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DISTRIGAS CORPORATION
Application For Import Authority
FE Docket No. 89-16-LNG

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY

Distrigas Corporation) FE Docket No. 89-16-LNG

APPLICATION FOR IMPORT AUTHORITY

Pursuant to Section 3 of the Natural Gas Act ("NGA"), 15 U.S.C. § 717b, Department of Energy Delegation Order 0204-126 (1989), the Natural Gas Regulations of the Department of Energy, 10 C.F.R. § 590.407, Distrigas Corporation ("Distrigas") hereby files this application for authority to import LNG purchased by Distrigas from Sonatrading Amsterdam B.V. ("Sonatrading") under an "Agreement for the Sale and Purchase of Liquefied Natural Gas" dated December 11, 1988 (hereinafter referred to as the "1988 LNG Agreement"). A copy of the 1988 LNG Agreement is attached as Exhibit E-1.

The 1988 LNG Agreement is the result of negotiations between Distrigas and Sonatrading aimed at providing secure volumes of LNG to the U.S. market at market responsive prices. The 1988 LNG Agreement is responsive to the competitive conditions fostered by federal energy policies including the DOE NG/LNG Import Policy - New Policy

Guidelines Relating to the Regulation of Imported Natural Gas, 1/ Federal Energy Regulatory Commission ("FERC") Order Nos. 380, 2/ 436, 3/ and 500 4/, and is further responsive to the numerous orders and findings regarding need for increased gas service in the Northeast U.S. 5/ Moreover, the terms and conditions of the 1988 Agreement are fully consistent with DOE/ERA Opinion and Order No. 271, 6/

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- 1/ Federal Energy Guidelines (CCH) ¶ 70,011 (1984) ("LNG Import Guidelines"). References to "ERA" refer to the Economic Regulatory Administration which, until the issuance of DOE Delegation Order No. 0204-126 was responsible for LNG import authorizations.
- 2/ "Elimination of Variable Costs from Certain Natural Gas Pipeline Minimum Commodity Bill Provisions," Order No. 380, 27 F.E.R.C. (CCH) ¶30,655 (1983).
- 3/ "Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol," Order No. 436, F.E.R.C. Stats. & Regs. [Regs. Preambles, 1982-1985] (CCH) ¶ 30,655 (1983).
- 4/ "Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol," Order No. 500, F.E.R.C. Stats. & Regs. [Regs. Preambles] (CCH) ¶30,761 (1987).
- 5/ See, e.g., "Order Ruling On Discreteness of Additional Northeast Projects And Establishing Procedures," Northeast U.S. Pipeline Projects et.al., Docket No. CP87-451-016, ___ F.E.R.C. (CCH) ¶ _____ (Jan. 12, 1989); "Final Report of the Chief Judge and Certification of Settlement, "Northeast U.S. Pipeline Projects et. al., Docket Nos. CP-87-451-008 et al., ___ F.E.R.C. ¶ _____ (Nov. 30, 1988).
- 6/ Distrigas Corp., DOE/ERA Opinion and Order No. 271, "Order Granting Amended Long-Term Authorization to Import Liquefied Natural Gas From Algeria, Amending a Short-Term Authorization, and Granting Interventions," 1 ERA (CCH) ¶70,132 (1988).

The 1988 LNG Agreement provides for the importation of up to 17 cargoes of LNG annually until 48 cargoes have been delivered. The pricing structure adopted is very similar to the LNG purchase and import arrangement approved by DOE/ERA Opinion No. 271 in that Distrigas and Sonatrading will divide the ultimate selling price of the product, with Distrigas receiving approximately 37/100 and Sonatrading 63/100 of the sales price. This sharing concept, which is fully elaborated in Exhibit E-III-D, directly links the interests of the Supplier/Seller, Sonatrading, to the U.S. gas market by permitting the seller to share with the buyer in the benefits and risks associated with changing prices and demand levels.

In support of this application, Distrigas states as follows:

I. GENERAL INFORMATION.

Distrigas is a wholly-owned subsidiary of the Cabot Corporation and is engaged in the purchase, importation and sale of LNG. Distrigas is a corporation organized and existing under the laws of the State of Delaware and has its principle place of business at Two Oliver Street, Boston, Massachusetts 02109.

Correspondence and communication regarding this application should be sent to the following:

Paul F. Saba, Esq.
c/o Distrigas Corporation
Two Oliver Street
Boston, MA 02109
(617) 439-6676

and

Bruce F. Kiely
Randolph Q. McManus
Drew J. Fossum
Baker & Botts
555 13th St., N.W.
Suite 500 East
Washington, D.C. 20004-1109
202-639-7700

II. BACKGROUND.

Distrigas is an importer and seller of LNG. The ERA originally authorized Distrigas to import LNG by an order issued December 31, 1977. 7/ Under certificate authority issued by the FERC, Distrigas sells the LNG it imports to its affiliate, Distrigas of Massachusetts Corporation ("DOMAC"). 8/ In the past year, Distrigas received first short term 9/ and then long-term authority 10/ from ERA amending its original import

7/ Distrigas Corp.. "Order on Importation of Natural Gas from Algeria," Docket No. 77-011-LNG, (ERA) (Dec. 31, 1977).

8/ Distrigas of Massachusetts Corp. and Distrigas Corp., 5 FERC (CCH) ¶ 61,296 (1978), reh'g granted in part and denied in part, 6 FERC (CCH) ¶ 61,253 (1979).

9/ Distrigas Corp., DOE/ERA Opinion and Order No. 228, "Order Granting Amended Authorization to Import Liquefied Natural Gas from Algeria, Imposing Conditions and Granting Interventions," 1 ERA (CCH) ¶ 70,129 (1988); Distrigas Corp., DOE/ERA Opinion and Order No. 228-A, "Amendment to Order Granting Amended Authorization to Import Liquefied Natural Gas from Algeria," 1 ERA (CCH) ¶ 70,131 (1988).

10/ DOE/ERA Opinion and Order No. 271, 1 ERA (CCH) ¶ 70,132 (1988). That authority pertained to gas imported and purchased under "Amendment No. 3 to the Agreement for
[Footnote continued]

authorization to reflect revised sale and purchase arrangements between Sonatrading and Distrigas.

As a result, Distrigas is currently importing LNG pursuant to the market-oriented approach approved by DOE/ERA in Opinion No. 271. Distrigas sells the LNG to its affiliate, DOMAC. DOMAC resells the LNG to gas utilities, end-users or other interested customers under market-oriented authority issued by the FERC. 11/ Since January of 1988, first under existing, and thereafter under amended short-term and long-term authority, Distrigas has imported and DOMAC has sold on the order of 27 million MMBtu's of LNG to a variety of historic and new customers.

III. THE 1988 LNG AGREEMENT IS CONSISTENT WITH THE PUBLIC INTEREST.

A. The Standard of Review Under Section 3 of the NGA and the DOE's LNG Import Guidelines.

The ERA's review of Distrigas' application is governed by Section 3 of the Natural Gas Act (NGA), which provides that the Commission shall issue an order authorizing importation of natural gas unless there is a finding that such import "will not be consistent with the public interest." 12/ The ERA LNG Import Guidelines and

[Footnote continued]

the Sale and Purchase of Liquefied Natural Gas of April 13, 1976" ("Amendment No. 3") between Distrigas and Sonatrach, the national oil company of Algeria.

11/ Distrigas Corp. and Distrigas of Massachusetts Corp., 45 FERC (CCH) ¶ 61,428 (1988).

12/ 15 U.S.C. 717b. (1985).

regulations add substance to that standard by listing factors a party seeking import authority should establish in its Application. Those factors include (1) the "security of the natural gas supply," (2) the "marketability of the gas," (3) "why the import arrangement will remain competitive over the life of the project," (4) the "need for the natural gas by the applicant or the applicant's prospective customers," and (5) "the potential environmental impact of the project." 13/

B. The Criteria of the LNG Import Guidelines Are Satisfied By The 1988 LNG Agreement.

1. The 1988 LNG Agreement Meets the Standard of Competitiveness by Establishing Market-Responsive Price and Quantity Provisions.
 - a) The 1988 LNG Agreement Provides For Market Based Pricing Over the Term of the Agreement.

The pricing provisions of the 1988 LNG Agreement contain the same type of market-oriented, risk sharing pricing and delivery concept the ERA approved in Opinion No. 271, but with even greater flexibility to ensure marketable LNG supplies in increasingly competitive gas markets.

As more fully described in the 1988 LNG Agreement, there are several pricing standards designed to allocate risk as between the supplier of LNG, Sonatrading, and the

13/ 10 C.F.R. § 590.204 (1987).

purchaser, Distrigas, but which do not limit the market-responsiveness of the final sales prices. The price to Sonatrading per MMBtu (F.O.B. Algerian port in U.S. dollars) for LNG loaded in any month, is determined by calculating the higher of the "Reference Price," 14/ the "Minimum Price" 15/ and a price ("P") which will be based upon the

14/ Exhibit E-I, Appendix A. The "Reference Price" is a negotiated concept that serves to establish certain rights and obligations between Distrigas and Sonatrading. It does not govern the price at which LNG would have to be sold by Distrigas to any customer. Rather, it provides assurance to Sonatrading that Distrigas will use its best efforts to market the LNG at the best price available in the market. The Reference Price is calculated monthly using a formula and indices that reflect a negotiated market basket of fuels in the New England area with which the LNG may have to compete from time to time.

The formula for RP is different for winter months (October 15 - March 14) and summer months (March 15 - October 14) as follows:

Winter: $\frac{1}{3}$, 0.3% sulfur grade No. 6 fuel oil estimated spot price, net of transportation differential, $\frac{1}{3}$, 1.0% sulfur grade No. 6 fuel oil estimated spot price, net of transportation differential, and $\frac{1}{3}$, the higher of the Algonquin F-1 commodity rate or Tennessee CD-6 commodity rate.

Summer: No. 6 fuel oil 1.0% sulfur grade estimated spot price, net of transportation differential.

15/ Exhibit E-I, Appendix A. As in the case of the Reference Price, the Minimum Price ("MP") is a negotiated value designed to establish certain rights and obligations between Distrigas and Sonatrading. It does not determine the price at which LNG actually would be or would have to be purchased by Distrigas or establish a resale price to any party. The MP is set as follows:

[Footnote continued]

actual price received from the sale of that LNG in that month. 16/

The market-responsiveness of these pricing terms is reflected by the provision in Section 6.3 of the 1988 LNG Agreement that Distrigas' obligation to take eight (8) cargoes of LNG during a contract year is subject to a "market out" if the Prevailing Market Price for Natural Gas ("Market Price") falls below the Reference Price or the Minimum Price. 17/ The take obligations also are subject to the availability of transportation. 18/ The price paid to Sonatrading by Distrigas will be controlled by the prices that will be set in the market, in accordance with the stated goals of the LNG Import Guidelines, even if the Market Price falls below the Minimum Price. As in the case of Amendment No. 3, neither the Reference Price nor the Minimum Price provisions establish the price at which the LNG will be resold. Rather, both provisions serve only

[Footnote continued]

March 15, 1989 - October 14, 1989	- \$1.35
October 15, 1989 - March 14, 1990-	\$1.56
March 15, 1990 - October 14, 1990	- \$1.40
October 15, 1990 - March 14, 1991	- \$1.645
March 15, 1991 - October 14, 1991	- \$1.45
October 15, 1991 and thereafter	- \$1.70

16/ Exhibit E-I at Sections 6.3, 9.1.

17/ Exhibit E-I at Section 6.3(a).

18/ Exhibit E-I at Section 6.3(a).

to allocate certain risks and create certain obligations between Sonatrading and Distrigas.

The 1988 LNG Agreement also provides a mechanism for distinguishing between LNG imported and purchased under Amendment No. 3 and the 1988 LNG Agreement. Section 9.2 of the 1988 LNG Agreement provides that up to certain volumetric limits, the highest price gas sold by DOMAC will be deemed to come from Amendment No. 3 and gas sold at lower prices will be attributed to deliveries under the 1988 LNG Agreement. This provision allows the parties to keep track of obligations arising under both agreements.

DOMAC's resales of LNG to be imported under the the 1988 LNG Agreement will be made under a variety of contracts and FERC-approved rate schedules. These allow DOMAC to terminal LNG and to make sales of LNG for resale in interstate commerce to any interested purchaser at negotiated rates, subject only to certain price caps and make direct sales to end-users at negotiated prices on a firm or interruptible basis.

Contracts will be tailored to meet the needs of customers. The common thread of all sales contracts will be to let market need set the price without reliance on take-or-pay provisions. Since the New England market area is highly competitive and customers have a variety of choices of alternative gas supplies or other fuels, this market-oriented contracting approach is necessary to the success of the market-responsive arrangement between

Distrigas and Sonatrading. LNG transportation is dealt with by a separate negotiated transportation Agreement. 19/ The agreement essentially is the same as the one approved in Opinion No. 271.

- b) The 1988 LNG Agreement Provides for Flexibility as to Minimum and Maximum Quantities.

Significantly, the 1988 LNG Agreement provides for variable quantities and has no onerous take-or-pay obligations. The revenue sharing arrangement, rather than a take-or-pay provision, serves as the motivation for Sonatrading and Distrigas to maximize sales of LNG. Complementing the competitive pricing arrangements in the 1988 LNG Agreement are other terms regarding volumes and market out provisions that enhance the marketability and flexibility of the purchase and sale of LNG.

The 1988 LNG Agreement envisions the sale to Distrigas of 144 million MMBtu of LNG, corresponding to up to 48 full cargoes of about 125,000 cubic meters each. That

19/ Exhibit E-III. The Transportation Agreement provides for one ship to be provided by Sonatrach for the purpose of shipping LNG purchased by Distrigas, the cost of which shipping will be \$0.27 per MMBtu plus bunkers and certain other charges, subject to yearly recalculation in accordance with a fixed formula beginning with the contract year beginning on September 15, 1991. The cost of shipping will be borne entirely by Distrigas, which will be at risk for the recovery of such amounts from its share of proceeds from the sales of the LNG under the revenue splitting formula.

Agreement calls for the delivery of up to seventeen (17) cargoes per year. The minimum quantity to be scheduled for delivery in any year is eight (8) cargoes. Distrigas is required to make payment to Sonatrading for each of the eight (8) cargoes pursuant to the price provisions of the agreement, unless immediately before the cargo is scheduled to be loaded, the Market Price is lower than the Reference Price and the Minimum Price, or the Reference Price is lower than the Minimum Price. If the Reference Price is lower than the Minimum Price, Distrigas will not be obligated, but may exercise an option, to buy that cargo at the Market Price. 20/ Or, where the Market Price is lower than the Reference Price or the Minimum Price, then Sonatrading has the right to sell at the Market Price. Distrigas is therefore not required to buy any cargo at a price that is out-of-line with the prevailing price of competing fuels. Additionally, if the Market Price is below the Reference Price and Minimum Price and the parties cannot agree on a price, both parties are excused from any obligation to sell or buy that cargo of LNG. 21/

The parties agree that they will use their best efforts to sell and buy LNG in excess of eight cargoes. To the extent that the total quantities purchased by Distrigas

20/ Exhibit E-I, Section 6.3.

21/ Exhibit E-I, Section 6.3.

in any year total less than 17 cargoes, Distrigas has the right to increase the quantity purchased in succeeding year(s) until the total of such purchases equals the amount by which the original purchases in the year of deficiency were less than 51 million MMBtu (17 cargoes). If, at the end of the contract term, there are still quantities of LNG remaining to be shipped under the make-up provision, the contract term may be extended until a total of 144 million MMBtu have been delivered. Depending on market conditions, it is anticipated that deliveries of the LNG should take place in a 3-5 year period.

The contractual provision for make-up volumes, operating in conjunction with the provision setting a minimum number of cargoes, allows Distrigas significant flexibility with respect to the scheduling of cargoes, not only from month-to-month, but also from year-to-year. As Distrigas and Sonatrading each have a vested interest in the marketability of the LNG to be imported, the agreement encourages the parties to utilize the provisions of the agreement to deliver maximum quantities of LNG during periods in which an acceptable market exists.

In sum, the volume and price provisions of the 1988 LNG Agreement are interwoven to form the basic fabric of an inherently market-responsive and flexible import arrangement that accords with the market-based approach of the LNG Import Guidelines.

2. The 1988 LNG Agreement Will Fulfill a Need for Natural Gas in New England, New Jersey, New York and Elsewhere.

As described above, the 1988 LNG Agreement provides for the importation of up to 48 cargoes of LNG on market responsive terms. As also outlined above, terms of that Agreement ensure that these volumes of LNG will be imported only when they are marketable. Consequently, Distrigas submits that the Agreement is entitled to the presumption of need for the imported gas that the LNG Import Guidelines confer on any import arrangement which is market responsive and will remain so over the term of the contract. 22/

The Agreement provides the opportunity for a year-round supply of LNG enabling Distrigas and Sonatrading to offer LNG to meet significant demands for natural gas in the winter months, and to satisfy a year-round market for natural gas in the Northeastern United States. To provide this LNG service, no new facilities are required, thereby avoiding the environmental concerns associated with new construction of major gas supply projects. The need for additional natural gas in the Northeast, particularly for winter loads, was demonstrated by the support shown by a variety of customers in the ERA proceeding regarding Amendment No. 3 which was the subject of DOE/ERA Order

22/ Id. at 70,018.

No. 271. This need also has led to the filing of many applications at both the ERA and the FERC proposing to provide new service. 23/ These filings demonstrate that there is a present and future demand for additional gas in the Northeast and that there is, and will continue to be, intense competition to meet that demand.

The LNG import arrangement uniquely addresses the winter gas supply problems in the Northeast. The nature and location of the Distrigas LNG facilities, combined with the delivery systems of the Northeast gas utilities, make Distrigas' LNG the ideal fuel to meet the extreme swings in winter demand for gas in the Northeast. DOMAC's existing terminalling facilities provide a flexible delivery system designed to serve customers' peak-day needs by delivery of gas vapor through existing pipeline delivery hook-ups, and delivery of liquid into LNG tank trucks for distribution to the LNG storage facilities of gas utilities located throughout the Northeast. For these utilities, LNG is, and has been for many years, the preferred peak-shaving supply.

In short, with no new capital investment or environmental impact from construction of new facilities, the importation of LNG under the 1988 LNG Agreement will permit Distrigas and DOMAC to distribute gas to any

23/ See e.g. "Final Report of the Chief Judge and Certification of Settlement," Northeast U.S. Pipeline Projects et al., Docket Nos. CP87-451-008, et al., _____ F.E.R.C. (CCH) ¶ _____ (Nov. 30, 1988).

purchasers in the Northeast despite capacity bottlenecks on the interstate pipeline network and the resulting interruption of transportation service. The unique capacity of Distrigas and DOMAC to terminal and deliver LNG in both liquid and vapor form where it is needed and when it is needed, particularly in the winter months, assures a ready market for LNG.

3. The Agreement Provides a Reliable and Secure Source of LNG Supply.

The LNG Import Guidelines provide that "[a]n import will be considered secure if it does not lead to undue dependence on unreliable sources of supply." 24/ In Opinion No. 271, ERA found Algerian gas to be a secure source of supply for Distrigas. 25/ The LNG subject to this Application comes from the same source.

C. The 1988 LNG Agreement Is Also Consistent With The Public Interest Under Analyses Other Than Those Specifically Set Out In The LNG Import Guidelines.

1. The Impact Of LNG Imports Under The 1988 LNG Agreement On The U.S. Balance Of Payments Is Zero Or Positive.

The importation of LNG will meet key market needs in the Northeast United States and will have no adverse

24/ LNG Import Guidelines at 70,018.

25/ 1 ERA (CCH) ¶ 70,132 at 70,780. See also, Pan National Sales, Inc., DOE/ERA Opinion No. 289, "Order Granting Authorization to Import Liquefied Natural Gas From Algeria and Imposing Conditions," 1 ERA (CCH) ¶ 70,133 (1988)

impact on the United States' balance of payments.

Additionally, the total cost of the volumes of LNG to be imported by Distrigas will be but a small fraction of the total volume of energy imports into the U.S. over the term of the Agreement.

The Northeastern United States, and especially New England, is a region which today meets much of its energy requirements through imports of oil, gas and electricity, a situation that will continue for the foreseeable future. The balance of payments effect of Distrigas' project is thus offset by the fact that the imported LNG will displace imported propane used in gas utility peak-shaving applications, imported residual fuel oil used under electric utility boilers, imported distillate oil used by interruptible customers of the gas utilities, or pipeline gas, a significant portion of which is supplied by imports. Indeed, much of the thrust of the "Open Season" applications at the Commission is to supply additional gas to the Northeast from imported sources. Delivery of additional volumes of LNG by Distrigas will permit continued expansion of gas utility marketing efforts to residential and commercial customers in this region, which in turn will tend to displace imported distillate oil.

In addition, the revenues paid by Distrigas to Sonatrading will be used to offset the cost of the purchase of commercial aircraft by Air Algerie, the Algerian national airline, from The Boeing Commercial Airplane Company

("Boeing"), as such transaction is finalized. Since such aircraft will be made in the United States with United States' labor, materials and services, the value paid Sonatrading under such an arrangement will be returned to the United States in the form of aircraft sales.

2. The Amended Agreement Will Have No Measurable Impact On Domestic Gas Production.

The volumes of LNG to be imported under the Agreement will have no measurable impact on U.S. gas production. The maximum amount of 17 cargoes per year proposed to be imported under the Agreement (approximately 51 TBtu), would have constituted approximately .31 percent of the total U.S. gas production in 1987, 26/ and a minuscule 0.08 percent of the total U.S. production of energy from all sources. 27/ Indeed, the same 51 TBtu would have accounted for merely 0.29 percent of total U.S gas consumption 28/ and approximately 0.07 percent of the total energy, from all sources, consumed by the U.S. in 1987. 29/

The volumes to be imported under Amendment No. 3 would have no consequential effect on domestic gas production. More over, the location of DOMAC's terminalling

26/ Energy Information Agency, Annual Energy Outlook 1987, p. 33, Table A1.

27/ Id.

28/ Id.

29/ Id.

and distribution facilities in New England, and the growing demand for natural gas that has already overcome the physical ability of pipelines to transport domestic gas in the winter months, assures that the imports proposed under the Agreement will have no measurable impact on domestic gas production.

3. The LNG Agreement Does Not Result In Direct Subsidization Of Imported Gas.

The 1988 LNG Agreement will satisfy the DOE's direct sale presumption as the LNG sold by Sonatrading to Distrigas will be priced at a level reflecting the price at which the LNG is resold to customers. Hence, the sale is, in effect, a direct sale to a distributor as there is no rolled-in pricing or any other form of indirect price subsidization.

IV. ENVIRONMENTAL IMPACT AND SAFETY OF OPERATIONS.

This Application proposes no addition to or modification of the LNG facilities approved by the ERA in December of 1977. Therefore, consistent with ERA's prior findings in Distrigas' import dockets, including Opinion No. 271 30/ this application will have no new environmental or safety impacts of any kind and will not constitute a major federal action having a significant impact on the quality of the human environment.

30/ 1 ERA (CCH) ¶ 70,132 at p. 70,780.

Finally, the LNG facilities to be utilized have been operated safely since start up and comply with applicable federal safety standards. See 49 C.F.R. Part 193 (Subparts F-J). DOMAC's safety plan and performance recently have been reviewed by the U.S. Coast Guard and the Office of Pipeline and Producer Regulation of the Federal Energy Regulatory Commission. Both reviews commented favorably on DOMAC's compliance efforts. See Exhibits Z-I, Z-II.

V. LIST OF EXHIBITS.

In addition to the foregoing, Distrigas has provided exhibits that comply with Section 153.4 of the FERC's Regulations relating to applications under Section 3 of the Act, as noted on the attached list. Each exhibit is attached hereto behind the tab bearing the same designation, unless otherwise explained below.

Exhibit A Articles of Incorporation and By-laws.
Omitted. Incorporated by reference as set forth in ERA Docket No. 77-011-LNG.

Exhibit B Statement of Financial and Corporate Relationship Between Distrigas and Others.
Omitted. Incorporated by reference as set forth in ERA Docket No. 88-37-LNG.

Exhibit C Opinion of Counsel.
Attached.

Exhibit D Export Contract.
Not applicable as no exports are involved.

Exhibit E Import Contract.
Attached are:

Exhibit E-I - Agreement for the Sale and Purchase of Liquefied Natural Gas of December 11, 1988.

Exhibit E-II - Mutual Assurances Agreement.

Exhibit E-III - Transportation Agreement.

Exhibit E-IV - Revenue Sharing Agreement.

Exhibit E-V - Agreement as to Taxes.

Exhibit F

Location of Facilities.

Inapplicable because no new facilities are proposed herein.

Exhibit Z

Safety Compliance Reviews.

Attached are:

Exhibit Z-I - Letter From R. L. Anderson, Captain, U.S. Coast Guard, Captain of the Port of Boston, Massachusetts.

Exhibit Z-II - Fifth Post-Certification Cryogenic Design and Technical Review, Distrigas of Massachusetts Corporation, Everett, Massachusetts, Docket No. CP77-216 (Jan. 20, 1989).

VI. AUTHORIZATION REQUESTED.

A. Nature of Requested Authority.

As demonstrated, the 1988 LNG Agreement provides the maximum possible flexibility in terms of both import price and volumes while simultaneously assuring a secure source of supply at responsive prices. These terms, along with the revenue sharing agreement executed between Sonatrading and Distrigas, will assure that LNG imported under the Agreement will be market-responsive -- meeting a need for gas in the market at competitive prices. Distrigas' request conforms with the key requirement in the

LNG Import Guidelines that "the market . . . determine the price and contract terms of imported gas." 31/


Accordingly, pursuant to ERA's authority under DOE Delegation Order No. 0204-126, Distrigas requests that DOE approve imports of LNG under the 1988 LNG Agreement, including the market-based pricing provision and the revenue sharing provision of the Agreement, as being consistent with the LNG Import Guidelines and thus in the public interest.

B. Requested Effective Date of Amended Authorization.

The 1988 LNG Agreement provides for deliveries of LNG beginning upon receipt of U.S. regulatory approvals. Distrigas therefore requests prompt approval of this application to allow for importation of this LNG supply as soon as possible.

WHEREFORE, Distrigas respectfully requests that the DOE issue an order under Section 3 of the Natural Gas Act, finding that the 1988 LNG Agreement of December 11, 1988, between Distrigas and Sonatrading, is not inconsistent with the public interest, and authorizing and approving the importation of LNG by Distrigas pursuant to that Agreement.

Respectfully submitted,



R. Gordon Shearer
Vice President
DISTRIGAS CORPORATION

Dated: February 27, 1989

31/ LNG Import Guidelines at 70,012.

DISTRIGAS CORPORATION
FE Docket No. 89-___-LNG
EXHIBIT C
OPINION OF COUNSEL.

DISTRIGAS

DISTRIGAS CORPORATION

February 27, 1989

J. Allen Wampler
Assistant Secretary of Energy
for Fossil Energy
Department of Energy
Forrestal Building
Room GA-035, RG-43
1000 Independence Avenue, S.W.
Washington, DC 20585

Dear Mr. Wampler:

This opinion is furnished in accordance with the requirements of Section 153.4 of the Regulations under the Natural Gas Act in connection with the Application of DISTRIGAS Corporation ("Applicant") for authorization to import liquefied natural gas.

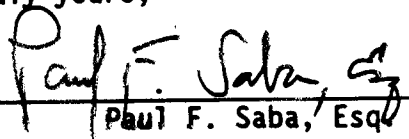
The undersigned is counsel to the Applicant and is the corporate secretary. For the purpose of this opinion, I have examined its Certificate of Incorporation, By-laws, and Corporate Records to the extent I deemed necessary.

By virtue of the foregoing, I am of the opinion that:

1. The proposed importation of natural gas is within the corporate powers of Applicant.
2. Applicant either has complied with or is in the process of complying with State laws and regulations of State regulatory authorities in the state or states in which Applicant operates.

Very truly yours,

By:


Paul F. Saba, Esq.

DISTRIGAS CORPORATION

FE Docket No. 89-16-LNG

EXHIBIT E-I

AGREEMENT FOR THE SALE AND
PURCHASE OF LIQUEFIED NATURAL GAS
OF DECEMBER 11, 1988

AGREEMENT FOR THE SALE AND PURCHASE OF
LIQUEFIED NATURAL GAS

Between:

Sonatrading Amsterdam B.V., with registered office
at Kantoorgebouw "Sloterstyn" No. 5C, Sloterkade 133,
1058 HM Amsterdam West, The Netherlands, hereinafter
referred to as the "Seller", represented by
Mohamed Larbi Kateb, authorized to execute this
Contract,

on the one hand

and

Distrigas Corporation, a corporation organized and
existing under the laws of the State of Delaware, with its
principal office in Boston, Massachusetts, Two Oliver
Street, hereinafter referred to as the "Buyer", represented
by R. Gordon Shearer, authorized to execute this Con-
tract,

on the other hand,

W I T N E S S E T H

IT IS AGREED AS FOLLOWS:

ARTICLE 1
DEFINITIONS

For the purpose of this agreement, the words and terms contained in Appendix A attached hereto and which are an integral part of this agreement, will have the meanings defined in said appendix.

ARTICLE 2

(Intentionally Left Blank)

ARTICLE 3
SOURCE OF SUPPLY

The LNG sold by Seller and delivered to Buyer will come from Natural Gas wells located in Algeria.

Seller represents that the LNG which is to be sold under the provisions of this agreement will be produced by liquefaction units at liquefaction plants in Algeria.

ARTICLE 4

TANKERS; DELIVERY; PASSAGE OF TITLE

Section 4.1. Tankers. Buyer shall cause the LNG purchased and sold hereunder to be shipped from Algeria in LNG Tankers having a Gross Cargo Capacity as defined in the Transportation Agreement dated the date hereof between L'Entreprise Nationale pour la Recherche, la Production, le Transport, la Transformation et la Commercialisation des Hydrocarbures ("Sonatrach") as transporter and Buyer as shipper (the "Transportation Agreement"), of between 30,000 and 135,000 cubic meters, for carriage to and delivery at the Terminalling Facility. Such LNG Tankers shall have specifications and characteristics compatible with the ports of loading and discharging.

Section 4.2. Delivery Point, Passage of Title and Risk of Loss. The delivery point is the point at which the flange coupling of the loading line joins the flange coupling of the LNG loading manifold on board any LNG Tanker at Arzew or other safe port in Algeria. Title and risk of loss shall pass to Buyer at the delivery point.

ARTICLE 5

LIABILITY

While the LNG Tanker is being berthed or leaving the berth, and as long as it is berthed at the loading port, each party will be responsible to the other party for any proven injuries or damage, excluding all indirect consequences, which may be caused to the other party by the fault or negligent act of the first party, its own employees, representatives, contractors or suppliers of services and in no case shall Buyer or its affiliates be deemed to be employees, representatives, contractors or suppliers of Seller, and vice versa.

Seller shall cause the LNG to be delivered and Buyer shall receive the LNG at the delivery point with due compliance with appropriate safety precautions.

ARTICLE 6

QUANTITIES AND DELIVERIES

Section 6.1. Quantities. Subject to the provisions of this Article 6, from the effective date, Seller shall sell to Buyer and Buyer shall purchase from Seller,

during each twelve-month period during the term hereof, F.o.b. Algerian port up to 51 million MMBtu of LNG, corresponding to up to 17 full cargoes each of approximately 125,000 cubic meters until a total of approximately 144 million MMBtu of LNG or a total of 48 such cargoes have been sold and purchased.

Section 6.2. Undertaking of Buyer and Affiliates.

Throughout the term of this agreement, Buyer undertakes that it and any affiliate of Buyer selling LNG purchased by Buyer hereunder or regasified LNG derived therefrom shall diligently seek to obtain from their customers and potential customers commitments (capable of being satisfied by such LNG or regasified LNG) on terms and conditions (including price) which in Buyer's reasonable commercial judgment are the most favorable available to Buyer and affiliates of Buyer in the prevailing market and under the prevailing circumstances, for the purchase by such customers and potential customers from Buyer or any such affiliate of Buyer of LNG for delivery in the U.S.A., or of Natural Gas derived from the regasification of LNG; provided, however, such obligation of Buyer shall be subject to the obligations of Buyer, as undertaken in Amendment No. 3, Section 6.2, between Sonatrach and Distrigas thereunder dated February 21, 1988 ("Amendment No. 3"), which obligations of Buyer thereunder

shall have priority over Buyer's obligations under this agreement.

Section 6.3. Minimum Quantities; Excess Quantities; Make-up.

(a) Seller shall sell and cause to be loaded hereunder, and Buyer shall buy, as part of the quantities specified in Section 6.1, minimum quantities of LNG totaling in the aggregate approximately 24 million MMBtu (corresponding to eight full cargoes of an LNG Tanker or LNG Tankers each of a capacity of approximately 125,000 cubic meters) during each Contractual Year and pro rata for any part of a Contractual Year. Deliveries of such minimum quantities hereunder shall be scheduled by agreement under Section 6.4 hereof. During each Contractual Year, with respect to quantities that are in excess of the minimum quantities of approximately 24 Million MMBtus, Buyer shall use its best efforts to buy and Seller shall use its best efforts to sell and cause to be loaded such excess quantities; unless the Prevailing Market Price for Natural Gas is less than the Reference Price or the Minimum Price, or Buyer or any affiliate of Buyer cannot obtain transportation from the Terminalling Facility to its customers. Any schedule of deliveries shall reflect the priority to be given to cargoes to be delivered to Buyer by Seller under Amendment No. 3. Buyer shall make payment to Seller in respect of each cargo forming part of the minimum or excess quantities at the price computed in accordance with Article 9 hereof; provided that (i) if the Reference

Price on the tenth day preceding the date such cargo is scheduled for loading pursuant to Section 6.4 shall be below the prevailing Minimum Price Buyer shall not be obligated under this Section 6.3(a) to buy, and Seller shall not be obligated under this Section 6.3(a) to sell and cause to be loaded such cargo, but Buyer shall instead have the option (exercisable by notice delivered by telex or other prompt means not later than 10 days before such scheduled date) to purchase at the Minimum Price, and to call for delivery of, such cargo as scheduled and (ii) provided that if the Reference Price or the Minimum Price on the tenth day preceding the date such cargo is scheduled for loading pursuant to Section 6.4 shall be in excess of the Prevailing Market Price For Natural Gas in Buyer's market area, Buyer shall not be obligated under this Section 6.3 to buy but instead shall provide Seller written notice of such Prevailing Market Price For Natural Gas, and Seller shall have the option (exercisable by notice delivered by telex or other prompt means not later than 5 days before such scheduled date) to sell and cause to be loaded such cargo at such Market Price For Natural Gas or to withhold such cargo until Buyer and Seller have mutually agreed to a price.

(b) If in any Contractual Year any portion of the minimum quantities of LNG totalling approximately 24 Million MMBtus are not sold and purchased pursuant to Section 6.3(a)(i) or (ii) then Seller's obligation to sell and cause to be loaded and Buyer's obligation to purchase such minimum quantities shall be reduced by the quantities not so sold and purchased.

(c) To the extent that the aggregate quantities of LNG purchased by Buyer for delivery in any one Contractual Year shall at the end of such Contractual Year be less than 51 million MMBtu, Buyer shall have the right in respect of the next succeeding Contractual Year(s) during this agreement to increase the quantity of 51 million MMBtu in Section 6.1 hereof until the total of such increases shall equal the amount by which such quantities are less than 51 million MMBtu.

Section 6.4. Schedule of Loadings. Seller and Buyer shall consult together during the term of this agreement as may be reasonably required, and shall in particular meet each February and August to establish a schedule of

projected loadings for the seventeen (17) cargoes to be purchased and sold hereunder month by month for the period commencing the following March 15th and October 15th, respectively.

Such schedule shall be updated from time to time to the extent reasonably practicable.

Ten (10) days prior to the beginning of each calendar month, Seller shall confirm by telex to Buyer the schedule of deliveries for such month.

Prior to the loading of any LNG under this agreement, Buyer shall notify Seller by telex of the identity of the Terminalling Facility to which such LNG is to be shipped.

Seller shall ensure that Buyer shall be promptly notified by telex of any loading of LNG under this agreement and of the departure of such cargo and the estimated time of arrival at the Terminalling Facility.

Section 6.5. Plant Inspections and Overhauls.

Seller and Buyer shall provide that annual inspections and overhauls of the plants and facilities necessary to carry out the operation contemplated by this agreement shall take

place preferably during the summer, or at any such other suitable time of the year selected by mutual agreement as will not entail a decrease in the annual quantity of LNG the delivery of which is provided for by this agreement. Seller and Buyer shall notify each other of schedules of such annual inspections and overhauls ninety (90) days prior to their commencement.

ARTICLE 7

QUALITY

The LNG delivered by Seller to Buyer will have in the gaseous state:

- a PCS of between 9,640 Kcal/Nm³ and 10,650 Kcal/Nm³

- constituent elements the percentage of which will vary within the following limits (in molecular percentage):

Nitrogen N ₂	between 0.2 and 1.4
Methane C	between 85.65 and 96.6
Ethane C ₂	between 3.2 and 8.5
Propane C ₃	between 0.0 and 3.0

Isobutane iC4	between 0.0 and 0.52
Normal butane NC4	between 0.0 and 0.7
Pentane C5 plus	between 0.0 and 0.23

- an amount of H2S not exceeding zero point five (0.5) part per million in volume
- an amount of mercaptan sulfur not exceeding 2.3 mg/Nm3
- an amount of total sulfur not exceeding 30 mg/Nm3.

The verification of the PCS and of the composition of the LNG in compliance with the above specifications shall be made in accordance with the provisions of Article 8 below.

For the verification of the amounts of sulphur and H2S, the procedures defined by the standards ASTM D 2385 and D 3031 shall be applied.

ARTICLE 8
MEASUREMENT AND TESTING

Section 8.1. Gauging. The quantities of LNG delivered under this agreement shall be measured in metric units by gauging of the liquid in the ship's tanks immediately prior to and after loading.

The gauging at the delivery point and the calculations relating thereto shall be made by Seller or its designated representative, with Buyer having the right to be present.

Each party shall send or cause to be sent to the other party a certified copy of the gauging standards for each tank of each LNG Tanker being furnished by such party, in metric units approved by the Departments of Instruments and Measurements of Algiers - Paris or of the U.S. Bureau of Standards in Washington (D.C.), as well as correction charts (list, trim, tanks' contraction, etc.). Such standards and charts shall be used throughout the term of this agreement, except in the case of a physical change in the tanks, in which case new standards and charts shall be used. LNG level measuring devices shall be approved by both Seller and

Buyer. Each tank shall be equipped with two level-measuring devices of different types.

Section 8.2. Determination of Density. The density of the LNG shall be determined by a calculation from the molecular composition determined in accordance with Section 8.4 hereof, for the average temperature defined in Section 8.3 hereof.

The method of calculation shall be the method known as the revised Klosek and McKinley Model, as set forth in NBS Technical Note 1030, published by the U.S. Department of Commerce in December 1980.

Section 8.3. Determination of the Temperature. The temperature of the cargo shall be the arithmetic average of the temperatures indicated by the temperature-registering devices immersed in the LNG in all of the tanks.

The temperature-registering devices, thermocouples or "resistance probes", shall be distributed over the entire height of the tanks and shall be accurate to 0.2-C, more or less, subject to the condition that the instruments are capable of being that accurate. These temperatures shall either be recorded in writing or printed.

Section 8.4. Sampling. One or several representative samples of the LNG shall be taken by Seller at a point located as close as possible to the loading flange of the LNG Tanker. The sampling device shall permit the total vaporization of a definite quantity of LNG allowing the taking of representative gaseous samples.

The device shall be chosen by mutual agreement between Seller and Buyer. Samples shall be analyzed with the aid of a chromatograph approved by Buyer. The analysis or the average of these analyses shall determine the molecular composition of the LNG.

A calibration of the chromatograph used shall be made before each delivery, with the aid of a gaseous sample, in the presence of a representative of Buyer being present if it so wishes.

Section 8.5. Determination of the Gross Heating Value. The gross heating value (PCS) of the regasified LNG shall be calculated from its molecular composition determined in accordance with Section 8.4, from the molecular masses and from the PCS at 0-C at a pressure of 1.01325 Bar of each of the constituent elements.

The PCS shall be expressed in thermies/kg.

The PCS values of each of the constituent elements are indicated in the table attached hereto as Appendix B.

Section 8.6. Determination of the Thermies of Btus Delivered. The quantity of thermies loaded on the ship shall be computed from the following formula:

$$Q_{th} = V \times M \times PC$$

in which:

Q_{th} represents the quantity of thermies loaded

V represents the volume in cubic meters of LNG loaded in m³, determined in accordance with Section 8.1

M represents the density of LNG determined in accordance with Section 8.2, and expressed in kg/m³

PC represents the PCS determined in accordance with Section 8.5 and expressed in thermies/kg

The quantity of millions of Btus (MMBtu) loaded shall be equal to:

$$Q_{mmbtu} = \frac{Q_{th} \times 3,968.3}{1,000,000}$$

Section 8.7. Methods of Operation. The gauging equipment in the ship's tanks shall be provided, operated and maintained by the Buyer at its expense. The equipment and material utilized for the determination and tests of the quality and density of the product shall be provided, operated and maintained by Seller at its expense.

Any measurement and any calculation relating to the determination of the quality and density of the LNG shall be made by Seller in the presence of a representative of Buyer if Buyer so wishes.

The absence of one of the parties will affect neither the taking of the measurements nor the preparation of the calculations incumbent upon the other party.

At any time, one party shall have the right to inspect the measuring and testing equipment provided by the other party, after prior notice to the latter.

Calibration of an instrument shall be made by the party in charge of the operation of this instrument, the other party having the right to be present at such operations.

However, all data relating to the tests, diagrams, calculations or any other similar information must be made available to the parties and kept for a period of at least three (3) years.

Section 8.8. Accuracy of Measurements. The accuracy of the equipment used may be verified on request of Seller or Buyer. Such verifications may only be made with both parties having the right to be present by methods recommended by the makers of the instruments or by any other method agreed upon by Buyer and Seller.

If, when verified, a measuring apparatus shows errors of less than one percent (1%), the previous reports on this equipment shall be considered correct regarding calculation of deliveries and the equipment shall be adjusted immediately as needed.

If, when verified, a measuring apparatus shows errors of more than one percent (1%), the previous reports

on this equipment shall be recalculated to a zero deviation by comparison to calibration results for any definitely known or agreed period; but if the period in which this error occurred were not definitely known or agreed upon, this correction would be made for half of the deliveries since the date of the last calibration.

The equipment for measuring the level of the LNG and its mass, and the temperature in the ship's tanks, as well as the chromatographs for analysis of natural gas, shall be the most reliable and accurate instrument known at the time they are chosen.

The equipment shall be professionally installed. The parties shall make every effort to obtain from the Service des Instruments et Mesures de Paris approval of measuring equipment and apparatus used.

Section 8.9. Disputes. Any dispute on the choice of the type and accuracy of the measurement apparatus, the result of a measurement, a sampling, an analysis, a calculation or method of calculation, shall be referred to the Ecole Polytechnique Federale de Zurich (Technische Hochschule, Zurich).

Any decision of this body shall be binding on Seller and Buyer. Expenses incurred relating to the services of this body shall be evenly divided between Seller and Buyer.

ARTICLE 9

PRICE

Section 9.1. F.o.b. Terms. Except as provided in Article 6 hereof, for any month during which there shall be completed any loading of any LNG Tanker hereunder the price F.o.b. Algerian port in U.S. Dollars per MMBtu of such LNG so loaded shall be the higher of the Reference Price (if any), the Minimum Price, and a price ("P") computed as follows:

(i) If SP for such month is less than \$5.00:

$$P = 0.6324 \times SP$$

(ii) If SP for such month is equal to or greater than \$5.00:

$$P = (0.6532 \times SP) - 0.0923$$

SP, for any month, shall be the amount obtained by ascertaining

(a) the total number of MMBtus of LNG or regasified LNG derived from LNG purchased hereunder and delivered at the tailgate of the Terminalling Facility to customers of Buyer or of any affiliate of Buyer during such month; and

(b) the total proceeds receivable by Buyer or any affiliate of Buyer from such deliveries less any sums paid by Buyer or such affiliate during such month to fiscal authorities in the United States in respect of any import duty, tax or other imposition not levied at the date of execution of this agreement but applicable to quantities of LNG imported under this agreement;

and by then dividing the aggregate of the amounts calculated under (b) above by the aggregate of the amounts calculated under (a) above. For any period less than a month, or for any month during which no vapor or liquid is delivered, SP shall be fixed by agreement of Buyer and Seller.

Buyer shall throughout this agreement diligently seek to maximize the proceeds under (b) above by negotiating or causing to be negotiated with such customers terms and

conditions (including price) which in Buyer's reasonable commercial judgment are the most favorable available to Buyer in the prevailing market and in the prevailing circumstances.

Section 9.2. Reconciliation with Amendment No. 3.

For purposes of coordinating the implementation of this agreement with Amendment No. 3, purchases and sales by Buyer under this agreement will be excluded from the calculation of quantities delivered by Seller under Amendment No. 3 and will be excluded from the calculation of prices under Amendment No. 3. During any period in which both cargoes purchased and sold by Seller and Buyer under Amendment No. 3 are being sold by Buyer or any affiliate of Buyer, and cargoes purchased by Buyer under this agreement are being sold by Buyer or any affiliate of Buyer at the Everett Terminalling Facility, the highest priced sales at the tailgate of the Everett Terminalling Facility shall be assumed to have been made from the Amendment No. 3 minimum quantities (as defined in Section 6.3 of Amendment No. 3), which are assumed to be sold at an average rate of approximately 120,000 MMBtu per day, and the lower priced sales shall be assumed to have been made from the quantities delivered under this agreement.

ARTICLE 10
TAXES AND DUTIES

All duties, taxes and imposts affecting the LNG cargo and collected by the Government of the United States of America shall be borne by Buyer without prejudice to Section 9.1 hereof.

All duties, taxes and imposts affecting the LNG cargo and collected by Algeria, and, where the LNG Tanker is furnished under the Transportation Agreement, all duties, taxes and imposts affecting the LNG Tanker shall be borne by Seller.

ARTICLE 11
PORT FACILITIES; LOADING

Section 11.1. Port and Loading Facilities.

(a) Port Facilities. Seller shall make available, or cause to be made available, safe port facilities for the loading of LNG purchased hereunder capable of receiving LNG Tankers of the following maximum dimensions:

Overall Length..... 290.00 meters
Width..... 43.70 meters
Draft at full capacity... 11.30 meters

Port facilities shall be such as to permit all loading and maneuvers to be carried out in complete safety within a reasonable time.

(b) Berthing and Loading Facilities. Seller shall make available or cause to be made available to Buyer at the port of loading in Algeria berthing and loading facilities including:

- (i) mooring equipment;
- (ii) lighting sufficient to permit docking maneuvers by day or by night in complete safety, to the extent permitted by the port authorities;
- (iii) pipelines to ensure normal stocking of the LNG Tanker with bunker fuel;

- (iv) loading arms, pipes and other appropriate facilities permitting the loading of LNG at the average rate of ten thousand m³/hour;
- (v) a vapor return line from the LNG Tanker to shore facilities having a diameter sufficient to maintain appropriate operating pressure in the tanks of the LNG Tanker and in the storage reservoirs; and
- (vi) a liquid nitrogen loading facility compatible with the LNG Tanker.

The facilities described in this Section 11.1(b) shall be provided, operated and maintained at no cost to Buyer.

Section 11.2. Safety. Loading of LNG shall be carried out in strict conformity with all applicable safety and other similar regulations.

Section 11.3. Conditions of Loading. Buyer shall give written notice to Seller of the estimated date and hour of arrival at the port of loading of any LNG Tanker providing maritime transportation hereunder as well as of the

estimated quantity of LNG which is to be loaded. Buyer shall send or cause to be sent to Seller the following written notices:

- (i) a first designation notice shall be given upon departure from last port of discharge or (if later) at least ninety-six (96) hours prior to the estimated time of arrival, and shall contain an estimated time of arrival;
- (ii) a second designation notice shall be given so as to arrive seventy-two (72) hours prior to the estimated time of arrival;
- (iii) a third designation notice shall be given so as to arrive twenty-four (24) hours prior to the estimated time of arrival; and
- (iv) at the time the LNG Tanker arrives at the sea buoy or designated anchorage at the loading port, the Master shall give written notice of such arrival to Seller or its authorized representative at any time of the day or night.

As soon as the LNG Tanker is berthed alongside the pier and prepared to load its cargo, the Master of the LNG Tanker shall give written notice of ready to receive to Seller or its representative at any time of the day or night. Provided that the bottom temperature of the tanks of the LNG Tanker is not higher than minus one hundred and forty-five degrees centigrade, Seller shall then take all appropriate measures within its reasonable control to permit the loading of the LNG Tanker as quickly as is safely possible.

Section 11.4. Laytime and Demurrage. Laytime for loading the LNG Tanker shall respectively begin to run 6 hours after the giving of the notice under Section 11.3(iv) above, or, if earlier, when the LNG Tanker is berthed alongside the pier and prepared to load. Thereafter, Seller shall cause the LNG Tanker (at the Loading Port) to load as quickly as possible. Allotted laytime shall be 24 running hours. In respect of all time lost in excess of allotted laytime in loading, Seller shall pay to Buyer demurrage at the rate of \$30,000 per day, and pro rata for less than a day. For the computation of demurrage, the following shall be added to allotted laytime: (i) any period during which loading is delayed, hindered or suspended by reason of the state or condition of the LNG

Tanker; (ii) the time required at the Loading Port to cool down the tanks of the LNG Tanker to the temperature specified in Section 11.3 above; and (iii) any period during which loading of the LNG Tanker may have been delayed, hindered or suspended by reason of an event of force majeure. Demurrage, if any, shall be computed and payable at the end of each consecutive period of three (3) consecutive months beginning the effective date of this agreement but not earlier than October 15, 1989.

Section 11.5. Cooldown; Heel and Gas Trials.

(a) Seller shall make available or cause to be made available LNG for gas trials and cooldown for any LNG Tanker transporting LNG purchased hereunder which has a bottom temperature in its tanks prior to loading higher than minus one hundred and forty-five degrees centigrade. Payment for the LNG so supplied shall be the responsibility of Buyer, except as provided below. Buyer shall pay to Seller for the LNG so supplied (for which Buyer bears such payment responsibility) the price in U.S. Dollars per MMBtu provided in Article 9 hereof for LNG loaded during the month of such supply.

(b) Upon discharge of any LNG Tanker transporting LNG in connection herewith, which is scheduled to load LNG at the loading port within thirty (30) days following completion of such discharge, Buyer shall retain or cause to be retained aboard that LNG Tanker (if returning forthwith in ballast to the loading port to load further cargo hereunder) an amount of LNG sufficient to permit such tanker to maintain a temperature no higher than minus one hundred and forty-five degrees centigrade at the bottom of the tanks for a period of at least twenty-four (24) consecutive hours after its arrival at the loading port or, in the case of an LNG Tanker provided under the Transportation Agreement, after the time (if earlier) when such arrival would have occurred had it proceeded to the loading port with due dispatch. The supply of LNG necessitated by a failure of Buyer so to cause sufficient LNG to be retained aboard shall be the responsibility of and shall be paid for by Buyer, but at the request of Buyer such LNG shall be supplied by Seller. The price to be paid by Buyer to Seller for LNG for which Buyer is obligated to pay Seller under this Section 11.5 shall be the price in U.S. Dollars per MMBtu provided in Article 9 hereof.

(c) If any LNG Tanker aboard which LNG has been so retained does not load within such twenty-four (24)-hour

period for any cause attributable solely to any matter within the reasonable control of Seller or Seller's affiliate(s), the cost of additional LNG thereby rendered necessary and utilized for cooldown of such Tanker shall be the responsibility of Seller.

(d) The quantities of LNG purchased pursuant to this Section 11.5 by Buyer shall not be included in the quantities covered by Article 6 of this agreement.

ARTICLE 12

INVOICING, PAYMENT AND ERRORS

Section 12.1. Invoicing and Payment.

(a) Seller's Documents; Payments on Account. Not less than 7 days in advance of each month in the course of which Buyer anticipates that there will be LNG deliveries hereunder, Buyer shall notify Seller by telex of Buyer's best good faith estimate of the price P under Article 9 for that month. Promptly following the completion of each loading of LNG purchased hereunder Seller shall send to Buyer in respect thereof a telex substantially in the form of Appendix C hereto. Seller shall at the same time cause to be dispatched to Buyer (a) the data and documents indicating