an applicant that has made arrangements for providing gas liquids for value-added processing in Alaska. To have a pipeline without in-state value-added processing and the jobs it will provide would be a major blunder.
2. The state should assess a reserves tax on a North Slope leaseholder that holds existing gas reserves and refuses to make firm transportation commitments or sell the gas it controls to the AGIA licensee.

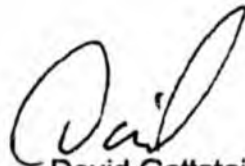
This latter provision would help guarantee a successful Open Season and a gasline built on an expedited basis.

Thank you for considering our thoughts, and keep up the good work.

Sincerely,



Walter F. Hickel
Co-Chair



David Gottstein
Co-Chair

Backbone II is a non-partisan citizen organization that advocates on behalf of Alaskans on oil and gas development issues. We offer our ideas based on their merits and years of involvement in Alaska public policy issues.

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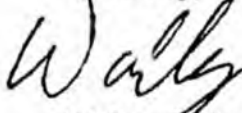
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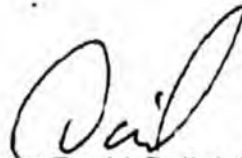
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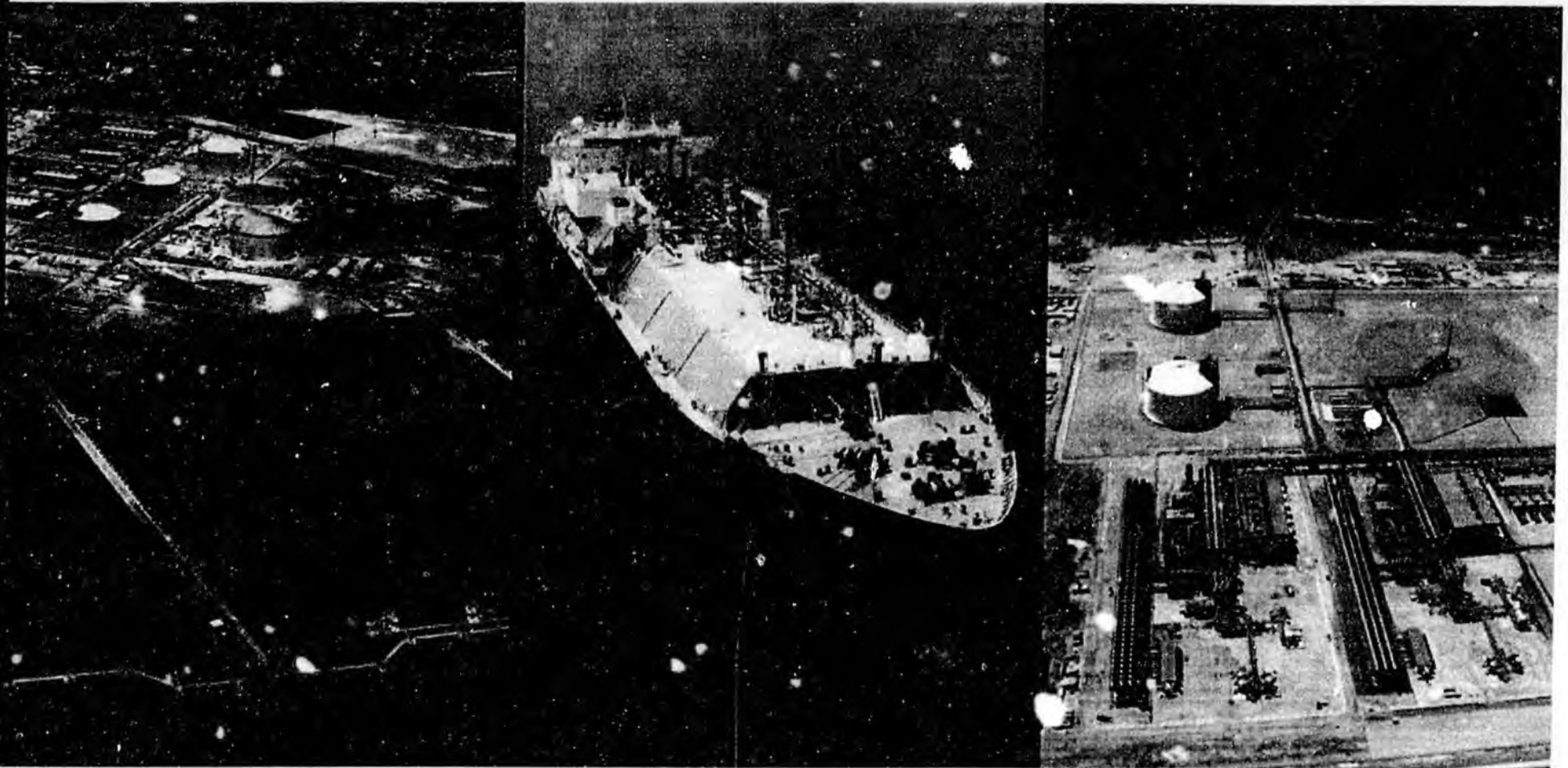
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BG Group



House Resources Committee

David Keane • Juneau • April 17

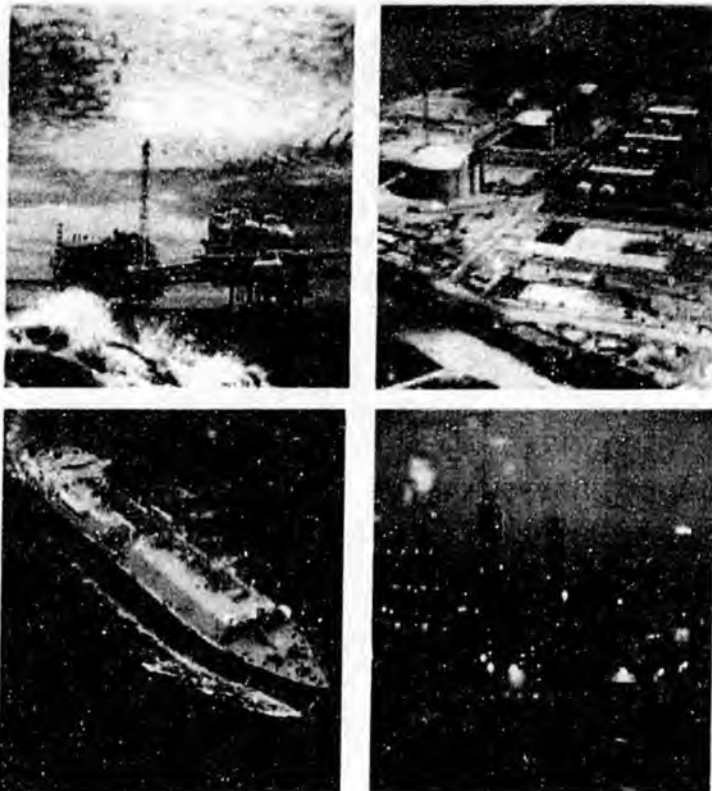
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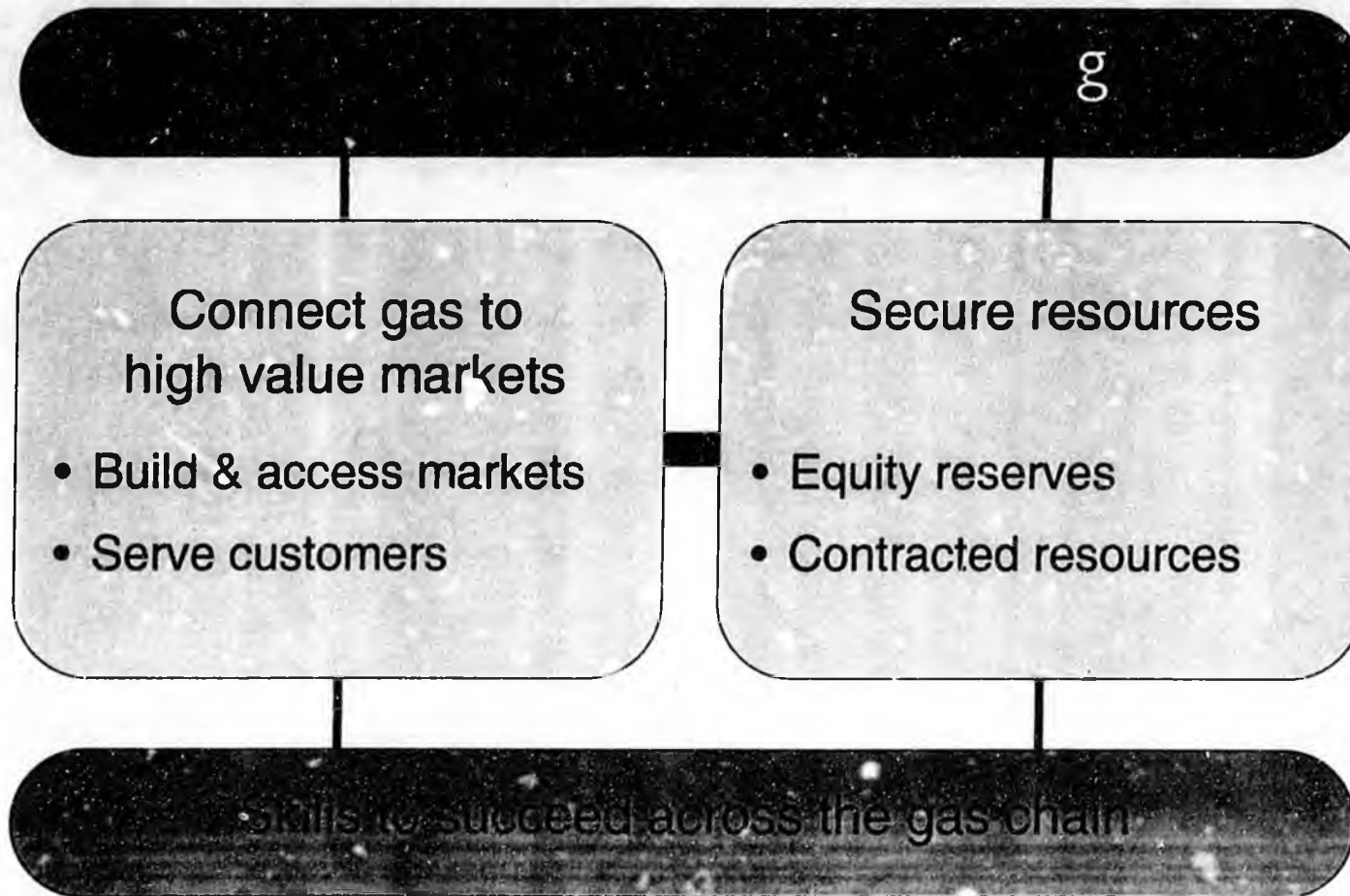
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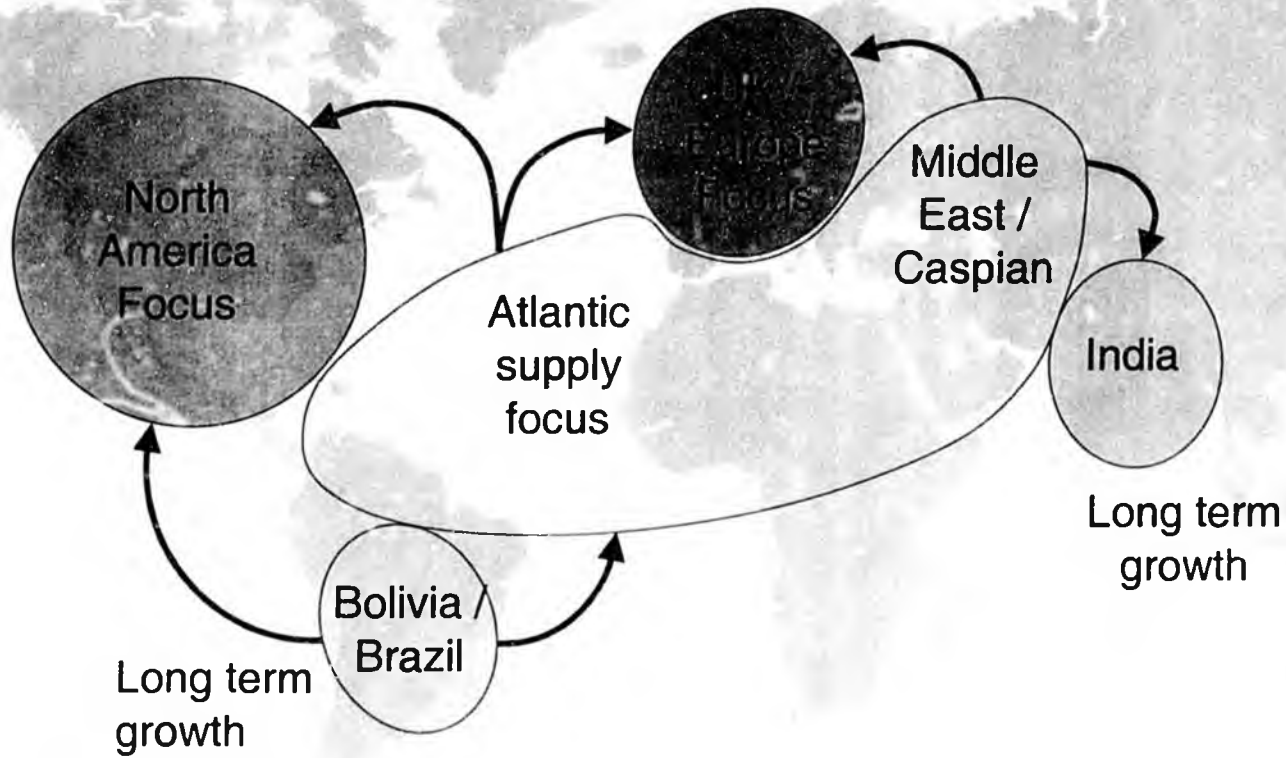
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- Integrated gas major
 - Long heritage in natural gas
- Activities span the natural gas chain
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 - LNG
 - Transmission & Distribution
 - Gas Fired Power Generation
- A top 20 UK company
- Market capitalisation
 - Over \$45 billion
- A global player
 - Active in 25 countries

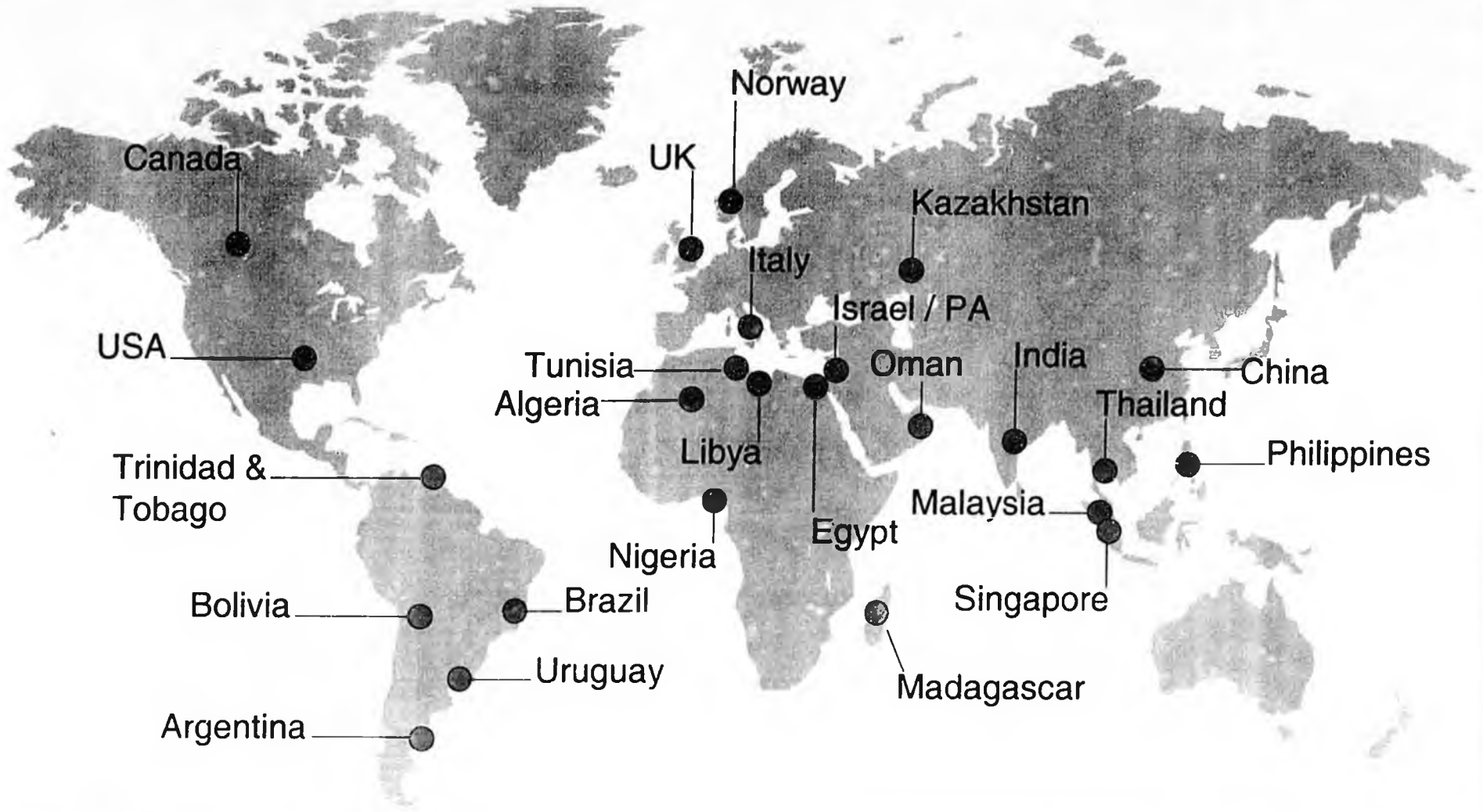


Gas market focus

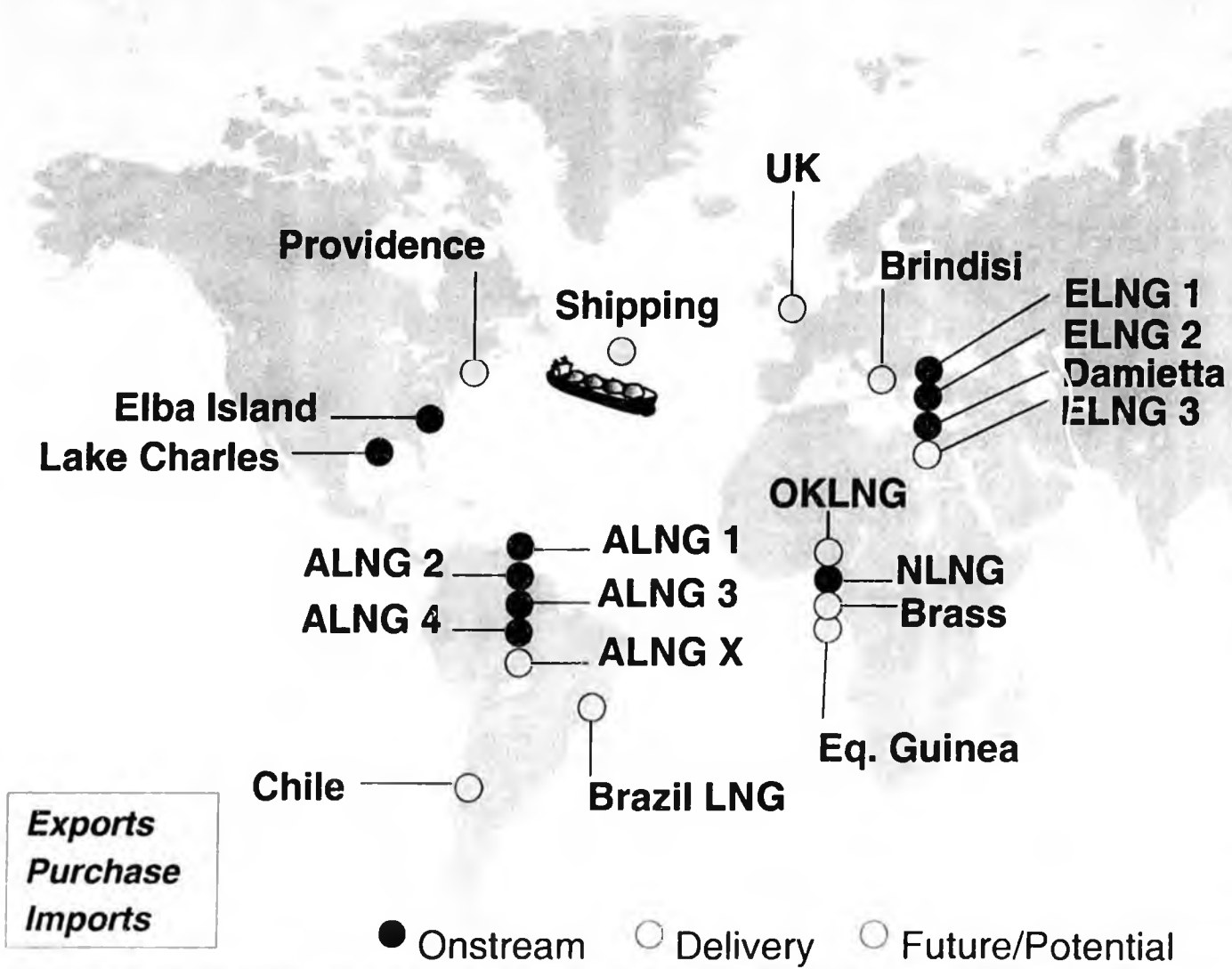


● Developed Market ○ Developing Market ○ Supplies

Countries of current operation



BG Group's LNG portfolio

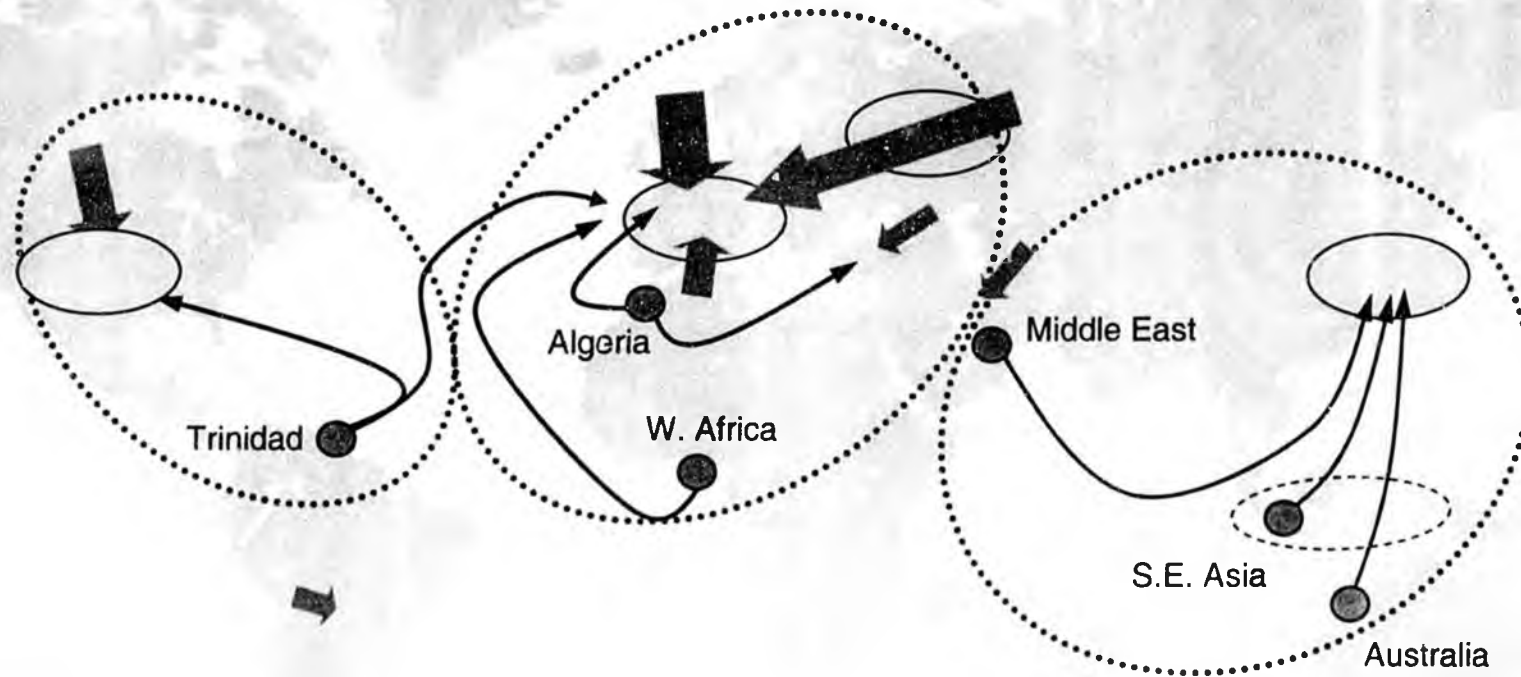


Atlantic LNG



Lake Charles

Global gas trade – the recent past

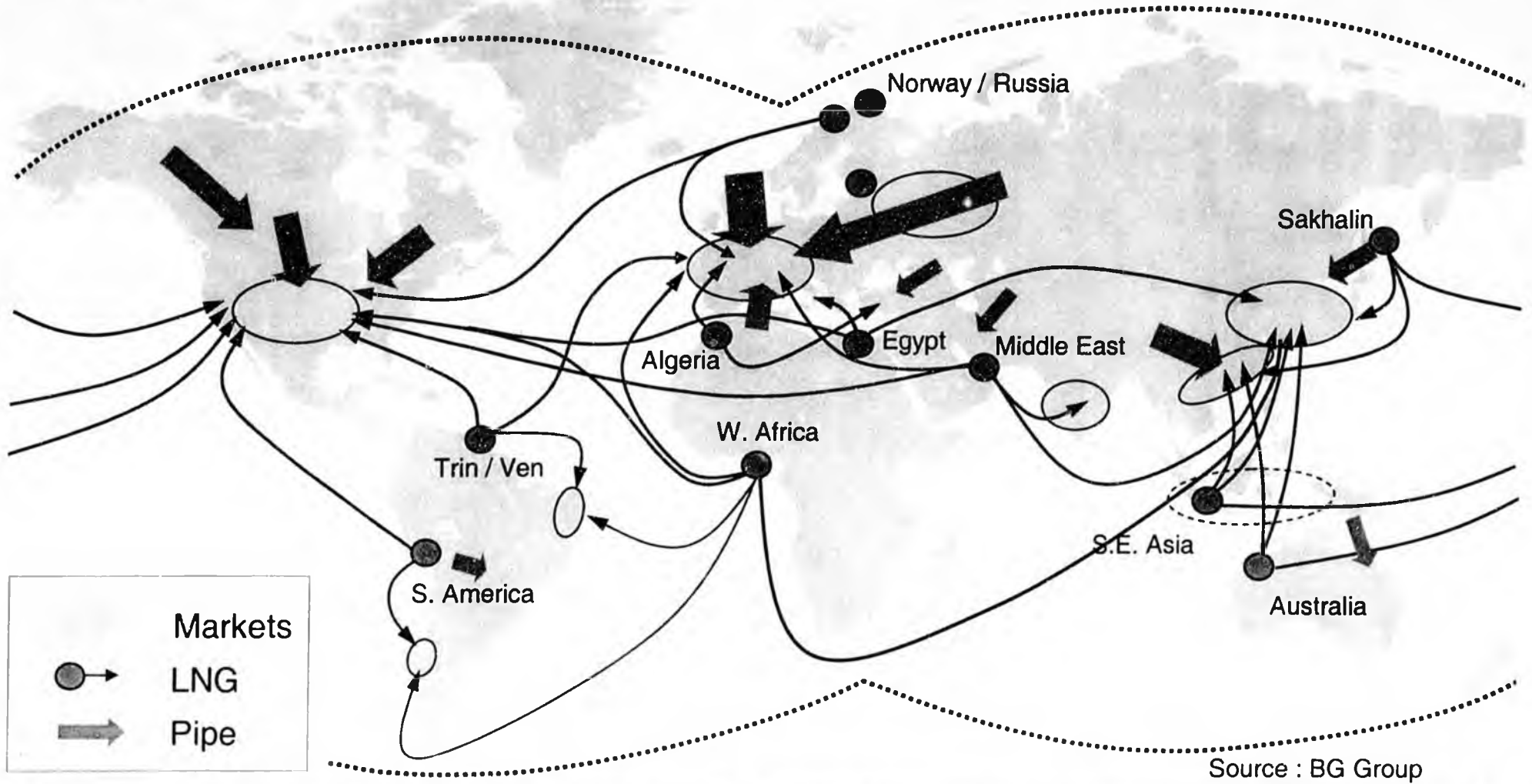


- Markets
- → LNG
- ➔ Pipe

Source : BG Group

Industry evolution from three main trade regions...

Global gas trade – gradually evolving



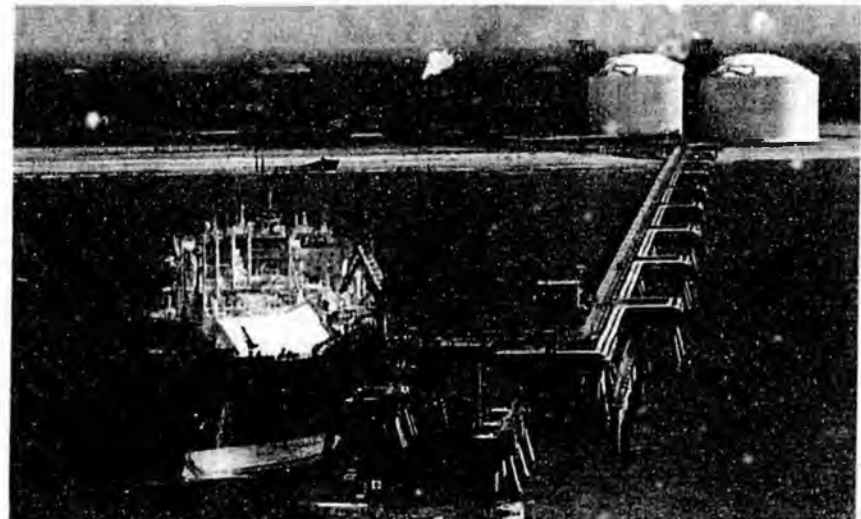
© a globalising gas industry

BG LNG

Supply projects



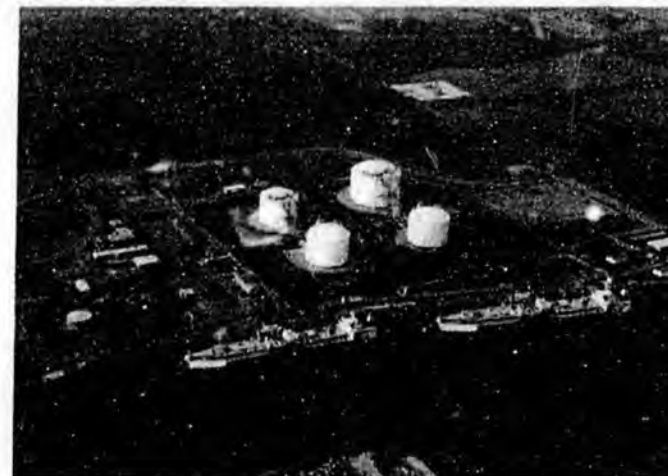
- Train 1: 3.1 mtpa – 1999 (BG 26.0%)
- Train 2/3: 6.6 mtpa – 2002 (BG 32.5%)
- Train 4: 5.2 mtpa – 2005 (BG 28.9%)
- BG initiated project and was instrumental in Phillips design
- Single train start-up



- Train 1: 3.6 mtpa – 2005 (BG 35.5%)
- Train 2: 3.6 mtpa – 2005 (BG 38.0%)
- Egypt's largest project financing to date
- Unique project commercial structure
- Utilized lessons learnt from ALNG

Atlantic LNG – total export capacity of 15 mtpa in just 7 years

- Lake Charles import terminal
- Phase I expansion Q4 2005
 - 1.2 bcf/d sustainable send out
 - 1.5 bcf/d peak send out
 - 9.1 bcf total storage
- Phase II expansion Q2 2006
 - 1.8 bcf/d sustainable send out
 - 2.1 bcf/d peak send out
- Elba Island import terminal
 - 0.45 bcf/d sustainable send out
 - 0.67 bcf/d peak send out
 - 4.0 bcf storage capacity
 - 1.17 bcf/d firm send out & 8.2 bcf storage after second expansion



Lake Charles

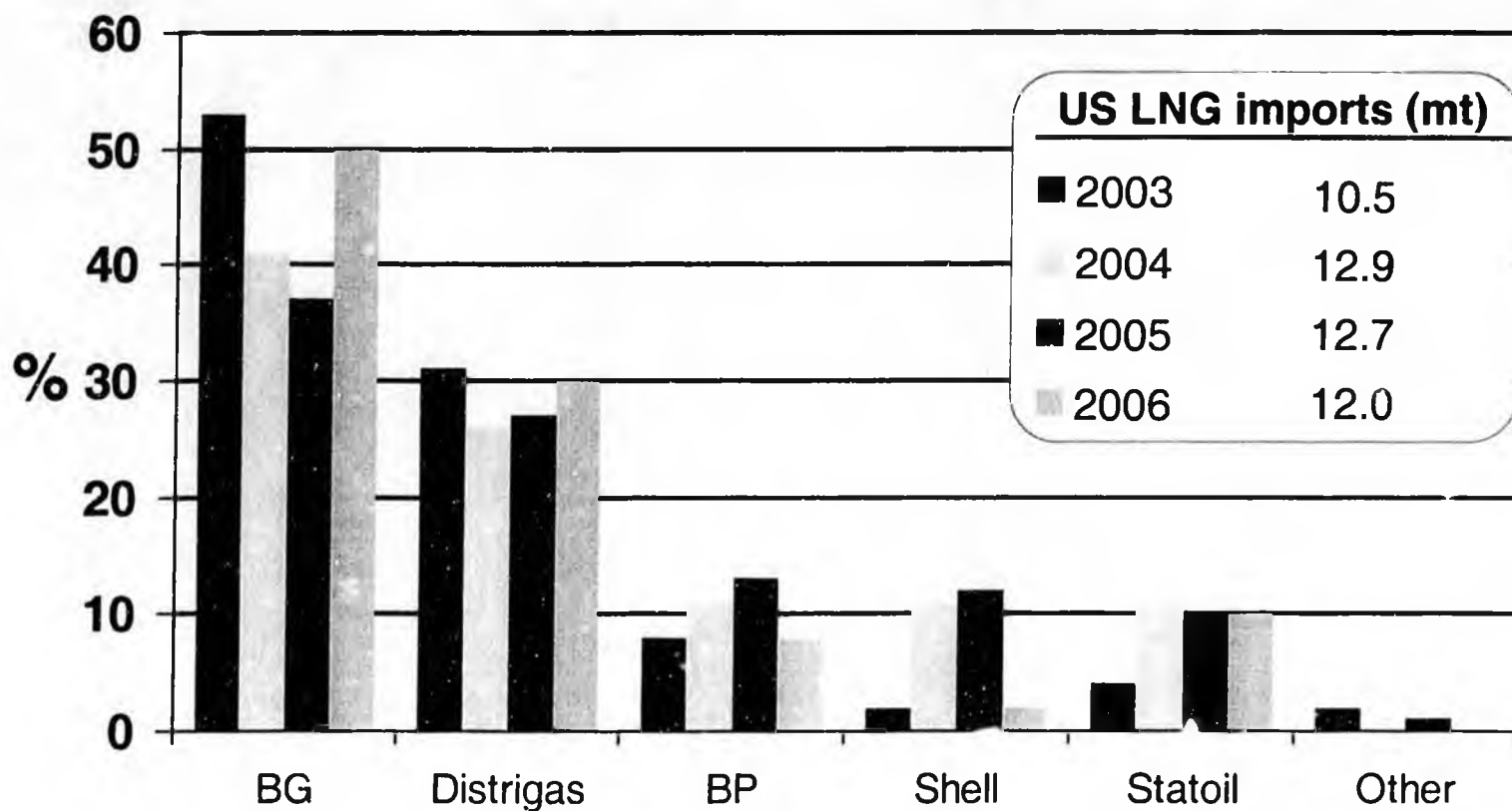


Elba Island

US LNG imports
2003 to present



Share of US LNG imports



Source : DOE

BG LNG Shipping

BG shipping capacity



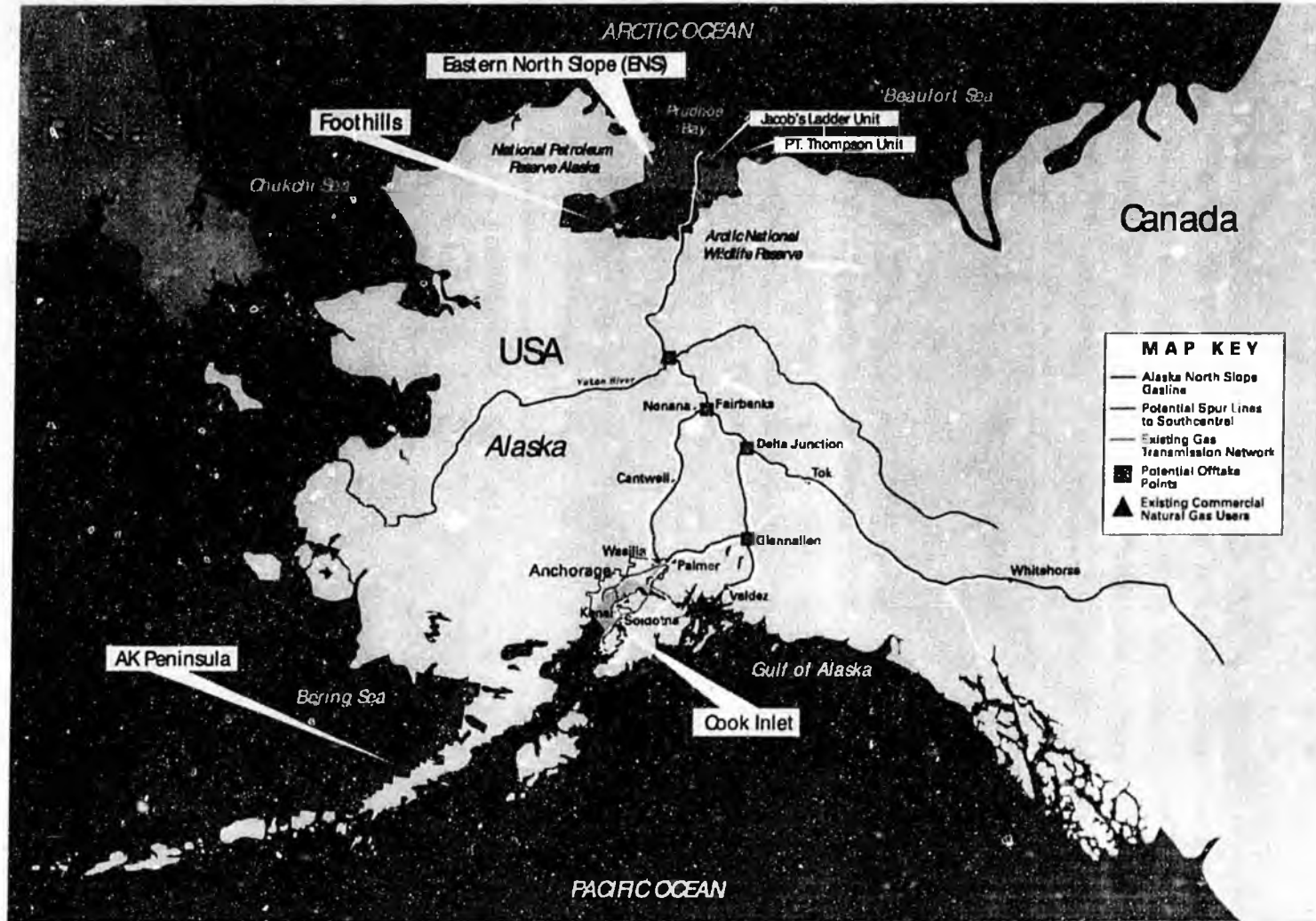
- 4 Golar ships (chartered)
- Methane Princess (20-year charter)
 - Golar new-build delivered early 2004
- Methane Kari Elin (long-term lease)
 - Samsung new-build delivered mid 2004
- Methane Rita Andrea, Methane Jane Elizabeth & Methane Lydon Volney
 - Samsung new-build delivered April, June and August 2006
- 3 new ships scheduled for delivery
 - Samsung new-builds delivery 2007
- 2 new ships scheduled for delivery
 - Samsung 170,000 m³
 - Delivery 2010



Methane Rita Andrea

Linking the LNG chains

Alaska Overview





- BG is investing in Alaska
 - Exploring along North Slope and ENS
- BG is a leading player throughout the natural gas value chain
 - Leading player in LNG - BG is interested in exploring the LNG option
- BG supports AGIA and the development of a pipeline but:
 - Had serious concerns about the previous draft contract
 - Contract must provide a level playing field for all participants
 - Contract must provide reasonable certainty that when we discover gas, we will have access to pipeline capacity
 - BG encourages the State to enter into discussions with independent pipeline companies

HB

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4/18/07

The Palin-Parnell Administration presents

AGIA

The Alaska Gasline Inducement Act

**Analysis of Producer Returns,
Investment Attractiveness, and Fiscal Certainty
Presentation to House Resources**

4/18/207

How to measure investment attractiveness?



- NPV = “net present value”
 - The current value of future profits
- IRR = “internal rate of return”
 - The discount rate that makes $NPV = 0$
- P/I = “profitability index”
 - $[\text{present value of cash inflows}] / [\text{present value of outflows}]$
- NPV/Boe = “NPV per barrel oil equivalent”
 - Measure of how much cash flow is generated from reserves

Producer Upstream Returns

Base case cost = \$20.5B



	NPV₁₀ (\$B)	IRR	P/I	NPV₁₀ per BOE
\$4.00	6.1	39.7%	4.3	\$0.74
\$5.50	12.1	62.9%	7.5	\$1.46
\$7.00	17.8	79.2%	10.5	\$2.15

Prices are real, \$2007, escalating at 2%/year

Producer Upstream Returns

50% cost overrun = \$30.1B



	NPV ₁₀ (\$B)	IRR	P/I	NPV ₁₀ per BOE
\$4.00	3.2	20.9%	2.2	\$0.39
\$5.50	9.2	41.4%	4.6	\$1.12
\$7.00	15.1	57.2%	6.9	\$1.82

Prices are real, \$2007, escalating at 2%/year

Producers' returns as both shippers + pipeline owners



	NPV ₁₀ (\$B)	IRR	P/I	NPV ₁₀ per BOE
\$4.00	5.0	14.0%	1.4	\$0.60
\$5.50	10.6	17.9%	1.9	\$1.28
\$7.00	16.0	21.1%	2.3	\$1.93

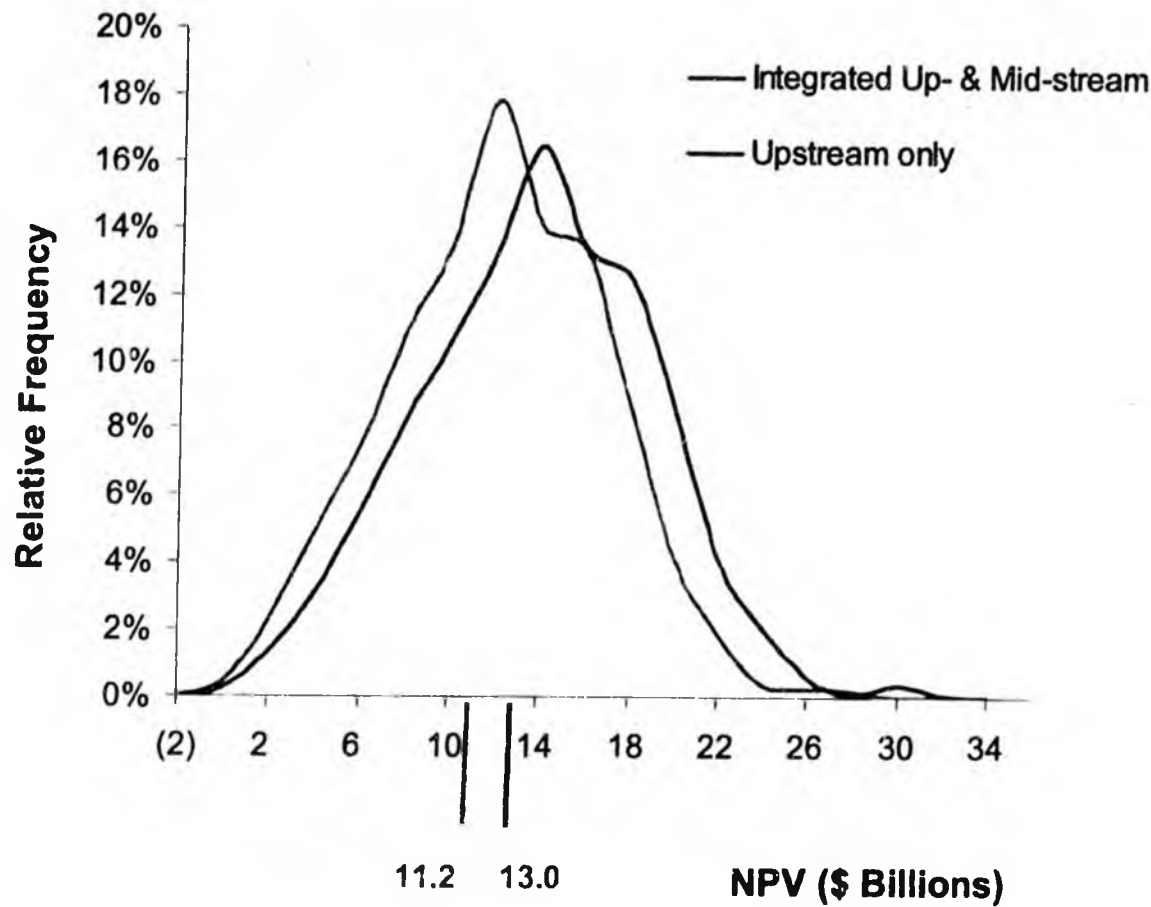
Prices are real, \$2007, escalating at 2%/year

Producer NPV: Relative likelihood



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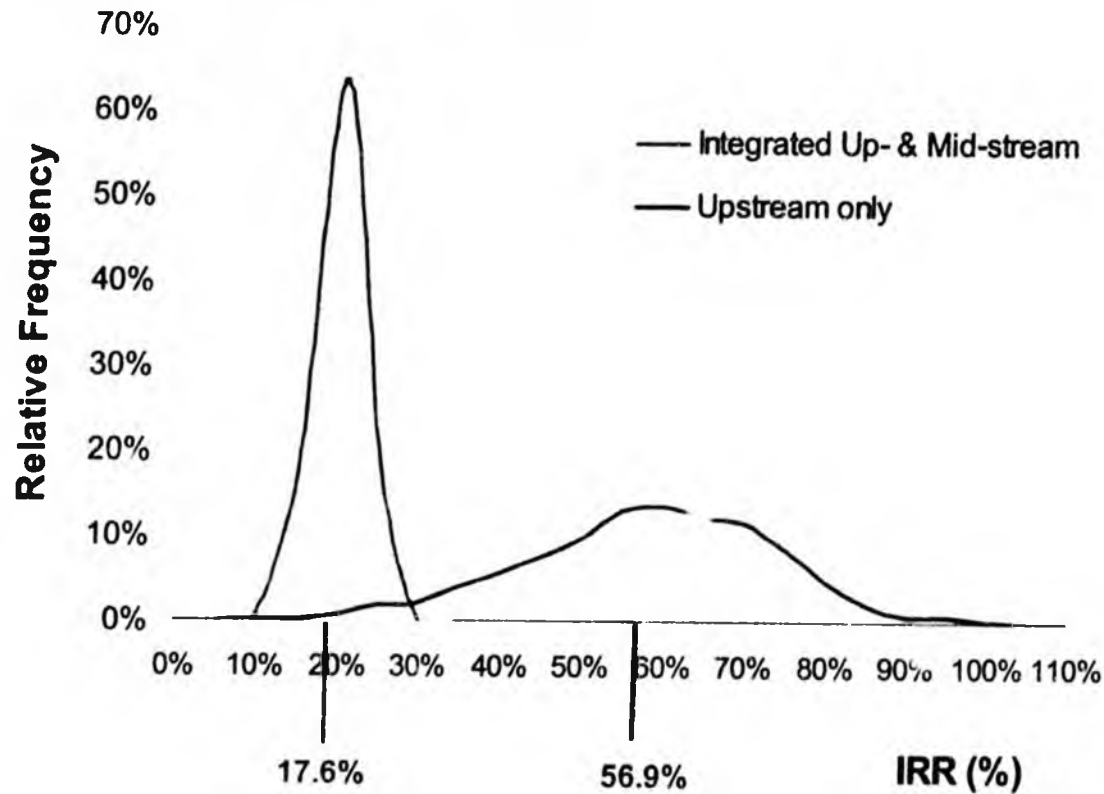
Frequency Distribution of Producer NPV₁₀



Producer IRR: Relative likelihood



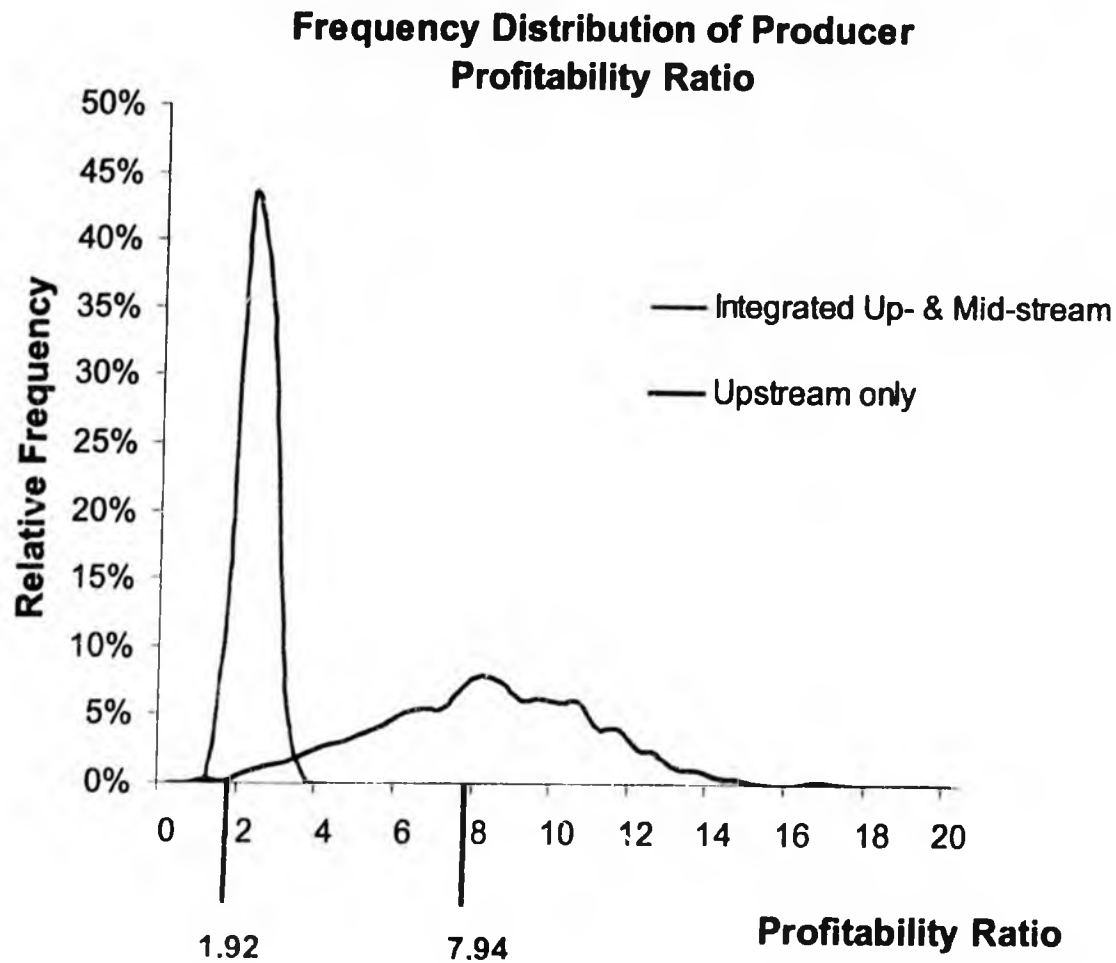
Frequency Distribution of Producer IRR



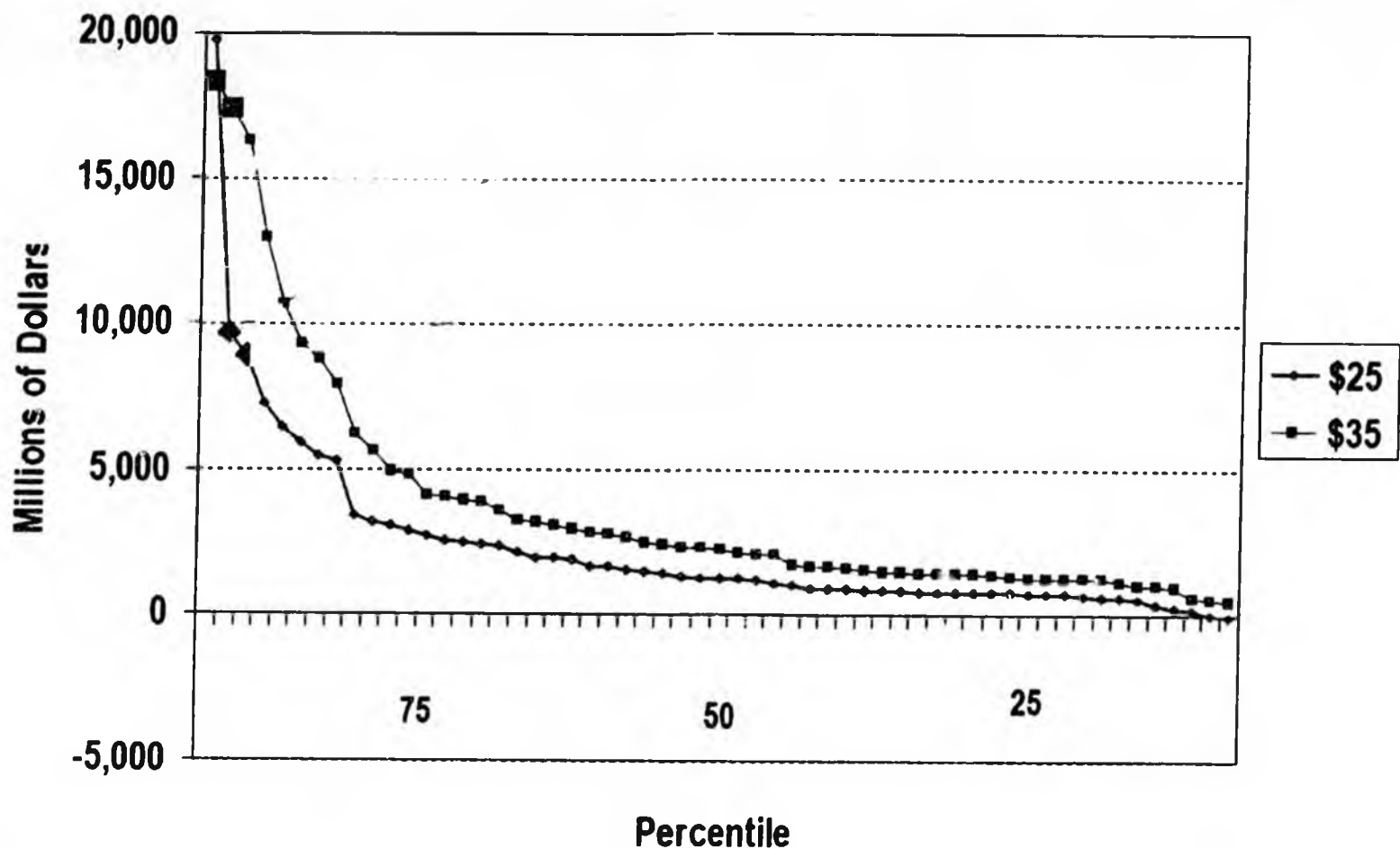
Producer P/I: Relative likelihood



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Comparative Project Opportunities Producer Net Cash Flow (NPV10) (\$35 and \$25 oil and 6/1 oil/gas ratio)

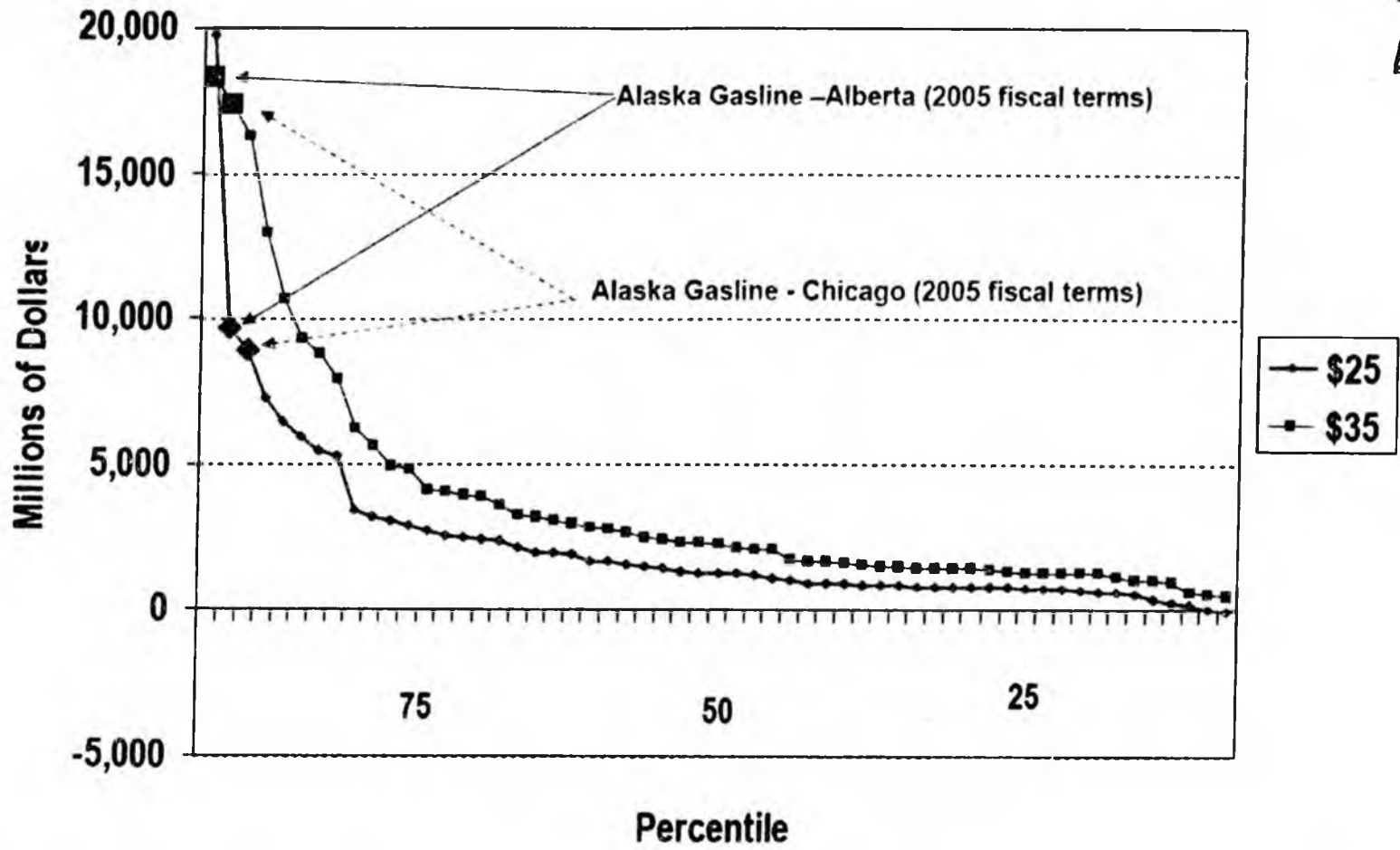


Project comparison data from EconOne presentation to LB&A Committee, 6/14/06.

Pre-PPT Gasline Economics in context Producer Net Cash Flow (NPV10) (\$35 and \$25 oil and 6/1 oil/gas ratio)

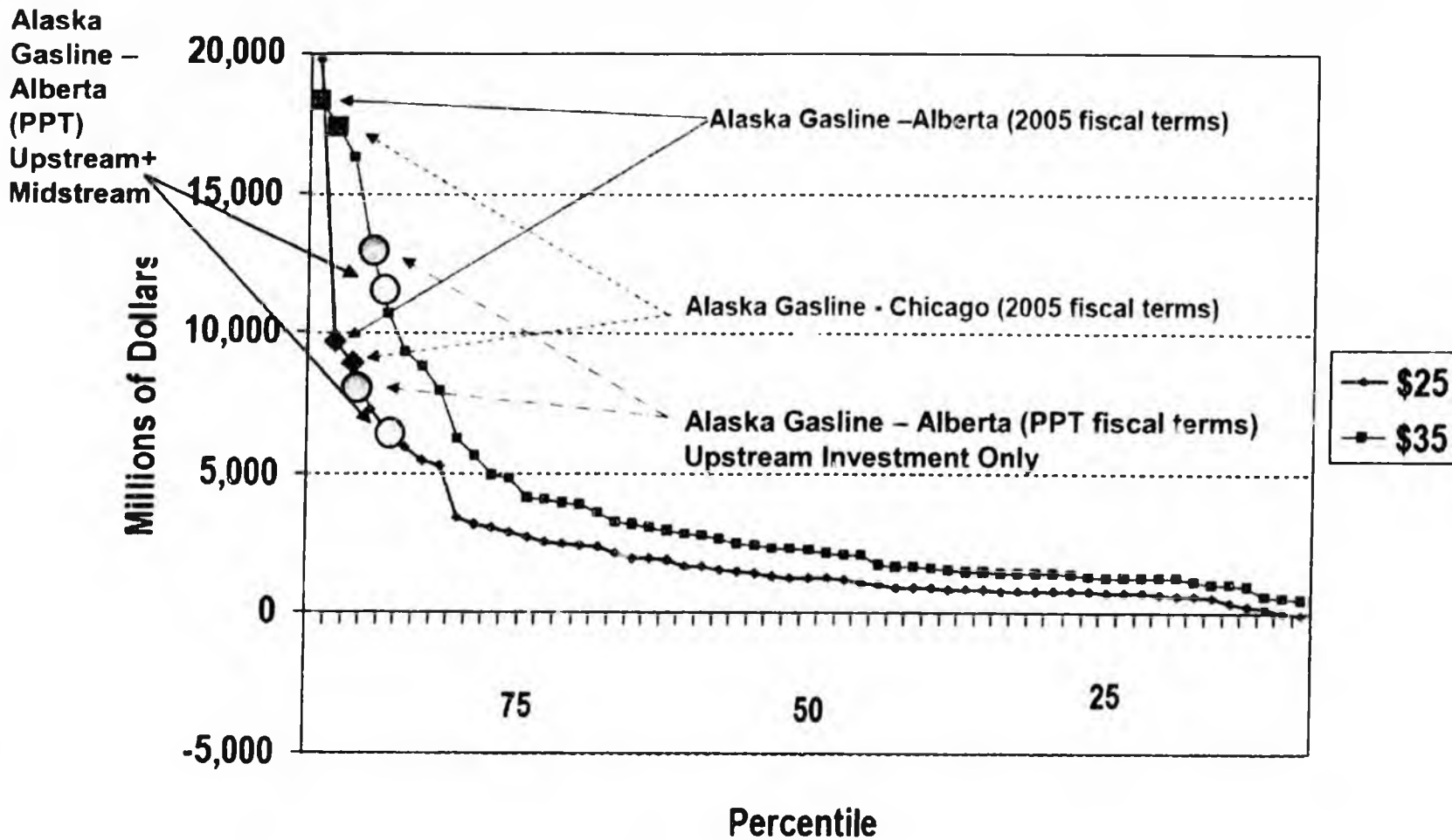


*under
 ELF*



Project comparison data from EconOne presentation to LB&A Committee, 6/14/06. EconOne data assume 100%
 Producer pipeline ownership, ~\$15B Alberta project.

Current Gasline Economics Produce Net Cash Flow (NPV10) (\$35 and \$25 oil and 6/1 oil/gas ratio)

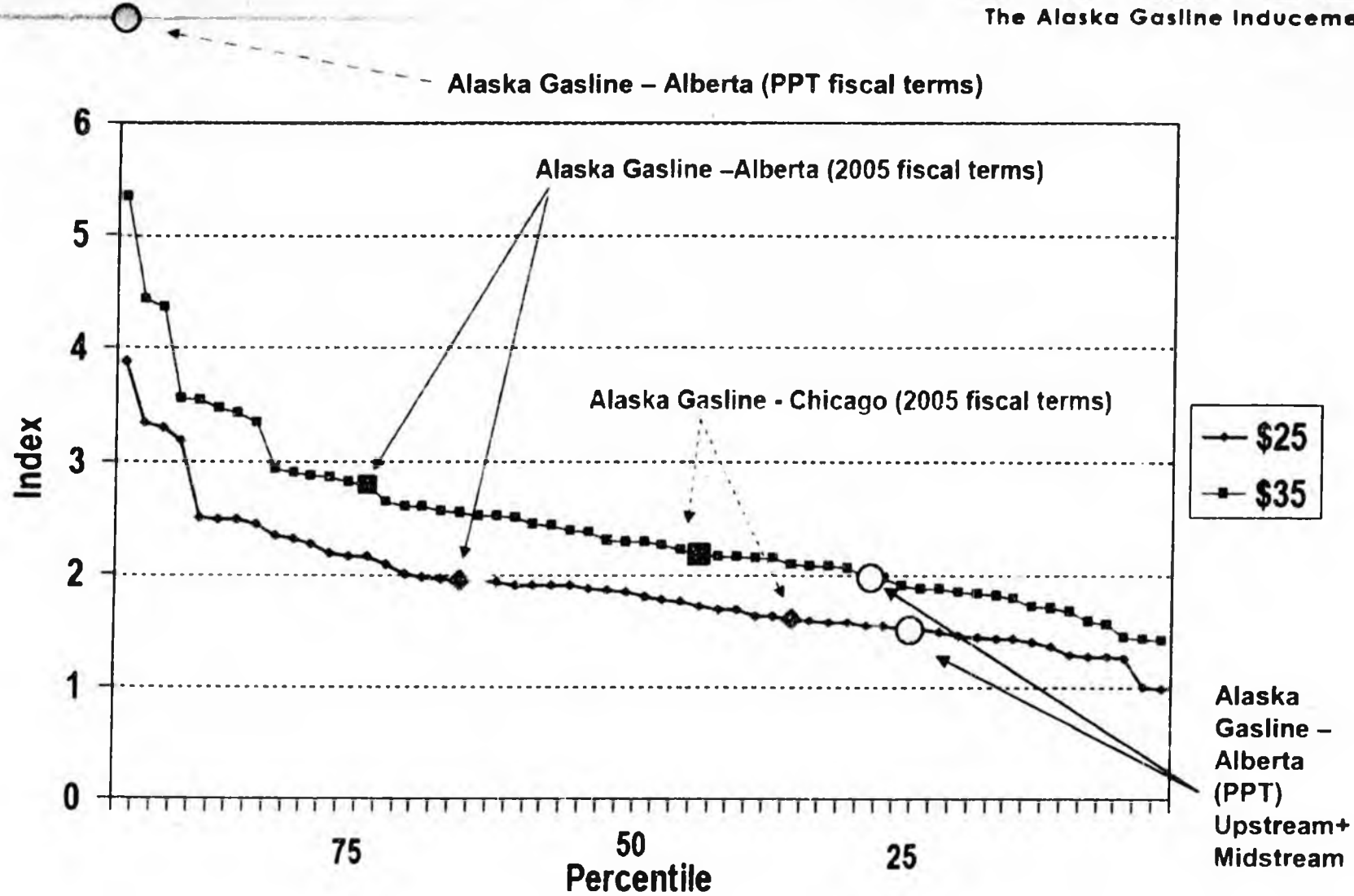


Project comparison data from EconOne presentation to LB&A Committee, 6/14/06. EconOne data assume 100%¹¹ Producer pipeline ownership, ~\$15B Alberta project; upstream return data assumes 0% pipeline ownership.

Current Gasline Economics Profitability Index Ratio (PIR10) (\$35 and \$25 oil and 6/1 oil/gas ratio)



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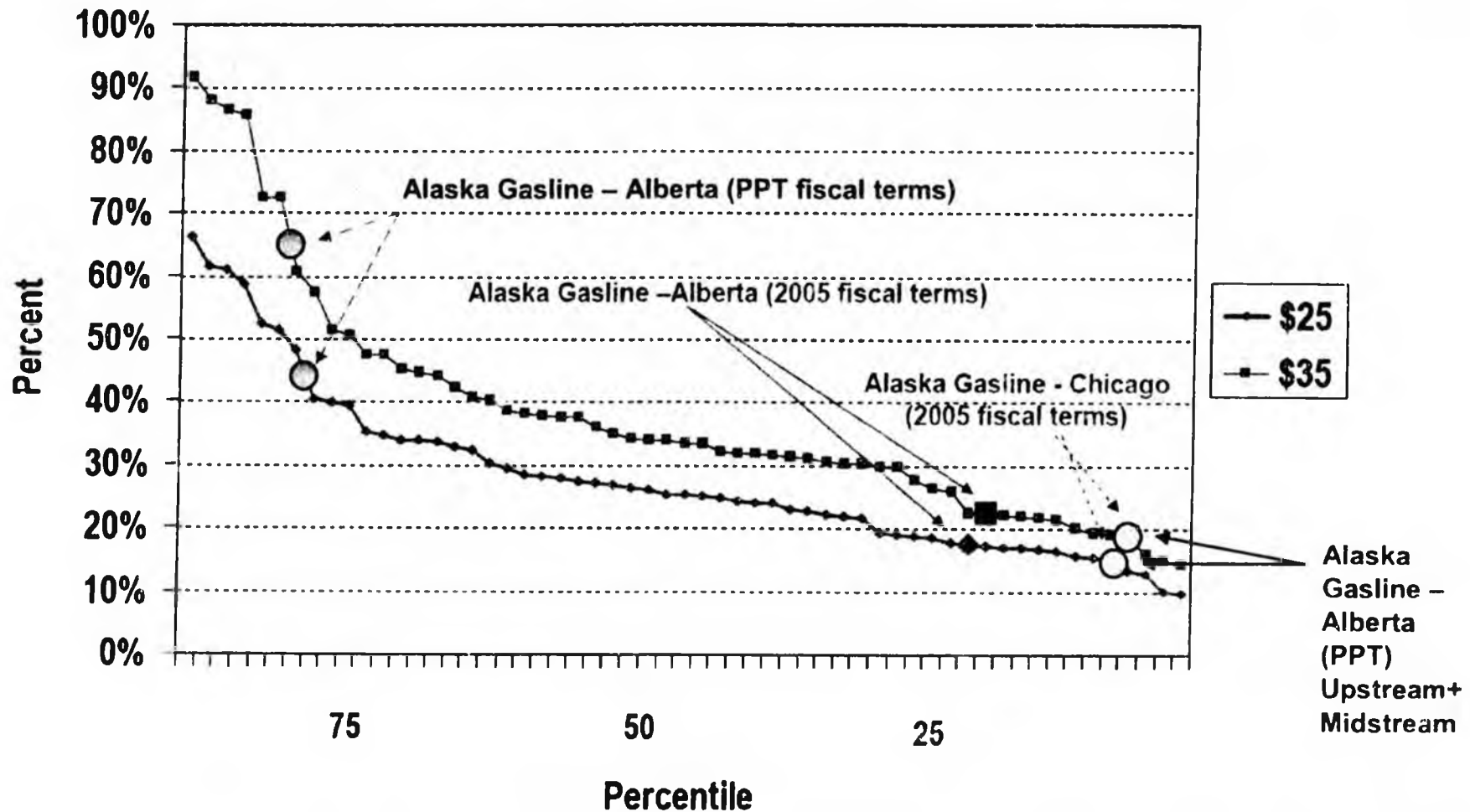


Project comparison data from EconOne presentation to LB&A Committee, 6/14/06. EconOne data assume 100% Producer pipeline ownership, ~\$15B Alberta project; upstream return data assumes 0% pipeline ownership.

Current Gasline Economics Internal Rate of Return (IRR) (\$35 and \$25 oil and 6/1 oil/gas ratio)



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Project comparison data from EconOne presentation to LB&A Committee, 6/14/06. EconOne data assume 100% Producer pipeline ownership, ~\$15B Alberta project; upstream return data assumes 0% pipeline ownership.

Why Pipeline Ownership?

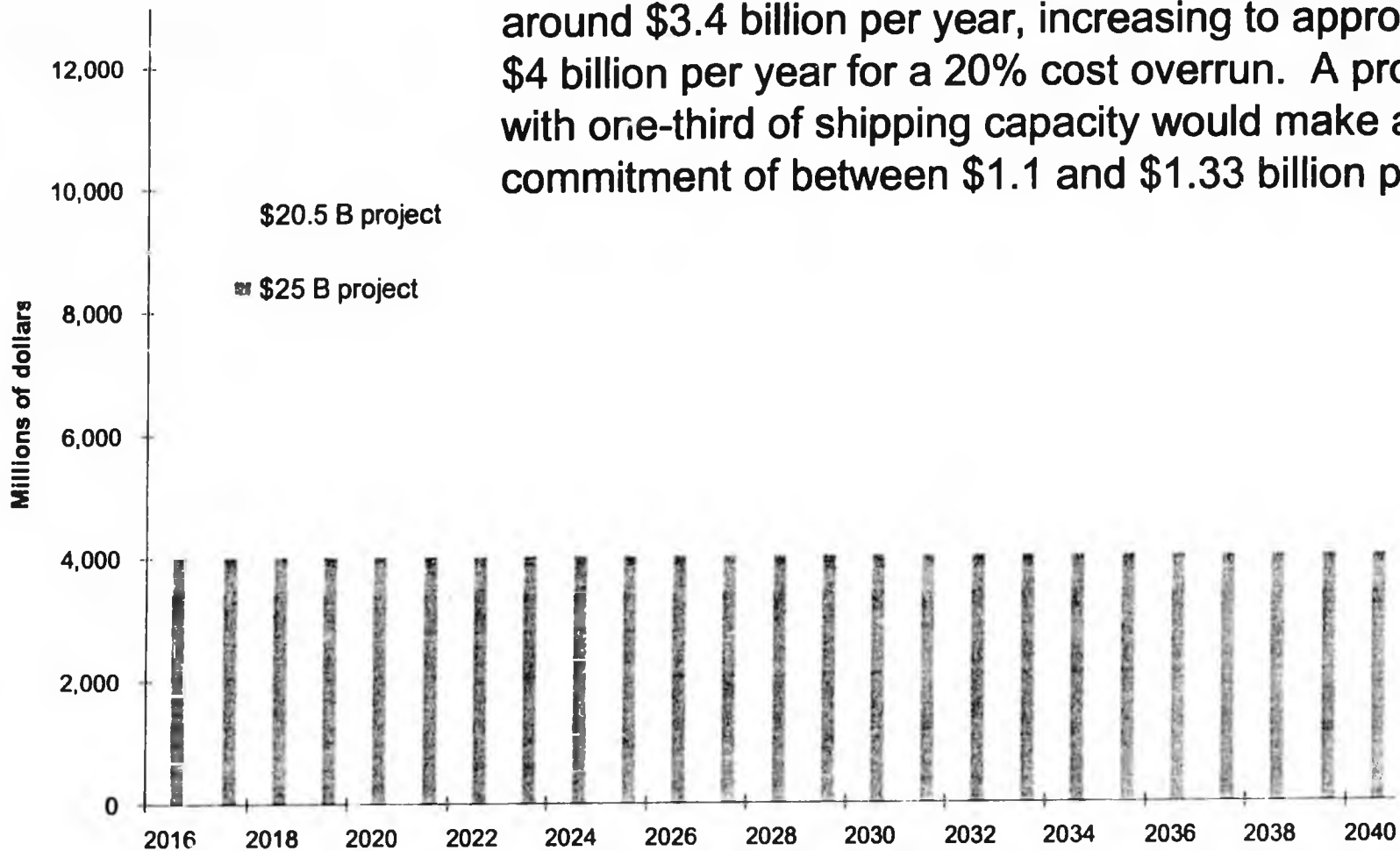


- Producers the only entities that can do it?
- Need to control costs? *clearly need council need*
- FT = Debt? *accounting profits* [*market views*]
- Control over pipeline terms?
- Bargaining leverage with state?

FT contracts: nominal dollar size of obligation



The total financial commitment for the producers would be around \$3.4 billion per year, increasing to approximately \$4 billion per year for a 20% cost overrun. A producer with one-third of shipping capacity would make a financial commitment of between \$1.1 and \$1.33 billion per year.

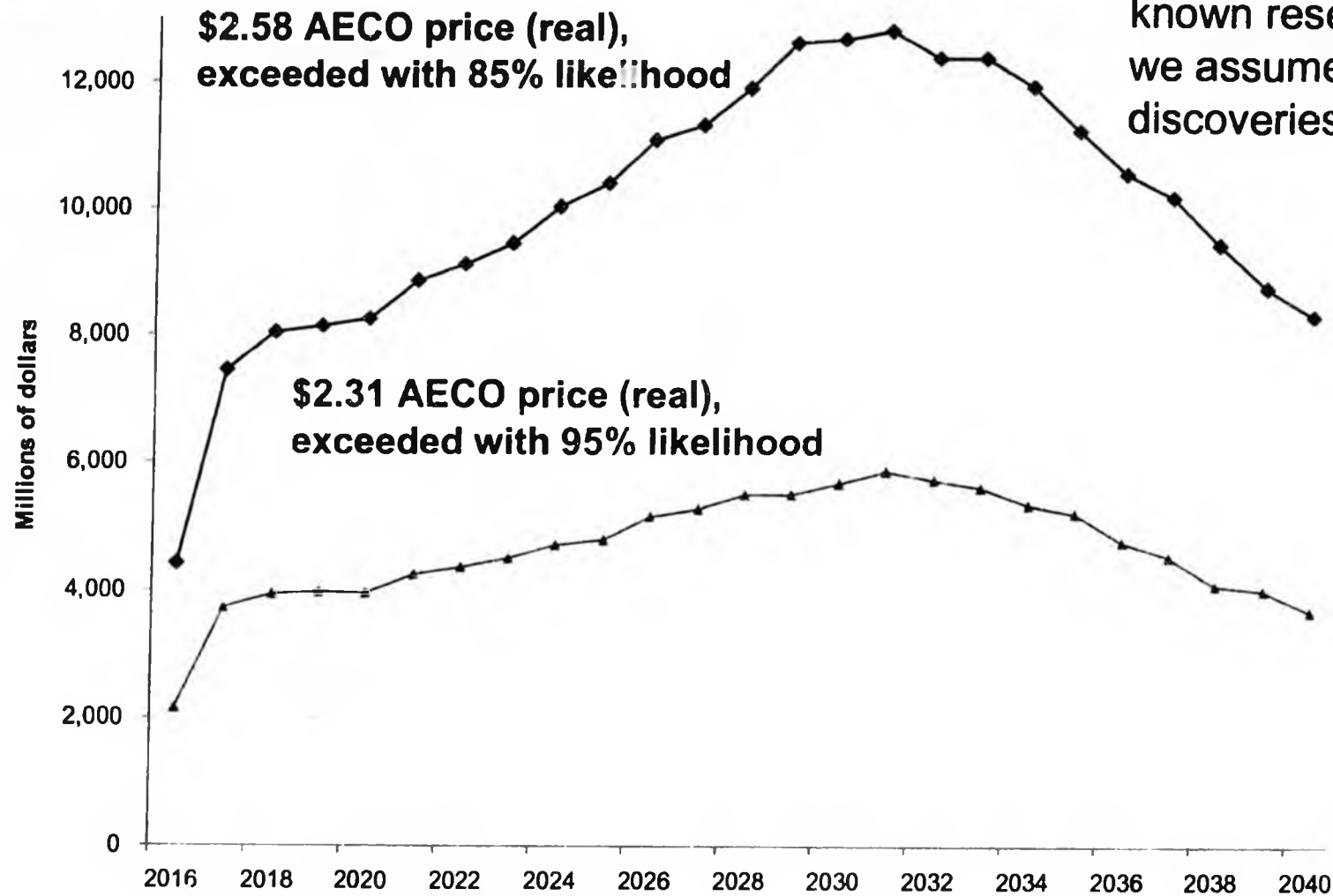


FT contracts (cont.): tariff in context of revenues



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Revenues declines as known reserves decline; we assume no new discoveries.



Tax increase effects on NPV

→ No fiscal certainty



Producer NPV₁₀ in billions of dollars with increase in production tax rate at start of project

	NPV ₁₀				% change		
	<u>0%</u>	<u>15%</u>	<u>30%</u>	<u>50%</u>	<u>15%</u>	<u>30%</u>	<u>50%</u>
\$3.50	3.8	3.6	3.3	3.0	-6.4%	-12.8%	-21.3%
\$4.00	5.7	5.4	5.0	4.6	-5.8%	-11.6%	-19.3%
\$4.50	7.6	7.2	6.7	6.2	-5.5%	-11.0%	-18.4%
\$5.00	9.4	8.9	8.4	7.8	-5.4%	-10.7%	-17.8%
\$5.50	11.3	10.7	10.1	9.3	-5.2%	-10.5%	-17.5%
\$6.00	13.1	12.5	11.8	10.9	-5.2%	-10.3%	-17.2%
\$6.50	14.9	14.2	13.4	12.4	-5.1%	-10.2%	-17.1%
\$7.00	16.7	15.8	15.0	13.8	-5.1%	-10.2%	-17.0%
\$7.50	18.3	17.4	16.5	15.2	-5.1%	-10.2%	-17.1%
\$8.00	19.9	18.9	17.8	16.5	-5.1%	-10.3%	-17.2%
\$8.50	21.4	20.3	19.2	17.7	-5.2%	-10.4%	-17.3%

Tax increase effects on NPV

→ Fiscal certainty 10 years



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Producer NPV₁₀ in billions of dollars with increase in production tax rate at 11th year of project

	NPV ₁₀				% change		
	<u>0%</u>	<u>15%</u>	<u>30%</u>	<u>50%</u>	<u>15%</u>	<u>30%</u>	<u>50%</u>
\$3.50	3.8	3.7	3.6	3.5	-2.9%	-5.8%	-9.7%
\$4.00	5.7	5.6	5.4	5.2	-2.5%	-5.0%	-8.4%
\$4.50	7.6	7.4	7.2	7.0	-2.3%	-4.7%	-7.8%
\$5.00	9.4	9.2	9.0	8.7	-2.2%	-4.4%	-7.4%
\$5.50	11.3	11.1	10.8	10.5	-2.1%	-4.3%	-7.1%
\$6.00	13.1	12.9	12.6	12.2	-2.1%	-4.2%	-6.9%
\$6.50	14.9	14.6	14.3	13.9	-2.0%	-4.1%	-6.8%
\$7.00	16.7	16.3	16.0	15.5	-2.0%	-4.1%	-6.8%
\$7.50	18.3	18.0	17.6	17.1	-2.0%	-4.0%	-6.7%
\$8.00	19.9	19.5	19.1	18.6	-2.0%	-4.0%	-6.7%
\$8.50	21.4	21.0	20.5	19.9	-2.0%	-4.1%	-6.8%

Tax increases effects on NPV

→ Fiscal certainty 5 years



Producer NPV₁₀ in billions of dollars with increase in production tax rate at 6th year of project

	NPV ₁₀				% change		
	<u>0%</u>	<u>15%</u>	<u>30%</u>	<u>50%</u>	<u>15%</u>	<u>30%</u>	<u>50%</u>
\$3.50	3.8	3.7	3.5	3.2	-4.7%	-9.3%	-15.4%
\$4.00	5.7	5.5	5.2	4.9	-4.1%	-8.2%	-13.6%
\$4.50	7.6	7.3	7.0	6.6	-3.8%	-7.6%	-12.7%
\$5.00	9.4	9.1	8.7	8.3	-3.7%	-7.3%	-12.2%
\$5.50	11.3	10.9	10.5	10.0	-3.5%	-7.1%	-11.8%
\$6.00	13.1	12.7	12.2	11.6	-3.5%	-6.9%	-11.6%
\$6.50	14.9	14.4	13.9	13.2	-3.4%	-6.8%	-11.4%
\$7.00	16.7	16.1	15.5	14.8	-3.4%	-6.8%	-11.3%
\$7.50	18.3	17.7	17.1	16.3	-3.4%	-6.8%	-11.3%
\$8.00	19.9	19.2	18.5	17.6	-3.4%	-6.8%	-11.4%
\$8.50	21.4	20.7	19.9	18.9	-3.4%	-6.9%	-11.4%

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Note: Oil effects excluded