

September 20, 1990

Mr. A. W. Risley
Manager, International and Utility Sales
Phillips 66 Natural Gas Company
890C Plaza Office Building
Bartlesville, Oklahoma 74004
USA

Mr. F. R. Adamchak
Manager, International Natural Gas
Marathon Oil Company
P.O.Box 3128
Houston, Texas 77253
USA

APPLICATION OF LNG PRICING FORMULA

Dir Sirs,

We refer to the FIRST AMENDATORY AGREEMENT dated as of September 19th, 1990 ("Agreement"), and the NEW MEMORANDUM ON ADJUSTMENT dated as of September 19th, 1990 ("Memorandum"), relating to the LIQUEFIED NATURAL GAS SALE AND PURCHASE EXTENSION AGREEMENT dated as of June 17th, 1988.

With respect to the application of the LNG pricing formula specified in the Agreement and the Memorandum, our understanding is as follows:

1. Definition of "JCC"

JCC includes the following items indicated in the "Customs Tariff Schedules of Japan" published by Japan Tariff Association.

Petroleum oils and oils obtained from bituminous minerals, crude Code No. :2709.00-000
Raw oils Code No. :2710.00-162, 164, 166, 169, 172, 174, 179, 182, 184 and 189

Should a significant change occur in the definition or weighting of raw oils compared to the total, Sellers and Buyers shall discuss in good faith the impact of such change on the price of LNG.

2. Calculation of "JCC"

$$JCC = \frac{X \times 1,000 \times 0.15898}{Y \times Z}, \text{ US\$/BBL} \quad \text{(rounded to two decimal places)}$$

- X: Please look at the following schedule.
 Y: Please look at the following schedule.
 Z: Foreign exchange rate (imports) indicated in "Japan Exports & Imports Monthly"
 0.15898: Conversion factor from "kl" to "BBL"

Code No.	Value (1,000 yen)	Quantity (kl)
2709.00-000	A	a
2710.00-162	B	b
2710.00-164	C	c
2710.00-166	D	d
2710.00-169	E	e
2710.00-172	F	f
2710.00-174	G	g
2710.00-179	H	h
2710.00-182	I	i
2710.00-184	J	j
2710.00-189	K	k
SUM	X	Y

3. Calculation of "J"

$$J = \frac{O + P + Q}{3}, \text{ US\$/BBL (rounded to two decimal places)}$$

where:

O = JCC (n-2), US\$/BBL

P = JCC (n-1), US\$/BBL

Q = JCC (n), US\$/BBL

"n" being the calendar month of delivery

"n-1" being the first calendar month prior to the calendar month of delivery

"n-2" being the second calendar month prior to the calendar month of delivery

4. Calculation of "Pn"

(1) $15 \leq J < 17.5$, US\$/BBL

$$\langle 1 \rangle E_n = 592.8 \times \frac{(J-0.68)}{34.48} \text{ (rounded to one decimal place)}$$

$$\langle 2 \rangle A_n = 30 \times \frac{(20-J)}{(20-15)} \text{ (rounded to one decimal place)}$$

$$\langle 3 \rangle S_n = 8.5 + 3.9 \times \frac{(J-17.5)}{(17.5-15)} \text{ (rounded to one decimal place)}$$

$$\langle 4 \rangle P_n = E_n + A_n + S_n$$

(2) $17.5 \leq J \leq 28.5, \text{US\$/BBL}$

$$\langle 1 \rangle B_n = 592.8 \times \frac{(J-0.68)}{34.48} \quad (\text{rounded to one decimal place})$$

$$\langle 2 \rangle A_n = 30 \times \frac{(23-J)}{(28.5-17.5)} \quad (\text{rounded to one decimal place})$$

$$\langle 3 \rangle S_n = 8.5$$

$$\langle 4 \rangle P_n = B_n + A_n + S_n$$

(3) $28.5 < J \leq 31, \text{US\$/BBL}$

$$\langle 1 \rangle B_n = 592.8 \times \frac{(J-0.68)}{34.48} \quad (\text{rounded to one decimal place})$$

$$\langle 2 \rangle A_n = 30 \times \frac{(26-J)}{(31-26)} \quad (\text{rounded to one decimal place})$$

$$\langle 3 \rangle S_n = 8.5$$

$$\langle 4 \rangle P_n = B_n + A_n + S_n$$

5. Format of the monthly price telex

Subject: Alaska LNG pricing monthly statement for the month of "n" of the year _____.

Based on the FIRST AMENDATORY AGREEMENT and the NEW MEMORANDUM ON ADJUSTMENT, dated as of September 19th, 1990, we confirm Alaska LNG price as follows:

- <1> The determined price of LNG sold and delivered during the month of "n" of the year _____ is _____ US cents/MMBtu.
- <2> The provisional price for LNG sold and delivered during the month of "n+3" of the year _____ is _____ US cents/MMBtu.

<Note>

Month : "n-2" "n-1" "n"

JCC US\$/BBL : 0 P Q

Price formula: $P_n = B_n + A_n + S_n$

Where: $J = \frac{0 + P + Q}{3} = \text{_____ US\$/BBL}$

$$B_n = 592.8 \times \frac{(J-0.68)}{34.48} = \text{_____ US cents/MMBtu}$$

$$A_n = (\text{ex.}) 30 \times \frac{(26 - J)}{(31 - 26)} = \underline{\hspace{2cm}} \text{ US\$ cents/MMBtu}$$

$$S_n = (\text{ex.}) 8.5 \text{ US\$ cents/MMBtu}$$

$$\text{Therefore: } P_n = B_n + A_n + S_n = \underline{\hspace{2cm}} \text{ US cents/MMBtu}$$

6. Format of debit / credit note

Subject: Debit / credit amount for the month of "n" of the year

- <1> The provisional price for LNG sold and delivered during the month of "n" of the year was US cents/MMBtu.
- <2> The determined price of LNG sold and delivered during the month of "n" of the year is US cents/MMBtu.
- <3> Debit / credit amount calculated with respect to the difference between the determined price and provisional price of LNG sold and delivered during the month of "n" of the year is:

Tokyo Electric		US\$
Tokyo Gas		US\$
TOTAL :		US\$

This balance of payment shall be settled in the invoice for the cargo for (ship name, cargo number).

If you agree to the foregoing, please so confirm by signing in the space indicated below and returning two copies thereof to us.

Yours faithfully,

BUYERS:

THE TOKYO ELECTRIC POWER
COMPANY, INCORPORATED

By: Koichi Nemoto
General Manager,
LNG Project Office,
Fuel Department

TOKYO GAS CO., LTD.

By: Mikio Nose
General Manager
Raw Materials Department

ACCEPTED AND AGREED:

SELLERS:

PHILLIPS 66 NATURAL GAS COMPANY

By: Bill Kistly
Manager, International
& Utility Sales

MARATHON OIL COMPANY

By: J.R. Adamcik
Manager
International Natural Gas

Dated September 20th , 1990

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SECOND AMENDATORY AGREEMENT

THIS AGREEMENT made and entered into by and between Phillips Alaska Natural Gas Corporation (Phillips) as successor to Phillips 66 Natural Gas Company and Phillips Petroleum Company, corporations incorporated under the laws of the State of Delaware, the United States of America and Marathon Oil Company (Marathon), a corporation incorporated under the laws of the State of Ohio, the United States of America, hereinafter collectively referred to as "Sellers", and The Tokyo Electric Power Company, Incorporated (Tokyo Electric) and Tokyo Gas Co., Ltd. (Tokyo Gas), corporations incorporated under the laws of Japan, hereinafter collectively referred to as "Buyers".

WITNESSETH:

Sellers and Buyers have discussed increasing annual contract quantity (ACQ) applicable under the Liquefied Natural Gas Sale and Purchase Extension Agreement dated the 17th day of June, 1988, (hereinafter referred to as "Extension Agreement"). Sellers are undertaking modifications to manufacture incremental LNG and will have surplus shipping capacity upon delivery of the new LNG tankers now under construction. Buyers have expressed their interest in purchasing such incremental LNG. NOW, THEREFORE, in consideration of the mutual and dependent promises herein contained, Sellers and Buyers hereby agree as follows:

- Article V, Sections 5.1 and 5.2c in the Extension Agreement shall be deleted and replaced with the following respectively:

"5.1 Annual Contract Quantity

The annual contract quantity of LNG which Sellers agree to sell and deliver and Buyers agree to purchase and receive under this Extension Agreement shall be denominated in BTU's and shall be as per the following table for the contract years commencing April 1 of the years shown:

<u>Contract Year</u>	<u>Total</u>		<u>Tokyo Electric</u>		<u>Tokyo Gas</u>	
	<u>Btu's</u>	<u>Metric Tons</u>	<u>Btu's</u>	<u>Metric Tons</u>	<u>Btu's</u>	<u>Metric Tons</u>
	<u>Trillion</u>	<u>Thousand</u>	<u>Trillion</u>	<u>Thousand</u>	<u>Trillion</u>	<u>Thousand</u>
1989-1992	52.0	988.0	39.0	741.0	13.0	247.0
1993	56.0	1,064.0	42.0	798.0	14.0	266.0
1994-2003	64.4	1,224.0	48.3	918.0	16.1	306.0

Metric Tons are approximations for information purposes and shall in no way affect this Extension Agreement.

In reference to Section 4.1 of the Extension Agreement, Sellers have contracted for the purchase of two (2) new LNG tankers scheduled for delivery during June and December 1993. If Sellers anticipate any material delay in new LNG tankers introduction beyond these dates, Sellers shall notify Buyers of the delay, and Sellers and Buyers shall meet and discuss the necessary changes to the annual contract quantity for the contract years 1993 and 1994.

On or before March 31, 1994, Sellers shall have the option, upon written notice to Buyers, to change the annual contract quantity from contract year 1997 through contract year 2003. Prior to providing such written notice to Buyers, Sellers and Buyers shall meet to discuss Sellers' election to change the annual contract quantity. Thereafter, upon providing the written notice to Buyers, the annual contract quantity of LNG from contract year 1997 through contract year 2003 which Sellers agree to sell and deliver and Buyers agree to purchase and receive under this Extension Agreement shall be as per the following table:

<u>Total</u>		<u>Tokyo Electric</u>		<u>Tokyo Gas</u>	
Btu's	Metric Tons	Btu's	Metric Tons	Btu's	Metric Tons
<u>Trillion</u>	<u>Thousand</u>	<u>Trillion</u>	<u>Thousand</u>	<u>Trillion</u>	<u>Thousand</u>
57.5	1,092.0	43.125	819.0	14.375	273.0

Metric Tons are approximations for information purposes and shall in no way affect this Extension Agreement.

Prior to the arrival of a cargo of LNG at the LNG berthing facilities used jointly by Buyers, Buyers shall declare together to Sellers the ratio, totalling one hundred (100) percent, in which such cargo is to be allocated between Buyers.

For the purpose of calculating the quantity delivered in a contract year, delivery and receipt of all LNG unloaded from any LNG tanker shall be deemed to have been made on the day on which unloading of that LNG was commenced."

"5.2c Accumulated Annual Underlift Quantity

All annual underlift quantities and annual overlift quantities shall be accumulated at the end of each contract year and the accumulated annual overlift quantity shall be subtracted from the accumulated annual underlift quantity to determine the net accumulated underlift quantity, if any. Buyers shall limit the net accumulated underlift quantity to a maximum of sixty trillion, five hundred thirty-four billion (60,534,000,000,000) Btu's, as for Tokyo Electric to a maximum of forty-five trillion,

four hundred billion, five hundred million (45,400,500,000,000) Btu's and as for Tokyo Gas to a maximum of fifteen trillion, one hundred thirty-three billion, five hundred million (15,133,500,000,000) Btu's. If pursuant to Section 5.1 above, Sellers provide notice to change the annual contract quantity from the contract year 1997, Buyers shall limit the net accumulated underlift quantity to a maximum of fifty-seven trillion, three hundred fourteen billion (57,314,000,000,000) Btu's, as for Tokyo Electric to a maximum of forty-two trillion, nine hundred eighty-five billion, five hundred million (42,985,500,000,000) Btu's and as for Tokyo Gas to a maximum of fourteen trillion, three hundred twenty-eight billion, five hundred million (14,328,500,000,000) Btu's.

Buyers shall not exercise their rights under Section 5.2a above at any time during any contract year if such exercise would result in a net accumulated underlift quantity exceeding the maximums mentioned above at the end of that contract year. Buyers shall endeavor to bring the net accumulated underlift quantity to zero (0) by the end of this Extension Agreement."

2. The provisions of the Extension Agreement other than those specified in this Agreement shall remain as they are.
3. **APPROVAL AND AUTHORIZATION OF GOVERNMENTAL REGULATORY BODIES:**

3.1 Endeavors to obtain Approvals and Authorizations

Sellers shall use their best endeavors to obtain forthwith any and all approvals and authorizations required by any legally constituted regulatory bodies of the United States of America, or deemed necessary by Sellers to allow Sellers to commence and continue deliveries of LNG to Buyers under this Agreement, furnishing Buyers with certified copies of all such governmental approvals and authorizations, together with certified copies of rules, regulations and restrictions promulgated by each regulatory body in connection with such approvals and authorizations.

If Sellers fail to obtain by December 31, 1992, the necessary governmental approvals and authorizations to modify the plant as necessary and to increase the annual contract quantity in conformance with this Agreement, Sellers or Buyers may terminate this Agreement at any time thereafter by written notice to the other of their intent to terminate, so long as such notice is given prior to obtaining of such approvals and authorizations. Such termination will not affect the terms and conditions of the Extension Agreement. Further, if any governmental approval or authorization issued imposes terms or conditions unreasonable to Sellers, then Sellers may terminate this Agreement by written notice to Buyers within thirty (30) days after issuance of the said final governmental approval or authorization.

Both of Sellers or both of Buyers shall act jointly in terminating this Agreement under this Section.

3.2 Liability of Termination

Should either Sellers or Buyers exercise the right under Section 3.1 to terminate this Agreement, the parties exercising the right shall not be liable to the other parties for any losses, damages or expenses incurred by such other parties as a result of the termination of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in good faith, by their respective duly authorized officers as of the date set forth below.

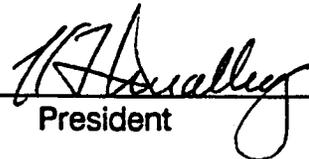
BUYERS:

**THE TOKYO ELECTRIC POWER
COMPANY, INCORPORATED**

By: 
President & Director

SELLERS:

**PHILLIPS ALASKA NATURAL GAS
CORPORATION**

By:  
President

TOKYO GAS CO., LTD.

By: 
President & Director

MARATHON OIL COMPANY

By:  
Executive Vice President

DATED: February 19th, 1992.

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March 30, 1993

Mr. K. Nemoto
General Manager
LNG Project Office
The Tokyo Electric Power Company, Incorporated
1-3, Uchisaiwai-Cho, 1-chome,
Chiyoda-ku, Tokyo 100
Japan

Mr. A. Ohnuma
General Manager
Gas Resources Department
Tokyo Gas Co., Ltd.
5-20, Kaigan, 1-chome,
Minato-ku, Tokyo 105
Japan

Dear Sirs:

By the First Amendatory Agreement dated September 19, 1990 and the New Memorandum on Adjustment dated September 19, 1990, Sellers and Buyers mutually agreed to the current formula for determining the sales price of Alaska LNG. Effective April 1, 1993 the special adjustment factor " S_n ", as specified in the New Memorandum on Adjustment, will expire.

Pursuant to Article 8.2 of the Liquefied Natural Gas Sale and Purchase Extension Agreement dated June 17, 1988, Sellers request that Sellers and Buyers meet to discuss the comparability of Alaska LNG sales pricing with the pricing of other projects supplying LNG to Japan under other long-term contracts.

Sellers propose that such discussions shall apply to the pricing of LNG sold and delivered from April 1, 1993 onward.

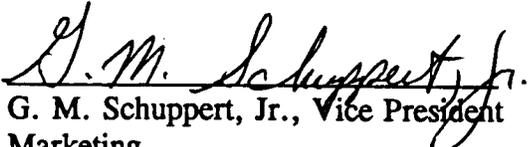
Sellers hereby propose to use the pricing formula in effect March 31, 1993 for purposes of interim pricing from April 1, 1993 onward.

Sellers propose that pricing determined as a result of such comparability discussions shall be applied to LNG sold and delivered from April 1, 1993 onward and any payment balance resulting from the difference in prices so determined and the proposed interim pricing formula shall be settled retroactively.

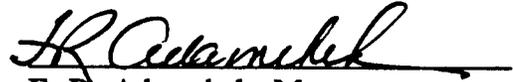
If Buyers agree with the foregoing proposal, it is requested that Buyers so indicate by signing in the appropriate space provided below and returning a fully executed copy of this letter to Sellers.

Sincerely,

PHILLIPS ALASKA NATURAL GAS
CORPORATION


G. M. Schuppert, Jr., Vice President
Marketing

MARATHON OIL COMPANY


F. R. Adamchak, Manager
International Natural Gas

ACCEPTED AND SIGNED as of this 3rd day of March, 1993

THE TOKYO ELECTRIC POWER COMPANY,
INCORPORATED


K. Nemoto
General Manager
LNG Project Office

TOKYO GAS CO., LTD.


A. Ohnuma
General Manager
Gas Resources Department

12

May 17, 1993

Mr. K. Nemoto
General Manager
LNG Project Office
The Tokyo Electric Power Company, Incorporated
1-3, Uchisaiwai-cho, 1-chome,
Chiyoda-ku, Tokyo 100
Japan

Mr. A. Ohnuma
General Manager
Gas Resources Department
Tokyo Gas Co., Ltd.
5-20, Kaigan, 1-chome,
Minato-ku, Tokyo 105
Japan

Dear Sirs,

In our recent discussion in Japan, Buyers and Sellers discussed a course of action which will allow Sellers more flexibility in aggregating natural gas supplies. Such additional flexibility will place Sellers in a better position to expand future LNG deliveries to Buyers.

Accordingly, as requested by Sellers in order to facilitate their long term planning including exploration and production, Buyers elect to increase the annual quantity of Alaskan LNG to be delivered during the 10-year period commencing with contract year 1994 by six percent (6%) above the ACQ, provided Sellers submit written acceptance of such increase to Buyers on or before October 1, 1993. If Sellers provide written acceptance of their election to supply the additional six percent (6%) of Alaskan LNG by October 1, 1993, then Buyers and Sellers shall meet as soon as possible thereafter to discuss any revisions that may be needed to amend the Liquefied Natural Gas Sale and Purchase Extension Agreement dated June 17, 1988 (hereinafter referred to as Extension Agreement), if necessary, to reflect this increased volume. It is understood that after the commencement of delivery of the additional six percent (6%), Buyers may reduce LNG purchases by up to 7.6 trillion Btus in any contract year subject to the limitations contained in Section 5.2c of the Extension Agreement. However, if after discussion with Buyers, Sellers furnish written notice to Buyers in accordance with the provisions contained in the Second Amendatory Agreement dated February 19, 1992 electing to reduce the ACQ to 57.5 trillion Btus beginning in contract year 1997, then Buyers are under no obligation to purchase and receive the additional six percent (6%) contemplated in this letter from contract year 1997 through contract year 2003.

May 17, 1993
Page Two

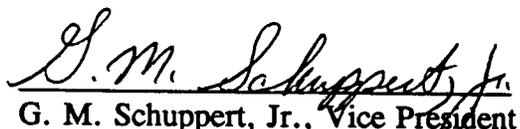
As further requested by Sellers, Buyers elect to extend the Extension Agreement by an additional five (5) years commencing April 1, 2004 until and including March 31, 2009 under the same terms and provisions of the current agreement, provided Sellers submit written acceptance of such extension to Buyers on or before March 31, 2001. If Sellers fail to submit the written acceptance of such extension to Buyers on or before March 31, 2001, Section 14.1 of the Extension Agreement shall be reactivated. In order to facilitate the Buyers' planning process regarding such extension, Sellers will periodically update Buyers commencing April 1, 1998 on situation of activities necessary to extend the contract.

If the foregoing is acceptable to Buyers, please so indicate by signing in the space provided below and returning a fully executed copy of this letter to Sellers.

We look forward to increasing our commitment to our valued customers.

Sincerely yours,

PHILLIPS ALASKA NATURAL GAS
CORPORATION


G. M. Schuppert, Jr., Vice President
Marketing

MARATHON OIL COMPANY


F. R. Adamchak, Manager
International Natural Gas

ACCEPTED AND SIGNED as of this 17th day of May, 1993

THE TOKYO ELECTRIC POWER COMPANY,
INCORPORATED


K. Nemoto, General Manager
LNG Project Office

TOKYO GAS CO., LTD.


A. Ohnuma, General Manager
Gas Resources Department

13

July 2, 1993

Mr. K. Takasaka
General Manager
LNG Project Office
The Tokyo Electric Power Company, Incorporated
No. 1-3, 1-chome, Uchisaiwai-cho
Chiyoda-ku, Tokyo 100, JAPAN

Mr. A. Ohnuma
General Manager
Gas Resources Department
Tokyo Gas Co., Ltd.
The Tokyo Gas Building
5-20, Kaigan 1-chome
Minato-ku, Tokyo 105, JAPAN

**The Formulae Used for Determining the Quantity
of LNG delivered by The New Alaska LNG Tankers**

Dear Sirs:

The total quantity of Btu's delivered from Sellers to Buyers has been determined in accordance with MEMORANDUM OF AGREEMENT dated the 28th day of September 1989.

On the occasion of the introduction of the new LNG tankers, Sellers hereby propose to make further revisions to Section 4.5 and 4.6 of Article IV, Article V and Table I in Exhibit A of the Liquefied Natural Gas Sale and Purchase Extension Agreement dated the 17th day of June 1988 (hereinafter referred to as "Extension Agreement") revised by the above MEMORANDUM OF AGREEMENT for determining the quantity of LNG delivered by the new LNG tankers.

Sellers also propose that the following formulae shall be applied to determine the quantity of LNG delivered by the new LNG tankers, until such revisions to Section 4.5 and 4.6 of Article IV, Article V, and Table I in Exhibit A of the Extension Agreement are agreed and made between Sellers and Buyers.

1. The following formulae shall be used to determine the total quantity of Btu's delivered from Sellers to Buyers.

(a) Determination of Total Btu's delivered

The total quantity of British Thermal Units delivered shall be calculated by use of the following formula:

$$Q = V \times D \times P - Q_r$$

Where:

Q: is the quantity of LNG delivered in British Thermal Units rounded to the nearest million Btu's.

V: is the volume of LNG unloaded, expressed in cubic meters, calculated by subtracting V_h (corrected to initial conditions per Section 4.3 in Exhibit A of the Extension Agreement) from V_b.

V_b: is the volume of LNG in the tanks of the LNG tanker immediately before unloading, rounded to the nearest one-tenth (0.1) cubic meter.

V_h: is the volume of LNG in the tanks of the LNG tanker immediately after unloading, rounded to the nearest one-tenth (0.1) cubic meter.

D: is the density of LNG unloaded, refer to paragraph (b) below.

P: is the gross heating value of LNG unloaded, refer to paragraph (c) below.

Q_r: is the quantity of British Thermal Units of the vapor which displaced the volume of LNG unloaded from the tanks of the LNG tanker, refer to paragraph (d) below.

(b) LNG Density Determination

The density of LNG shall be determined by use of the following formula:

$$D = \frac{\sum (X_i \times M_i)}{\sum (X_i \times V_i) - X_M \times \left(K1 + \frac{(K2 - K1) \times X_N}{0.0425} \right)}$$

Where:

- D: is the density of LNG unloaded in kilograms per cubic meter at temperature T_L rounded to two (2) decimal places.
- X_i : is the molar fraction of component (i) expressed to four (4) decimal places as obtained by the analysis method provided in Exhibit A of the Extension Agreement.
- M_i : is the molecular weight of component (i) as given in Table I.B attached hereto.
- V_i : is the Saturated Liquid Molar Volume factor in cubic meters per kilogram-mol at temperature T_L and shall be obtained by linear interpolation of the data in Table II attached hereto and rounded to six (6) decimal places.
- X_M : is the molar fraction of methane expressed to four (4) decimal places as obtained by the analysis method provided in Exhibit A of the Extension Agreement.
- X_N : is the molar fraction of nitrogen rounded to four (4) decimal places as obtained by the analysis method provided in Exhibit A of the Extension Agreement.
- K1: is the volume correction factor in cubic meters per kilogram-mol at temperature T_L and shall be obtained by linear interpolation of the data for K1 in Table III attached hereto and rounded to six (6) decimal places.
- K2: is the volume correction factor in cubic meters per kilogram-mol at temperature T_L and shall be obtained by linear interpolation of the data for K2 in Table III attached hereto and rounded to six (6) decimal places.
- T_L : is the temperature of LNG in the tanks of the LNG tanker immediately prior to unloading in degrees Kelvin. The readings of temperature shall be made by the temperature gauges in each cargo tank to the nearest one-tenth (0.1) degree Centigrade. The arithmetic mean of the values from all the tanks shall be converted from degree Centigrade into degrees Kelvin by using the conversion factor given in Table IV attached hereto and rounded to the nearest one-tenth (0.1) degree Kelvin.

(c) Gross Heating Value Determination of LNG Unloaded

Gross heating value (mass basis) of LNG unloaded shall be calculated by the following formula:

$$P = \sum \left(H_i \times \frac{(X_i \times M_i)}{\sum (X_i \times M_i)} \right)$$

Where:

P: is the gross heating value of LNG unloaded, stated in British Thermal Units per kilogram rounded to the nearest Btu per kilogram.

H_i: is the gross heating value of component (i) stated in British Thermal Units per kilogram as given in Table I.A attached hereto.

X_i: is the molar fraction of component (i) expressed to four (4) decimal places as obtained by the analysis method provided in Exhibit A of the Extension Agreement.

M_i: is the molecular weight of component (i) as given in Table I.B attached hereto.

(d) Gross Heating Value of Displacement Vapor Determination

The gross heating value of the vapor displacing LNG unloaded shall be determined by use of the following formula:

$$Q_r = V \times \frac{288.7}{T_v} \times \frac{P_v}{1.033} \times 35,668$$

Where:

Q_r: is the quantity of British Thermal Units of vapor which displaced the volume of LNG unloaded from the tanks of the LNG tanker and rounded to the nearest Btu.

T_v: is the temperature of vapor which displaced the volume of LNG unloaded from the tanks of the LNG tanker immediately after unloading in degrees Kelvin. The readings of temperature shall be made by the temperature gauges in each cargo tank and the arithmetic mean of the values from all the tanks shall be rounded to the nearest one-tenth (0.1)

degree Centigrade. Converting degrees Centigrade into degrees Kelvin shall be made by using the conversion factor given in Table IV attached hereto, rounded to the nearest one-tenth (0.1) degree Kelvin.

P_v : is the absolute pressure of LNG vapor in the tanks of the LNG tanker immediately after unloading in kilograms per square centimeter. The reading of pressure shall be made by the pressure gauge attached to each tank top, and the arithmetic mean of the values from all the tanks shall be rounded to three (3) decimal places.

2. Exhibit A of the Extension Agreement shall be applied to the procedures not covered by Section 1 above.

If Buyers agree with the foregoing proposal, it is requested that Buyers so indicated by signing in the appropriate space provided below and returning a fully executed copy of this letter to Sellers.

Sincerely yours,

**PHILLIPS ALASKA NATURAL GAS
CORPORATION**


G. M. Schuppert, Jr., Vice-President
Marketing

MARATHON OIL COMPANY

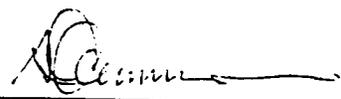

F. R. Adamchak, Manager
International Natural Gas

ACCEPTED AND SIGNED as of this 5th day of July, 1993

**THE TOKYO ELECTRIC POWER,
COMPANY, INCORPORATED**


K. Takasaka, General Manager
LNG Project Office

TOKYO GAS CO., LTD.


A. Ohnuma, General Manager
Gas Resources Department

T A B L E I
PHYSICAL DATA

A. GROSS HEAT OF COMBUSTION

COMPONENT	Btu/lb Vapor at 60°F	Btu/kg Vapor at 60°F
METHANE	23,891	52,671
ETHANE	22,333	49,236
PROPANE	21,653	47,737
ISOBUTANE	21,232	46,809
N-BUTANE	21,300	46,958
ISOPENTANE	21,043	46,392
N-PENTANE	21,085	46,484
N-HEXANE	20,943	46,171
NITROGEN	0	0
OXYGEN	0	0
CARBON DIOXIDE	0	0

SOURCE : GPA 2145-86

II. MOLECULAR WEIGHT

COMPONENT	MOLECULAR WEIGHT
METHANE	16.043
ETHANE	30.070
PROPANE	44.097
BUTANES	58.123
PENTANES	72.150
HEXANES	86.177
NITROGEN	28.013
OXYGEN	31.999
CARBON DIOXIDE	44.010

SOURCE : GPA 2145-86

T A B L E II

SATURATED LIQUID VOLUMES FOR MODIFIED KLOSEK AND MCKINLEY METHOD (REVISED)
m³/kg-mol

T (K)	C114	C2116	C3118	N-C4	I-C4	N-C5	I-C5	N2	O2 *	CO2 **
90	0.035441	0.046081	0.060461	0.074708	0.076084	0.089173	0.089243	0.037543	0.027782	0.034059
92	0.035649	0.046235	0.060632	0.074891	0.076274	0.089379	0.089454	0.038081	0.028269	0.034107
94	0.035861	0.046390	0.060804	0.075075	0.076466	0.089586	0.089666	0.038650	0.028524	0.034154
96	0.036077	0.046547	0.060977	0.075259	0.076659	0.089793	0.089878	0.039254	0.028787	0.034202
98	0.036298	0.046704	0.061151	0.075445	0.076853	0.090000	0.090091	0.039897	0.029058	0.034250
100	0.036524	0.046863	0.061325	0.075631	0.077047	0.090208	0.090304	0.040586	0.029338	0.034297
102	0.036755	0.047023	0.061501	0.075818	0.077243	0.090416	0.090518	0.041327	0.029629	0.034345
104	0.036992	0.047185	0.061677	0.076006	0.077440	0.090624	0.090733	0.042128	0.029929	0.034393
106	0.037234	0.047348	0.061855	0.076194	0.077637	0.090833	0.090948	0.043002	0.030242	0.034442
108	0.037481	0.047512	0.062033	0.076384	0.077836	0.091042	0.091163	0.043963	0.030566	0.034490
110	0.037735	0.047678	0.062212	0.076574	0.078035	0.091252	0.091379	0.045031	0.030904	0.034539
112	0.037995	0.047845	0.062392	0.076765	0.078236	0.091462	0.091596	0.046231	0.031258	0.034587
114	0.038262	0.048014	0.062574	0.076957	0.078438	0.091673	0.091814	0.047602	0.031628	0.034636
116	0.038536	0.048184	0.062756	0.077150	0.078640	0.091884	0.092032	0.049179	0.032015	0.034685
118	0.038817	0.048356	0.062939	0.077344	0.078844	0.092095	0.092251	0.050885	0.032423	0.034734
120	0.039106	0.048529	0.063124	0.077539	0.079049	0.092307	0.092470	0.052714	0.032854	0.034783
122	0.039404	0.048704	0.063309	0.077734	0.079255	0.092520	0.092690	0.054679	0.033308	0.034833
124	0.039710	0.048881	0.063496	0.077931	0.079462	0.092733	0.092911	0.056797	0.033792	0.034882
126	0.040025	0.049059	0.063684	0.078128	0.079671	0.092947	0.093133	0.059085	0.034308	0.034932
128	0.040350	0.049239	0.063873	0.078327	0.079880	0.093161	0.093355	0.061565	0.034859	0.034982
130	0.040685	0.049421	0.064063	0.078526	0.080091	0.093376	0.093578	0.064263	0.035446	0.035032

SOURCES: NBS MONOGRAPH 172

LIQUEFIED NATURAL GAS DENSITIES:
SUMMARY OF RESEARCH PROGRAM AT THE
NATIONAL BUREAU OF STANDARDS

* : ASRDI OXYGEN TECHNOLOGY SURVEY
VOLUME 1: THERMOPHYSICAL PROPERTIES

** : INTERNATIONAL THERMODYNAMIC TABLES OF
THE FLUID STATE
VOLUME 3: CARBON DIOXIDE

T A B L E III

CORRECTION k1 FOR VOLUME REDUCTION OF MIXTURE

T (K)	CORRECTION k1 FOR VOLUME REDUCTION OF MIXTURE									
	m ³ /kg-mol									
	16	17	18	19	20	21	22	23	24	25
90	-0.000005	0.000120	0.000220	0.000340	0.000430	0.000515	0.000595	0.000660	0.000725	0.000795
95	-0.000006	0.000135	0.000260	0.000380	0.000500	0.000590	0.000665	0.000740	0.000810	0.000885
100	-0.000007	0.000150	0.000300	0.000425	0.000575	0.000675	0.000755	0.000830	0.000910	0.000990
105	-0.000007	0.000165	0.000340	0.000475	0.000635	0.000735	0.000840	0.000920	0.001015	0.001120
110	-0.000008	0.000190	0.000375	0.000535	0.000725	0.000835	0.000950	0.001055	0.001155	0.001245
115	-0.000009	0.000220	0.000440	0.000610	0.000810	0.000945	0.001065	0.001180	0.001280	0.001380
120	-0.000010	0.000250	0.000500	0.000695	0.000920	0.001055	0.001205	0.001330	0.001450	0.001550
125	-0.000013	0.000295	0.000590	0.000795	0.001035	0.001210	0.001385	0.001525	0.001640	0.001750
130	-0.000015	0.000345	0.000700	0.000920	0.001200	0.001370	0.001555	0.001715	0.001860	0.001990
135	-0.000017	0.000400	0.000825	0.001060	0.001390	0.001590	0.001800	0.001950	0.002105	0.002272

CORRECTION k2 FOR VOLUME REDUCTION OF MIXTURE

T (K)	CORRECTION k2 FOR VOLUME REDUCTION OF MIXTURE									
	m ³ /kg-mol									
	16	17	18	19	20	21	22	23	24	25
90	-0.000004	0.000100	0.000220	0.000350	0.000500	0.000600	0.000690	0.000780	0.000860	0.000950
95	-0.000005	0.000120	0.000280	0.000430	0.000590	0.000710	0.000830	0.000940	0.001050	0.001140
100	-0.000007	0.000160	0.000340	0.000490	0.000640	0.000790	0.000940	0.001080	0.001170	0.001270
105	-0.000010	0.000240	0.000420	0.000610	0.000750	0.000910	0.001050	0.001190	0.001330	0.001450
110	-0.000015	0.000320	0.000590	0.000770	0.000920	0.001070	0.001220	0.001370	0.001520	0.001710
115	-0.000024	0.000410	0.000720	0.000950	0.001150	0.001220	0.001300	0.001450	0.001650	0.002000
120	-0.000032	0.000600	0.000910	0.001230	0.001430	0.001630	0.001850	0.002080	0.002300	0.002450
125	-0.000043	0.000710	0.001130	0.001480	0.001730	0.001980	0.002230	0.002480	0.002750	0.002900
130	-0.000058	0.000950	0.001460	0.001920	0.002200	0.002420	0.002680	0.003000	0.003320	0.003520
135	-0.000075	0.001300	0.002000	0.002400	0.002600	0.003000	0.003400	0.003770	0.003990	0.004230

SOURCE: NBS MONOGRAPH 172

T A B L E IV
CONVERSION FACTORS

$$T(K) = 1(^{\circ}C) + 273.15$$

$$1 \text{ lb} = 0.4535924 \text{ kg}$$

SOURCE: ASTM

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THIRD AMENDATORY AGREEMENT

THIS AGREEMENT made and entered into by and between Phillips Alaska Natural Gas Corporation (Phillips) as successor to Phillips 66 Natural Gas Company and Phillips Petroleum Company, a corporation incorporated under the laws of the State of Delaware, the United States of America and Marathon Oil Company (Marathon), a corporation incorporated under the laws of the State of Ohio, the United States of America, hereinafter collectively referred to as "Sellers", and The Tokyo Electric Power Company, Incorporated (Tokyo Electric) and Tokyo Gas Co., Ltd. (Tokyo Gas), corporations incorporated under the laws of Japan, hereinafter collectively referred to as "Buyers".

WITNESSETH :

Sellers and Buyers agreed to the terms and conditions of the Liquefied Natural Gas Sale and Purchase Extension Agreement dated June 17, 1988 (hereinafter referred to as "Extension Agreement").

By the First Amendatory Agreement dated September 19, 1990 (hereinafter referred to as "First Amendatory Agreement") and the New Memorandum on Adjustment dated September 19, 1990 (hereinafter referred to as "New Memorandum on Adjustment"), Sellers and Buyers agreed to amend the pricing formula of LNG sold and delivered for the period from October 1, 1989 to March 31, 2004.

In accordance with a letter agreement dated March 30, 1993, Sellers and Buyers discussed the pricing formula and hereby agree that the pricing formula of LNG sold and delivered from April 1, 1993 to March 31, 2004 under the Extension Agreement shall be amended as follows:

1. Upon the execution of this Agreement, the First Amendatory Agreement and the New Memorandum on Adjustment shall expire.
2. The price of LNG sold and delivered under the Extension Agreement shall be calculated and determined according to the following formula:

$$P_n = 14.85 \times J + 70$$

where;

- (1) "P_n" is the price of LNG sold and delivered in the calendar month "n", expressed in the United States cents per MMBtu's, rounded to one (1) decimal place in the manner as provided in Section 1.1r of the Extension Agreement.
- (2) "J" is the arithmetic average price over a period of three (3) months (month "n", month "n-1" and month "n-2"), expressed in the United States dollars per barrel, rounded to two (2) decimal places in the manner as provided in Section 1.1r of the Extension Agreement, of weighted average price of all crude oils (including raw oils) imported into Japan in each such month (hereinafter referred to as "JCC").

The prices and quantities of imported crude oils (including raw oils) and the exchange rates used in the determination of each JCC shall be based upon the statistics in "Japan Exports & Imports Monthly" edited by Customs Bureau, Ministry of Finance, Japan and published by Japan Tariff Association.

(3) The formula specified above shall be applied when "J" has a value of thirteen United States dollars per barrel (US \$ 13/bbl) or greater and twenty six United States dollars per barrel (US \$ 26/bbl) or less. When the value of "J" lies outside this range, Sellers and Buyers shall promptly discuss and agree on the LNG price to be applied. Until an agreement is reached, the interim price shall be calculated using the formula specified above.

3. Since "Japan Exports & Imports Monthly" for any particular month is usually published two (2) months later, the latest determined LNG price available at the end of month "n-1" shall be used as the provisional LNG price for month "n". The provisional LNG price shall be adjusted when the JCC for month "n" becomes available, whereupon Sellers shall promptly issue a debit note or credit note (as the case may be) to each Buyer through Buyers' designated agent in the United States of America.

Invoices for the first LNG cargo of each Buyer delivered after the debit note or credit note has been issued shall be adjusted accordingly to settle such debit or credit.

In the event that the JCC for any month of any calendar year should be modified in "Japan Exports & Imports Monthly" issued for the month of December or any other month, the price of LNG shall be modified accordingly and then any difference shall be included on the invoice for the first LNG cargo of each Buyer delivered after the price difference has been determined.

4. The balance of payment arising from the difference between the prices determined according to the pricing formula specified in the foregoing provisions and the interim prices used, as specified in the March 30, 1993 letter agreement, for the actual payment for LNG sold and delivered to Buyers for the period from April, 1993 to the month of the execution of this Agreement shall be settled as early as practicable. The details, such as the confirmation of the amounts, the timing, and the methods of the settlement shall be discussed and agreed separately and immediately.

5. This Agreement supersedes the pricing provisions contained in Sections 8.1a, 8.1b and 8.1c of the Extension Agreement. Except as modified herein, the remaining terms and provisions of the Extension Agreement, as amended, shall remain in full force and effect.

6. This Agreement is subject to the approval of the United States Department of Energy. Sellers agree to exercise their best endeavors to obtain such approval.

7. The terms and conditions specified in Section 24.1 of the Extension Agreement shall be applied to this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused THIS AGREEMENT to be executed in good faith, by their respective duly authorized officers as of the date set forth below.

BUYERS:

SELLERS:

THE TOKYO ELECTRIC POWER
COMPANY, INCORPORATED

PHILLIPS ALASKA NATURAL GAS CORPORATION

BY: Hiroshi Araki
H. Araki
President

K.J.

BY: J. L. Whitmire
J. L. Whitmire
President

Jms

TOKYO GAS CO., LTD.

MARATHON OIL COMPANY

BY: Kunio Anzai
K. Anzai
President

K.A.

BY: J. L. Frank
J. L. Frank
Executive Vice President

JLF
6/8

Dated: April 19th, 1994

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Mr. G. M. Schuppert
Vice President, Marketing
Phillips Alaska Natural Gas Corp.
1090B Plaza Office Building
Bartlesville, Oklahoma 74004
U. S. A.

Mr. D. W. Mowrey
Manager, International Gas marketing
Marathon Oil Company
P. O. Box 3128
Houston, Texas 77253
U. S. A.

Dear Sirs,

Re: The Exchange Rates Used for the Calculation of "JCC" in the
Determination of the Price of LNG

We refer to the THIRD AMENDATORY AGREEMENT dated April 19, 1994 ("Agreement"), relating to the LIQUEFIED NATURAL GAS SALE AND PURCHASE EXTENSION AGREEMENT dated June 17, 1988.

We, Buyers, understand that both Sellers and Buyers confirm that the monthly exchange rates for the calculation of "JCC", which have been used in the determination of the price of LNG, became unavailable in "Japan Exports & Imports Monthly" from its issue of April 1996 onwards.

Therefore, we propose that the exchange rate used in the determination of the JCC of a specified month from April 1996 onwards ("Z") shall be calculated on the weekly exchange rates announced by the Commissioner of Customs according to the Customs Tariff Law of Japan and its related laws and regulations and The Export And Import Statistics announced by Customs Bureau, Ministry of Finance, Japan.

The calculation of "Z" shall be carried out in the manner set out in the Schedule attached.

米国オクラホマ州 74004
パートルズビル
プラザ・オフィス・ビル 1090B
フィリップス・フラスカ・ナチュラル・ガス・コーポレーション
販売担当副社長
G. M. シュバート殿

米国テキサス州 77253
ヒューストン、私書箱 3128
マラソン・オイル・カンパニー
国際天然ガス部長
D. W. モーレイ殿

拝啓、

LNG価格の決定に使用されるJCCの計算のための為替換算率について

1988年6月17日付液化天然ガス売買延長契約書に関する1994年4月19日付第三次改訂協定書（以下「協定書」と言う。）に言及致します。

我々買主は、売主と買主双方が、LNG価格の決定に使用されてきた「JCC」の計算のための月間為替換算率が1966年4月以降の「日本貿易月表」において入手できなくなることを確認しているものと理解しています。

従って、我々は1966年4月以降のある月のJCCの決定に使用される為替換算率（「Z」）は、日本国の関税定率法およびその関係法令に従って税関長より公示される週間為替換算率および日本国大蔵省関税局より発表される貿易統計に基づき、算定することを提案致します。

「Z」の計算は、添付別紙に定められる方法で行われるものと致します。

If you agree to the Buyers' proposal of the aforementioned, please so confirm by signing in the space indicated below and returning two copies thereof to us.
本件に対する買主の提案にご異存無い場合は下記に指定された欄に署名の上二部返却していただければ幸いに存じます。

Yours faithfully,
敬具

Buyers:
買主 :

THE TOKYO ELECTRIC POWER
COMPANY, INCORPORATED
東京電力株式会社

By: Kazuo Takasaka
Kazuo Takasaka
高坂 和夫
General Manager, LNG Project Office
Fuel Department
燃料部LNG室長

TOKYO GAS CO., LTD.
東京ガス株式会社

By: Akio Ohnuma
Akio Ohnuma
大沼 明夫
General Manager,
Gas Resources Department
原料部長

ACCEPTED AND AGREED :
ここに受入合意する :

SELLERS :
売主 :

PHILLIPS ALASKA NATURAL
GAS CORP.
フィリップス・アラスカ・ナチュラル・ガス・コーポレーション

By: G. M. Schuppert
G. M. Schuppert
G. M. シュバート
Vice President, Marketing
販売担当副社長

MARATHON OIL COMPANY
マラソン・オイル・カンパニー

By: D. W. Mowrey
D. W. Mowrey
D. W. モーレイ
Manager.
International Natural Gas
国際天然ガス部長

Dated: JUNE 24 1996
日付 1996年 月 日

SCHEDULE

CALCULATION OF "Z"

"Z" shall be determined in accordance with the following formula, replacing the rate referred to in the Agreement.

$$Z = \frac{V}{W}$$

Z is the exchange rate expressed in Yen equal to one United States Dollar, Rounded to two(2) decimal places, for a specified month ("Month").

V is The Value In Yen Specified In The Export And Import Statistics (prompt edition) for the whole of the Month announced by Customs Bureau, Ministry of Finance, Japan.

Ref.: The Value In Yen Specified In The Export And Import Statistics (prompt edition) is the sum of the values of all imported commodities in millions of Yen specified in The Export And Import Statistics (prompt edition) for the first ten days of a month, for the first and second ten days of the month or for the whole of the month announced by Customs Bureau, Ministry of Finance, Japan.

W shall be determined by the following formula;

$$W = \frac{V1}{Z1} + \frac{V2}{Z2} + \frac{V3}{Z3}$$

$\frac{V1}{Z1}$, $\frac{V2}{Z2}$, $\frac{V3}{Z3}$ and W shall be expressed in thousands of United States Dollars, Rounded to whole number.

V1 is The Value In Yen Specified In The Export And Import Statistics (prompt edition) for the first ten days of the Month announced by Customs Bureau, Ministry of Finance, Japan.

V2 is the value derived by subtracting The Value In Yen Specified In The Export And Import Statistics (prompt edition) for the first ten days of the Month announced by Customs Bureau, Ministry of Finance, Japan(V1) from The Value In Yen Specified In The Export And Import Statistics (prompt edition) for the first and second ten days of the Month announced by the above Bureau (the sum of the values in Yen for the second ten days of the Month).

V3 is the value derived by subtracting The Value In Yen Specified In The Export And Import Statistics (prompt edition) for the first and second ten days of the Month announced by Customs Bureau, Ministry of Finance, Japan from The Value In Yen Specified In The Export And Import Statistics (prompt edition) for the Month (V) announced by the above Bureau (the sum of the values in Yen for the remaining days of the Month).

Z1 is the exchange rate for the first ten days of the Month. It is the weighted average of each weekly exchange rate announced by the Commissioner of Customs and applying to the first ten days of the Month, weighted according to the number of days in each week and expressed in Yen per United States Dollar, Rounded to two (2) decimal places.

Z2 is the exchange rate for the second ten days of the Month. It is the weighted average of each weekly exchange rate announced by the Commissioner of Customs and applying to the second ten days of the Month, weighted according to the number of days in each week and expressed in Yen per United States Dollar, Rounded to two (2) decimal places.

Z3 is the exchange rate for the remaining days of the Month. It is the weighted average of each weekly exchange rate announced by the Commissioner of Customs and applying to the remaining days of the Month, weighted according to the number of days in each week and expressed in Yen per United States Dollar, Rounded to two (2) decimal places.

別 紙

「Z」の算定方法

「Z」は、「協定書」に定められたものに代わり、以下の算定方式に従って決定されるものとする。

$$Z = \frac{V}{W}$$

Z は ある特定の月（「当該月」）に関し、小数点以下3けた目四捨五入2けたどめされた1米ドルあたりの円で表示される為替換算率

V は 日本国大蔵省関税局発表の当該月の月分貿易統計（速報）の円表示額

（注）貿易統計（速報）の円表示額

日本国大蔵省関税局発表のある月の上旬分、同月の上中旬分または同月の月分の貿易統計（速報）において百万円単位で表示される輸入全品目の金額。

「W」は以下の公式により決定されるものとする。

$$W = \frac{V_1}{Z_1} + \frac{V_2}{Z_2} + \frac{V_3}{Z_3}$$

$\frac{V_1}{Z_1}$ 、 $\frac{V_2}{Z_2}$ 、 $\frac{V_3}{Z_3}$ およびWは、小数点以下1けた目四捨五入整数どめされた千米ドル単位で表示される。

V₁ は 日本国大蔵省関税局発表の当該月の上旬分貿易統計（速報）の円表示額

- V2 は 日本国大蔵省関税局発表の当該月の上中旬分貿易統計（速報）の円表示額から同局発表の同月の上旬分貿易統計（速報）の円表示額（V1）を差し引いた金額（同月の中旬分の円表示額）
- V3 は 日本国大蔵省関税局発表の当該月の月分貿易統計（速報）の円表示額（V）から同局発表の同月の上中旬分貿易統計（速報）の円表示額を差し引いた金額（同月の下旬分の円表示額）
- Z1 は 当該月の上旬為替換算率。税関長により発表され、同月の上旬に適用される各週の為替換算率の加重平均であり、各週の日数に従って加重平均され、小数点以下3けた目四捨五入2けたどめされた1米ドルあたりの円で表示される。
- Z2 は 当該月の中旬為替換算率。税関長により発表され、同月の中旬に適用される各週の為替換算率の加重平均であり、各週の日数に従って加重平均され、小数点以下3けた目四捨五入2けたどめされた1米ドルあたりの円で表示される。
- Z3 は 当該月の下旬為替換算率。税関長により発表され、同月の下旬に適用される各週の為替換算率の加重平均であり、各週の日数に従って加重平均され、小数点以下3けた目四捨五入2けたどめされた1米ドルあたりの円で表示される。

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Mr. G. M. Schuppert, Jr.
Vice President, Marketing
Phillips Alaska Natural Gas Corporation
1090B Plaza Office Building
Bartlesville, Oklahoma 74004
U. S. A

Mr. D. W. Mowrey
Manager, International Natural Gas Marketing
Marathon Oil Company
P. O. Box 3128
Houston Texas 77253
U. S. A

SUBJECT: Modification of the Code Numbers Indicated in the "Japan Exports & Imports Monthly" Applied for Determining the LNG Price

Dear Sirs,

We refer to the APPLICATION OF LNG PRICING FORMULA dated 25th April, 1994, relating to the THIRD AMENDATORY AGREEMENT dated 19th April, 1994.

Sellers and Buyers have acknowledged the modification of the code numbers of Petroleum oils and oils obtained from bituminous minerals, crude and Raw oils indicated in the "Japan Exports & Imports Monthly", specifically the division of code 2709.00-000 into Petroleum oils and oils obtained from bituminous minerals, crude intended for use in manufacturing petrochemical products stipulated by a cabinet order(new code 2709.00-010) and other oils(new code 2709.00-090) and elimination of sub codes 2710.00-182, 184 and 189. These codes are used in the determination of the LNG price under the documents referenced above.

To address this modification, Sellers and Buyers agree to amend the APPLICATION OF LNG PRICING FORMULA by replacing paragraph 1, Definition of "JCC", in its entirety with the following:

1. Definition of "JCC"

From January 1998 the calculation of JCC shall be based on values and quantities of the following items indicated in the "Japan Exports & Imports Monthly" edited by Customs Bureau, Ministry of Finance, Japan and published by Japan Tariff Association.

Petroleum oils and oils obtained from bituminous minerals, crude
Code No: 2709.00 - 010, 090
and

Petroleum oils and oils obtained from bituminous minerals, other than crude
Code No: 2710.00 - 162, 164, 166, 169, 172, 174, 179
(hereinafter called "Raw Oils")

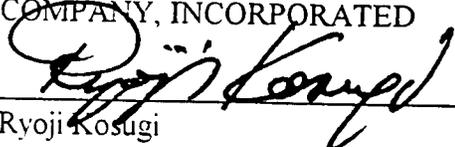
Should a significant change occur in the definition of raw oils or weighting of raw oils compared to the total, Sellers and Buyers shall discuss in good faith the impact of such change on the price of LNG.

Except as altered by this letter, the APPLICATION OF LNG PRICING FORMULA dated 25th April, 1994, shall remain unaltered and in full force.

Yours faithfully,

BUYERS:

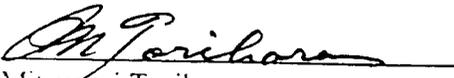
THE TOKYO ELECTRIC POWER
COMPANY, INCORPORATED

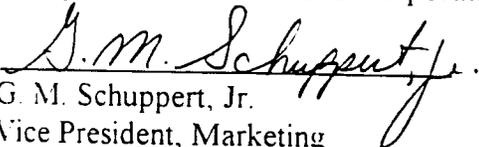

Ryoji Kosugi
General Manager, LNG
Fuel Department

Accepted and Agreed:

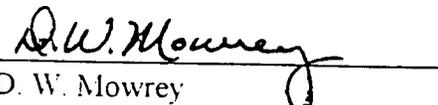
SELLERS:

TOKYO GAS CO, LTD


Mitsunori Torihara
General Manager
Gas Resources Department

Phillips Alaska Natural Gas Corporation

G. M. Schuppert, Jr.
Vice President, Marketing

MARATHON OIL COMPANY


D. W. Mowrey
Manager,
International Natural Gas Marketing

DATED: 1/24 March, 1998