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Boundary Gas, Inc. (ERA Docket No. 81-04-NG), August 9, 1982

DOE/ERA Opinion and Order No. 45

Order Conditionally Authorizing Boundary Gas, Inc. to Import Natural Gas from Canada

[Opinion and Order]

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I. Introduction and Project Description

On December 19, 1980, Boundary Gas, Inc. (Boundary) filed with the Economic Regulatory Administration (ERA) of the Department of Energy (DOE) an application pursuant to section 3 of the Natural Gas Act (NGA) to import up to 185,000 thousand cubic feed (Mcf) of natural gas per day and 675.25 billion cubic feed (Bcf) over a period of ten years (November 1, 1982, through October 31, 1992). Boundary is a corporation whose stockholders are comprised of thirteen natural gas distribution companies and one interstate pipeline company serving markets in the Northeastern and Middle Atlantic States. As proposed, Boundary will purchase and resell the gas to its fourteen stockholders based on their respective shares of ownership. Boundary's stockholders (referred to as "repurchasers" in its application and in this opinion), their percentage of ownership, and their respective market areas are shown below.

Stockholders	Percent of Ownership	Market Area
Bay State Gas Co. ...	10.27	MA/NH/ME
Berkshire Gas Co....	1.14	MA
Boston Gas Co. ...	7.52	MA
The Brooklyn Union Gas Co. ...	22.54	NY

Connecticut Gas Co. ...	5.11	CT
Consolidated Edison Company of New York, Inc....	22.54	NY
Fitchburg Gas and Electric Light Co. ...	.57	MA
Gas Service, Inc....	.57	NH
Haverhill Gas Co. ...	1.74	MA
Long Island Lighting Co. ...	12.97	NY
Manchester Gas Co. ...	1.16	NH
National Fuel Gas Supply Corp. ...	4.87	NY/PA
New Jersey Natural Gas Co. ...	7.85	NJ
Valley Gas Co. ...	1.15	RI

As a result of this division of ownership, approximately 63 percent of the gas will be sold in New York (mainly in the New York City area), 29 percent in the New England states, and 8 percent in New Jersey.

Under this import proposal, Boundary will purchase the gas from TransCanada PipeLines, Limited (TransCanada) and receive it at an existing point of importation where the pipelines of TransCanada and Tennessee Gas Pipeline Company, a Division of Tenneco Inc. (Tennessee), interconnect, near Niagara Falls, New York. The Gas Sales Agreements between Boundary and its repurchasers provide that Boundary will deliver the gas to the repurchasers at this point of interconnection and that the repurchasers will take title to the gas immediately.1/

Tennessee, which will transport the Boundary gas from the point of import to the systems of Boundary's repurchasers, will own and operate all necessary facilities. Each repurchaser has agreed to a Precedent Agreement and "form of" Transportation Contract (Gas Transportation Contract) with Tennessee. In order to transport the Boundary volumes, as well as its own Canadian import,2/ Tennessee will have to construct and install certain pipeline, compressors, and other related facilities.3/

The contract price of the gas to be imported by Boundary will be the uniform international border price for Canadian gas, presently U.S. $4.94 per MMBtu.

Boundary's Precedent Agreement and "form of" Gas Purchase Contract (Gas Purchase Contract) with TransCanada require it to take and pay for, or nevertheless pay for, an annual quantity of gas equal to 75 percent of the daily contract quantity (185,000 Mcf) times the number of days in the contract year. Each repurchaser will be assigned a minimum annual quantity according to its percentage entitlement to buy gas from Boundary. To the extent that a repurchaser releases gas which is taken by other repurchasers, its minimum annual quantity will be reduced accordingly.

The charge which Boundary will be obligated to pay for gas not taken during any contract year will be the sum of three factors: a transportation daily demand rate, a transportation commodity rate, and the imputed Alberta border price for the gas. This provision is designed to lower Boundary's payments for take-or-pay gas to a level approximately equal to the price charged by TransCanada to its Canadian domestic customers in its Eastern Rate Zone.

II. Procedural History

A. Initial Filings, Interventions, and ERA Notice

As noted earlier, Boundary filed its application with the ERA on December 19, 1980. The ERA issued a notice of receipt of the application on January 12, 1981, and invited protests, petitions to intervene, and notices of intervention.4/ Twelve of the Boundary repurchasers' petitions indicated that the imported gas was needed to offset anticipated decreases in their supply from traditional pipeline suppliers. Several state government agencies that intervened expressed general support for Boundary's application, citing the increased availability of reasonably priced fuel and the resulting reduction in reliance on imported oil the Boundary project would provide.

Several intervenors expressed reservations about Boundary's proposal, which can be categorized roughly as concerns about the effect of the project on (1) competition for Canadian gas supplies and U.S. fuel markets, (2) the encouragement of competition between distribution companies and pipeline companies, and (3) the price and supply of fuel oil to high-priority customers during natural gas curtailments. One intervenor, Transcontinental Gas Pipe Line Corporation (Transco), stated that the ERA should convene a formal evidentiary hearing to consider various issues surrounding Boundary's application.

On February 3, 1981, Boundary amended its application to conform with certain changes in its Gas Purchase Contract and Sales Agreement with TransCanada pertaining primarily to make-up rights and the price of take-or-pay gas.5/

On May 1, 1981, Boundary submitted a letter to the ERA asking for ". . .

expeditious consideration of the Boundary Applications." Specifically, Boundary requested the ERA to convene a conference for the purpose of discussing four matters: (1) supplemental information needed by the ERA; (2) identification mf issues that are relevant to this application; (3) procedures to be followed by the ERA; and (4) the establishment of a specific timetable for consideration of the application.

In a letter dated July 2, 1981, the ERA requested Boundary to submit additional information regarding its proposed project. The ERA's letter also indicated that it intended to request written comments from all parties in the near future on certain issues and to schedule a prehearing conference to determine if further proceedings were necessary. On August 5, 1981, Boundary responded to the ERA's July 2, 1981 information request in a joint filing that also responded to data requests made by the FERC.6/

B. ERA Order Requesting Comments

On August 12, 1981, the ERA issued an Order Granting Interventions, Requesting Written Comments on the Principal Issues in this Proceeding, and Convening a Conference (August 12 Order). This order granted all of the pending petitions for intervention and acknowledged the notices of intervention of all thirty-three parties that responded to the ERA's January 19, 1981 Federal Register notice of application.7/ The ERA's order also requested comments on eight issues:

(1) impact on increased reliance;

(2) national and regional need;

(3) competing projects for Canadian gas;

(4) direct purchases of imported natural gas by distribution companies;

(5) impact on the fuel oil market;

(6) impact on domestic production;

(7) impact on domestic distribution systems; and

(8) effect on the U.S. economy.

The August 12 Order requested submission of comments by September 11, 1981, and responses to these comments by September 25, 1981. In addition, the order scheduled a prehearing conference for September 30, 1981, in Boston, Massachusetts, in order to (1) identify relevant issues that were not mentioned in the August 12 Order; (0) determine whether further proceedings might be necessary to resolve any factual, legal, or policy issues; (3) determine the need for an evidentiary hearing; and (4) determine what evidence and testimony each party would propose to present, if an evidentiary hearing was convened.

On September 4, 1981, Transco requested an extension mf time from September 11 to September 18, 1981, to file initial written comments in response to the August 12 Order. The ERA, on September 9, issued an order extending the initial and reply comment periods to September 18 and October 2, 1981, respectively, granting another petition for intervention,8/ and rescheduling the conference to October 16, 1981.

Of the twenty parties that responded to the ERA's August 12 Order, seventeen filed initial comments and thirteen filed reply comments. The parties' comments focused on the eight specific questions the ERA raised in its order and are discussed in Section V of this opinion.

C. Prehearing Conference and Subsequent Meetings Between Parties

The discussion at the October 16, 1981 conference focused on those issues already identified by the ERA in its August 12 Order and on the question of what additional proceedings, if any, might be needed to resolve these issues. In order to resolve certain issues, the conference participants suggested a variety of procedures including briefs, discovery, evidentiary hearings, comparative hearings, and joint ERA/FERC comparative hearings.

In addition to the issues identified in the ERA's August 12 Order, three new issues emerged at the conference. The Empire State Petroleum Association (ESPA) and the New England Fuel Institute (NEFI) requested a statement of position from the ERA with regard to the Government's policy on the substitution of gas for oil, particularly imported gas. Algonquin Gas Transmission Company (Algonquin) questioned whether the ERA's procedures in this proceeding permitted adequate development of the record. The third issue that surfaced involved Transco's announcement that it had attempted unsuccessfully to join Boundary and Tennessee in transporting volumes intended for Boundary to several of its repurchasers. Specifically, Transco raised questions regarding the costs associated with the Boundary Project, and maintained that the ERA should consider, as part of its section 3 responsibilities, a joint venture that would reduce the cost of transportation in the Boundary/Tennessee Project.9/

At the conference, Algonquin asserted that certain facts regarding formation of the Boundary Project were unclear on the current record and the ESPA and NEFI claimed they needed assistance in understanding the market data previously submitted by Boundary. Without such information the parties asserted that they would be unable to identify specific issues that might be in dispute. In response, Boundary offered to meet informally with Algonquin, and the ESPA and NEFI during the week following the conference to discuss certain factual information in Boundary's application as a means of resolving these issues. The results of these meetings were reported by the parties in separate written submissions filed with the ERA. Although Boundary asserted that it had been fully responsive to all parties' requests within the guidelines set forth at the prehearing conference, the ESPA and NEFI claimed that several issues remained in dispute.

D. Post-conference Filings and ERA Order Requesting Certain Information of Applicant and Further Comment on Selected Issues

During the three-month period November 1981 through January 1982, the three interstate pipeline companies sponsoring the Canadian gas import application in ERA Docket 81-02-NG (Algonquin, Transco, and Texas Eastern Transmission Co. (TETCO)) (joint applicants) filed various motions in their proceeding as well as in this proceeding. Specifically, the joint applicants requested the ERA to expedite its consideration of their application in order to issue a decision concurrently with its decision on the Boundary application, to attach certain conditions to any prior grant of Boundary's application or, alternatively, to conduct a comparative evidentiary hearing on the two applications. In its responses to these motions, Boundary rejected the bases for the request for comparative hearings, and argued that the motions should be denied to the extent that they would impose conditions on a grant of, or delay final action on, its application. Boundary did not object, however, to the request for expeditious review of their joint import application.

After consideration of the record, the ERA on February 10, 1982, issued an Order Requesting Certain Additional Information from the Applicant, Requesting Further Comment on Selected Issues, Granting Additional Interventions, and Establishing Further Procedures in this Application 10/ (February 10 Order). The order requested Boundary to submit further information concerning its supply and demand projections, projected growth in natural gas customers and use, and actual sales figures for calendar year 1981. This order also granted all parties further opportunity to comment by March 31, 1982, on Boundary's response and on three specific issues:

(1) national and regional need;

(2) effects of a supply interruption on the fuel oil market; and

(3) competition for gas in the same market area.

By April 14, 1982, all interested parties had filed with the ERA responses and reply comments in accordance with the February 10 Order. On June 11, 1982, the ESPA and NEFI filed a joint motion for an evidentiary hearing, alleging that certain material issues remained in dispute in the proceeding that could be resolved only by evidentiary hearings. Boundary responded to this motion on June 16, 1982, contending that no material issues remained in dispute and that the ERA should deny their motion. On July 19, 1982, the ESPA and NEFI filed with the ERA a renewed motion for an evidentiary hearing, alleging new information. On July 20, 1982, Boundary filed a reply with the ERA opposing the renewed motion on the grounds that it was redundant and without merit.

E. Additional Request for Intervention

The ERA had already granted 39 petitions and notices of intervention in this proceeding when, on February 26, 1982, Michigan Wisconsin Pipe Line Company (Michigan Wisconsin) petitioned to intervene out-of-time. Michigan Wisconsin stated that it had ". . . a direct, immediate and substantial interest . . ." in this proceeding because it is currently an importer of Canadian gas and is seeking to import additional natural gas from Canada. Michigan Wisconsin stated that it delayed filing for intervention

> ". . . until it became clear, by the number of import applications filed to import Canadian gas, the single export proceeding relative thereto which the NEB has created, and the timing of likely United States consideration of all such import applications, that such various applications are likely to be interdependent, in part, at least."

The procedures governing intervention in ERA proceedings are set forth in 18 CFR Section 1.8. Specifically, Section 1.8(d) states in relevant part:

> Petitions to intervene and notices of intervention may be filed at any time following the filing of . . . an application , . . but in no event later than the date fixed for the filing of petitions to intervene in any order or notice . . . unless, for good cause shown, the [ERA] authorizes a late filing. (emphasis added)

In prior cases, and in this proceeding as well, the ERA has authorized interventions by persons whose petitions were filed out of time based on one or more of the following considerations: (1) whether granting intervention would delay the proceeding; (2) whether granting intervention would prejudice the rights of any of the parties already in the case; (3) whether any objections to the late petitions had been received; (4) whether any significant orders had been issued or any written or oral comments had been received in the proceeding; (5) whether granting intervention would otherwise adversely affect issuance of a timely decision; and (6) whether the late petitioner had stated a credible and reasonable basis for failing to file on time. The ERA must weigh these factors, as well as any other relevant considerations it identifies or which are brought to its attention by any parties objecting to a late petition, in order to determine whether the fundamental "good cause shown" standard in Section 1.8 has been met.

After careful review, we find Michigan Wisconsin has failed to demonstrate "good cause shown" for its late-filed petition which is, accordingly, denied. We note that the petition was filed more than one year after the intervention deadline the ERA announced in its January 1981 notice of Boundary's application, and after significant orders had been issued and most of the record compiled. We note further Michigan Wisconsin's stated interest--as an acquirer and importer of Canadian gas--is a general interest which is adequately represented by at least eight existing parties (see 18 CFR 1.8(b)(2)). We note, finally, that Michigan Wisconsin's reasons for delay in filing--the alleged interdependence of various Canadian gas import applications before ERA--was not new in February 1982 when the late petition was filed but, rather, was noted in other timely petitions for intervention in this proceeding a full year earlier.

III. Jurisdiction

Sections 301 and 402(f) of the DOE Organization Act 11/ gave the Secretary of Energy (the Secretary) jurisdiction over imports and exports of natural gas pursuant to section 3 of the NGA. This responsibility was delegated to the Administrator of the ERA on October 1, 1977.12/ On October 2, 1979, the Secretary issued two delegation orders delineating the areas of authority between the ERA and the FERC with respect to section 3 applications, and setting forth certain criteria to aid the ERA in executing its responsibilities.13/

Section 3 of the NGA reads as follows:

> After six months from the date on which this act takes effect

> no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the [Administrator] authorizing it to do so. The [Administrator] shall issue such order upon application, unless, after opportunity for hearing, [he] finds that the proposed exportation or importation will not be consistent with the public interest. The [Administrator] may by [his] order grant such application, in whole or in part, with such modification and upon such terms and conditions as the [Administrator] may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as [he] may find necessary or appropriate.

The NGA thus establishes a presumption in favor of authorizing an import of natural gas.14/ In authorizing such an import, the ERA must conclude that the import will not be inconsistent with the public interest. In asserting that such an import should be denied, an opponent should persuade the ERA that granting the application will not be consistent with the public interest.

The ERA's determination is based on its evaluation of the application and any other relevant information in the record of a particular case or in the public domain, in light of certain criteria described in Delegation Order 0204-54: (1) the security of the gas supply; (2) the effect on the U.S. balance of payments; (3) the price proposed to be charged at the point of importation; (4) the national need for the gas; and (5) consistency with any relevant DOE regulations or statements of policy. In addition, Delegation Order 0204-54 reserves to the Administrator the discretion to consider any other factors relevant to a particular case, including (but not limited to) regional need for the gas and the eligibility of purchasers and participants and their respective shares.15/ These criteria concern issues that are at the heart of the development of DOE policy concerning imported natural gas in the context of total national energy policies.

In evaluating the specific criteria set forth in Delegation Order 0204-54, as well as other factors that the Administrator considers relevant to a particular case, the ERA is required to weigh various advantages or disadvantages in determining, on balance, whether a particular application as a whole will not be inconsistent with the public interest. These factors interrelate and may overlap. Evidence bearing on one factor may bear on another. Some of these factors, because of their judgmental nature, are not susceptible to quantification. No one factor is necessarily determinative, but is weighed in consideration with all other factors. Likewise, in evaluating individual factors deemed relevant to a particular proceeding, the ERA similarly weighs all information on the record, and matters of which the agency may take official notice, with respect to that factor. This process involves not only assessing the facts of a particular situation but making judgments about the relative importance of those facts and their relationship to relevant DOE policies.

IV. Environmental Determination

The Secretary has delegated to the Administrator of the ERA the responsibility to authorize imports pursuant to section 3 NGA. Certain other areas of responsibility, however, have been delegated to the FERC. Specifically, the FERC has jurisdiction over "all functions under Section 3 of the Natural Gas Act to approve or disapprove the construction and operation of particular facilities and the site at which they would be located. . . ." 16/ Thus, the jurisdiction over the siting and construction of the facilities required by this import is clearly the FERC's.

The National Environmental Policy Act of 1969 (NEPA) requires the ERA to give appropriate consideration to the environmental effects of its proposed actions: in this case, authorization to import natural gas. The FERC has the statutory responsibility to perform an environmental review before making its own decision on Boundary's FERC section 3 application. It is appropriate, therefore, that the FERC should be the lead agency in terms of reviewing the environmental impacts of this import.

We are issuing a conditional order based on our review of the record before us. When the FERC has completed its environmental review, we will complete our own environmental review based on the FERC's analysis, reconsider this opinion and issue a final order. On July 9, 1982, the staff of the FERC issued a Draft Environmental Impact Statement on the joint Tennessee/Boundary Looping Project and has requested that comments be submitted on the study no later than August 31, 1982. Our conditional decision indicates to the parties the ERA's determination on only the non-environmental issues in this case. Since this is not a final order, approval neither jeopardizes the environment nor limits our alternatives in making a final decision on the environmental determination.

V. Discussion of the Issues and Opinion

A. Procedural Issues

1. Trial-Type Hearings

During the course of this proceeding, three parties have petitioned the ERA to convene trial-type hearings 17/ for the purpose of developing various issues. The ERA has reviewed these requests and in each case, as discussed more fully below, has determined that no party has shown that there exists an issue of a material fact in dispute that requires the ERA to conduct a trial-type hearing.18/ Trial-type hearings would not aid the ERA in reaching a decision in this proceeding and are lot required to ensure its fairness or the adequacy of the record.

Our decision was made after providing notice and numerous opportunities for the parties to submit evidence by written and oral comment on the issues and reviewing the abundant unsolicited comments and petitions of the parties. In light of the numerous opportunities for comments and reply comments we have provided, we do not believe that a trial-type hearing would illuminate the primarily legislative and predictive facts relating to whether a grant of this application will not be inconsistent with the public interest.

(a) Transco's request

In its February 9, 1981 petition for intervention in this proceeding, Transco requested the ERA to schedule a "formal hearing on the evidentiary record" to consider further two issues concerning Boundary's application: (1) potential competition for Canadian gas supplies and (2) potentially adverse impacts of encouraging competition between distribution companies and pipeline companies. The ERA has concluded that trial-type hearings on these issues are unnecessary.19/ The ERA has provided numerous opportunities for parties to assist in compiling a record on these issues by written and oral comment. These issues were aired at the October 16, 1981 prehearing conference and in extensive written comments thereafter. The parties have taken advantage of these opportunities to comment, and the existing record contains ample information to put the parties on notice of their respective positions and to enable the ERA to apply its expertise in reaching a determination on these two issues.

(b) The ESPA and NEFI's request

The ESPA and NEFI have petitioned the ERA to hold trial-type hearings on various questions related to Boundary's need for the gas it proposes to import from Canada. In an extensive series of joint comments and motions, the ESPA and NEFI have identified numerous issues which they allege are factual, material, and in dispute on the basis of the current record.

The ESPA and NEFI's allegations fall into two general categories.

First, the ESPA and NEFI alleged that the assumptions behind the Boundary repurchasers' supply and demand projections are unclear and can be illuminated only through cross-examination of the repurchasers in a trial-type forum. Specifically, the ESPA and NEFI contended Boundary has not explained adequately the assumptions behind the data each repurchaser developed, according to general guidelines prescribed by Boundary, to estimate future supply and demand over the ten-year term of the Boundary Project. Boundary disputed the contention that critical assumptions underlying the repurchasers' projections remain unclear, citing its March 17, 1982 response to the February 10 Order and prior submissions. Specifically, Boundary noted that it had provided the ERA and served on the ESPA and NEFI each repurchaser's supply and demand projections, broken down into annual and seasonal figures, and listing each repurchaser's supply sources and demand estimates for various priority service categories.

The ESPA and NEFI have had a dull opportunity to demonstrate that the assumptions behind the repurchasers' supply and demand projections are in dispute, but have failed to do so. The ESPA and NEFI have merely expressed the unsupported opinion that these assumptions may not be warranted and may therefore unfairly favor Boundary's case and the hope that cross-examination of Boundary's repurchasers may somehow illuminate this matter. The record fully explains the guidelines Boundary established as a framework for developing the repurchasers' projections. The ESPA and NEFI did not allege that the general guidelines are inappropriate, or that any particular data provided by a repurchaser is inaccurate. Instead, they request further opportunity to cross-examine the repurchasers on the "assumptions'% behind each of their projections, on the hope that cross-examination of their witnesses may reveal certain factual discrepancies. The ERA notes that ESPA and NEFI have had numerous opportunities to develop their position and were specifically requested by the ERA in the February 10 Order to submit data and information on Boundary's projections and to "describe how such projections support the conclusion that Boundary's assertions on national and regional need for imported gas are invalid.'% The ESPA and NEFI failed to show that there remain material issues of disputed fact relating to Boundary's projections or to explain why they could not be fully explored by means of notice and comment.

In addition, the ERA does not believe that trial-type hearings would provide additional information about the repurchasers' assumptions that would be material to or significantly aid its decision in this proceeding. More detailed knowledge of the derivation of the data underlying these assumptions would not enhance the record. In the absence of any specific dispute regarding the accuracy of the repurchasers' projections or Boundary's general guidelines, the ERA does not believe that trial-type hearings would materially add to the understanding of the repurchasers' projections already developed in this proceeding, or serve any other useful purpose.

As the other general basis for their request that the ERA convene a trial-type hearing in this proceeding, the ESPA and NEFI have enumerated a number of other issues, touching on almost every aspect of Boundary's application, which they characterize as material issues of disputed fact. Many of these alleged factual issues bear on Boundary's need for the gas, either with respect to Boundary's assertions of declining domestic supplies or its customers' demand projections. Boundary contended that, despite the length of the ESPA and NEFI's submissions, they have failed to raise any material, disputed issue of fact and merely speculate about various aspects of Boundary's application that are not actually in controversy. In its own series of pleadings, Boundary explained point-by-point why there is no basis for the ESPA and NEFI's assertions.

We have determined there should not be a trial-type hearing on these various points, which already have been fully developed by the parties in the extensive record of this proceeding. Some of the issues the ESPA and NEFI raise concern matters of policy which bear on the ERA's consideration of all section 3 import applications but do not involve adjudicative facts. These issues are discussed, as relevant, in our discussion of substantive issues in section V.B, of the opinion. Other allegations indicate possible disputes of fact, but do not involve facts that fairly could be characterized as material to the decision. Still other of the ESPA and NEFI's allegations raise theoretical questions about aspects of Boundary's application, but fail to demonstrate the existence of an actual material dispute of fact that should be resolved by trial-type hearings.

The ERA has considered carefully each of the ESPA and NEFI's numerous allegations with the objective of ensuring that all parties are treated fairly and have sufficient opportunity to develop and present their positions. With this important goal in mind, the ERA has determined that, after multiple opportunities to present information, the ESPA and NEFI have not shown that any issues of adjudicative fact material to Boundary's application remain in dispute. The ERA has decided, therefore, that trial-type hearings would not contribute to ensuring development of issues relevant to this proceeding, are not in the public interest, and are not required by law.

2. Comparative Hearings

In various pleadings some parties expressed concern that Boundary and other current and prospective Canadian gas importers might be in competition for limited supplies of exportable Canadian gas. This concern arose from a belief that the Canadian National Energy Board (NEB) might not grant all pending applications for export licenses.

In particular, the joint applicants in ERA Docket No. 81-02-NG alleged that approval by the ERA of Boundary's application before their own might be interpreted by the NEB as a signal that the ERA preferred Boundary's project, and thereby prejudice their import project in the event the NEB's determination of the level of exportable surplus Canadian gas precluded it from granting all pending applications for export licenses. In essence, this amounted to a claim of "mutual exclusivity" based on supply area competition.20/ Accordingly, the joint applicants asked the ERA either to (1) issue simultaneous decisions in this docket and theirs, or attach certain conditions to any prior approval to Boundary, or, in the alternative (2) hold comparative hearings on the two applications. As the basis for their request, the joint applicants cited Ashbacker Radio Corp. v. F.C.C.,21/ which requires agencies to evaluate "mutually exclusive" applications on a comparative basis.

In response to the joint applicants' allegations, Boundary, joined by Tennessee, contended that its application was not mutually exclusive of any other pending import application and urged the ERA to deny each of the joint applicants' procedural requests. In addition, Boundary contended that the procedural relief sought by the joint applicants would delay unduly a decision on its application, since the joint applicants' application was not yet perfected.22/

The standard for determining whether applications are "competitive" in terms of the Ashbacker doctrine can be summarized as whether the applications are mutually exclusive at the time they are being considered and the license award is being made.23/ The term "mutual exclusivity" has been interpreted as describing two or more concurrently filed applications for a similar license where the grant by the agency of one effectively precludes another. In addition, Midwestern Gas Transmission Company v. FERC 24/ and other decisions make clear that determinations regarding supply exclusivity must be based on economic conditions at the time the agency is considering potentially competitive applications.

In the instant proceeding, no party has suggested nor has the ERA given any indication that it foresees a need to limit the number of applications it can authorize consistent with its statutory responsibilities. Indeed, there are no such legal constraints on the ERA. As we recently stated in our order approving Tennessee's import (Tennessee Order),25/ we intend to issue decisions on a case-by-case basis, as each one becomes ripe, with no preferential order of decision. The allegations of supply exclusivity are based on speculation about future NEB actions with respect to pending export applications. To date, however, the NEB has made no announcement regarding either the number of export licenses it intends to grant or the total quantity of gas available for export.

The ERA has determined that Boundary's application is not mutually exclusive of any other import application pending before us at this time. The ERA does, of course, have the authority to reopen this or any other proceeding should future action by the NEB make it appropriate to do so.

B. Substantive Issues

In view of the projected long-term decline in supply of domestic natural gas from conventional sources over the ten-year life of the Boundary project, we find that during this period there are both national and regional needs for supplemental supplies from secure sources that are reasonably priced. Accordingly, we conclude that it will not be inconsistent with the public interest to authorize the proposed importation of natural gas from Canada as a means of meeting part of this need. As discussed below, we find that the price of this proposed import is reasonable and that there is no reason to believe that Canada will not be a reliable supplier of the volumes of natural gas Boundary proposes to import. In addition, we find that no undue dependency on Canadian gas will arise from granting this application. Lastly, we find that the proposed importation will not have a negative impact on the U.S. balance of payments, domestic transmission and distribution systems, domestic production, and the New England and Middle Atlantic fuel oil markets, but will, in fact, benefit gas consumers.

This import serves the consumers' interests in obtaining a long-term reliable supply of natural gas at a reasonable price. As we discuss further below, this import will help fill the projected consumer demand, regionally and nationally, for natural gas that cannot be met by supplies from domestic sources. In addition, this import will enhance the ability of the domestic natural gas transmission system to deliver gas to consumers in this region.

1. Need

(a) Introduction

The issues of national and regional need for the Boundary gas volumes have been contested in this proceeding. While Boundary and most other parties that have addressed this issue contend there is a need for this import, the ESPA and NEFI have argued that need is a function of either an increase in customer demand or a decline in domestic supply, and that neither of these has occurred, nor is expected to occur in the foreseeable future.

In evaluating the issue of need, several important factors were taken into consideration. First, the ERA concentrated on long-term supply and demand trends and was not unduly influenced by the frequent short-term supply, demand, and price fluctuations inherent in the natural gas and petroleum markets. Second, the DOE continues to have a policy favoring the displacement of oil imports with price competitive alternatives, including price-competitive Canadian gas. Third, as long as a substantial portion of our energy supplies depends on imports, the ERA observes that diversity in the sources and types of these supplies is desirable. Finally, as the applicable DOE delegation order and the procedural orders issued in this proceeding make clear, we have decided in this proceeding to evaluate both national and regional need. A conclusion that there is a need for the gas may be based on either of these factors separately, or a combination of both. The discussion and analysis that follow next, accordingly, deal with both of these need issues.

(b) Positions of the Applicant and Supporting Intervenors

(i) National Need

In support of its claim that there exists a national need for additional imported gas, such as proposed in its term-year import request, Boundary has stated that a number of studies 26/ have projected ". . . that the production of conventional natural gas in the United States will decline throughout the balance of this century. Over the same period, increased volumes of imported gas will be needed to meet the nation's gas requirements." 27/ In addition to these published reports, Boundary referred to a study by the FERC Office of Pipeline and Producer Regulation entitled "The Future Supply and Demand for Supplemental Gas in the United States" (July 21, 1981).28/ Boundary stated that the study concludes that future U.S. demand requirements could not be met from traditional "lower 48" gas supplies and that substantial supplemental supplies of natural gas (including Alaskan natural gas, Canadian and Mexican natural gas, LNG and SNG from coal) will be needed.

The three interstate pipeline companies (Tennessee, Transco, TETCO) that currently serve the Boundary market area supported Boundary's assertion that there will be a national need for additional volumes of imported gas over the term of the Boundary Project. Tennessee, in its September 18, 1981 filing, enclosed a table, compiled by gas and oil trade associations,29/ that illustrates that for the last 12 years, domestic natural gas reserve additions in the lower 48 states have failed to equal natural gas production and that the reserve life index for the lower 48 states is now only about 8 years. As additional evidence of national need for additional imports in the next decade and remainder of the century, Tennessee cited testimony given by two U.Q. Government officials before a Congressional Subcommittee on June 1, 1981, to the same general effect.30/ In their September 18, 1981 filings, both TETCO and Transco reiterated Boundary's and Tennessee's statements about dwindling natural gas supplies and the need for additional imports duping the next 20 years. Transco submitted data it previously filed in earlier ERA dockets 31/ with respect to the declining national inventory of proved natural gas reserves and TETCO listed several studies,32/ different from those submitted by the applicant, that forecast demand exceeding domestic production in the future. TETCO also enclosed a graph comparing the various forecasts made by these studies which, it asserted, showed that demand would exceed domestic production through 1990.

(ii) Regional Need

Boundary stressed the regional need for these gas volumes by citing the projected decline in supply availability of the interstate pipelines currently serving Boundary's repurchasers, its considerable support from state and regional representatives,33/ its own market demand study, its response to the ERA's supply and demand data requests, the New York State Energy Master Plan 34/ and the region's historically limited access to natural gas pipeline supplies. Boundary stated that while natural gas accounts for 27 percent of national energy consumption, natural gas use accounts for only 12 percent of energy consumption in the Northeastern United States. Boundary further emphasized that these new volumes would add flexibility to the repurchasers' systems and enhance their ability to meet peak-day requirements. Finally, Boundary added that the provisions of the Powerplant and Industrial Fuel Use Act of 1978 (FUA) that restricted the use of natural gas by electric utilities have been repealed, ". . . making the need for the Boundary Project all the more compelling." 35/

All three interstate pipeline companies (Tennessee, TETCO, Transco) currently supplying the New York and New England areas with domestic natural gas supplies stated that this region's need for the gas is particularly acute. For example, Tennessee stated that ". . . the areas of greatest decline in production are those from which the pipelines serving the New York and New England areas draw the major portions of their supply." 36/ The New York State Energy Office, in support of the Project, maintained that "[t]he Northeast is at a geographical disadvantage compared to other regions since it is at the end of the interstate transmission system. Therefore, entry of volumes from Canada for the Boundary participants and for Tennessee could alleviate potential problems arising from declining deliverability on the interstate system." 37/

The Public Service Commission of the State of New York (PSCNY) noted in its remarks that

". . . an established gas supply source from Canada should afford additional protection in the event of an unexpected cut-off of imported oil supplies just as it proved useful, through gas for electric power exchanges, during the 1977 winter when domestic gas supply shortages resulted in particularly heavy pipeline gas curtailments." 38/

(c) Position of the ESPA and NEFI

(i) National Need

Throughout the proceeding the ESPA and NEFI have jointly argued that the Boundary demand projections are inflated and the supply projections do not realistically reflect domestic supply availability during the 1982-92 decade.

These two parties argued that ". . . a consensus is emerging that domestic natural gas supplies from conventional and supplemental sources will be adequate to serve projected levels of demand, particularly in the later years of the Boundary Gas contract." 39/ In support of this statement, they asserted that the DOE National Energy Policy Plan-III (NEPP-III) projected that post-1985 domestic production will rise to levels equal to current supplies.40/

With respect to national demand for natural gas, the ESPA and NEFI cited the EIA's 1980 Annual Report to Congress, which, they asserted, estimated a decline in natural gas consumption. They also stated that the EIA, in anticipation of lower demand, forecasted that imports of Canadian gas will decrease between 1978 and 1995.41/ The ESPA and NEFI maintained that these projections disprove Boundary's contentions that its proposed import is necessary to meet projected national demand. In response to the ERA's February 10 Order requesting further data and independent analysis on the question of need, the ESPA and NEFI submitted more comments and three accompanying analyses42/ supporting their position pertaining to the national and regional needs for imported gas. Two of the studies looked further at gas demand in the Boundary market area, and the third study, the DAC Study, assessed "the reasonableness of Boundary's supply and demand projections" and compared them with those made by the American Gas Association (AGA) using its Total Energy Resource Analysis model. The DAC Study stated that Boundary's projections differed significantly from those of the AGA and concluded that Boundary was overly optimistic in its demand projections and overly pessimistic in its supply forecasts. The DAC Study asserted that "Boundary projects a rapid decline of supplies from current domestic pipeline sources of about 25% by 1990. In contrast, the AGA projects that conventional natural gas supplies will increase in the mid-80's due to higher wellhead prices associated with decontrol, and only show a modest decline of less than 4 percent by 1990." 43/ The study further stated that it was inconceivable for demand to increase over the next ten years in light of the ". . . price-induced conservation effects expected to result from wellhead price decontrol." 44/

(ii) Regional Need

The ESPA and NEFI argued that Boundary has not produced any evidence that gas demand in the region served by its repurchasers will increase beyond the capabilities of its current domestic suppliers. In support of this claim, the ESPA and NEFI in their September 18, 1981 comments cited a recent FERC Report 45/ projecting winter gas supply for the nation's twenty-eight pipeline companies. The report indicated ". . . that every domestic pipeline serving the Northeast region anticipated meeting its demands with little or no curtailment . . ." during the 1980-81 winter.46/ In addition, the ESPA and NEFI in their June 11 and July 19, 1982 motions asserted that two recent events indicate that new supplies mf domestic gas may have become available to the repurchasers and that this "new information" calls into question Boundary's assertion of its repurchasers need for this import. Specifically, they note that one of the repurchasers, Brooklyn Union, is seeking an off-system purchase of surplus gas from an interstate pipeline, and that Transco, a supplier of the Boundary region, is seeking permission from the FERC to make certain off-system sales.

As discussed above, the ESPA and NEFI submitted two studies that specifically assessed regional need, in response to the ERA's February 10 Order. The Hirst Study focused on future natural gas use in residential and commercial buildings for Federal Regions I and II.47/ Comparing different estimates of residential and commercial natural gas consumption in Federal Regions I and II during the 1978-1980 period, the author concluded that this data demonstrated that ". . . gas use trends have changed dramatically during the past few years." 48/ The study's projections indicated a slow reduction of approximately 12 percent in natural gas use in residential and commercial buildings in Federal Regions I and II over the next twenty years. The study concluded that "[t]his decrease in gas use is likely to occur even though the number of households and amount of commercial floor space both are assumed to increase. The effects of higher gas prices reduce gas use per household and per unit commercial floor space." 49/

The DRI Study examined the natural gas demand outlook for the industrial sector in Boundary's market area. Using a simulation of its Core Energy Model and Drilling Model, DRI predicted that industrial demand for natural gas in New England and the Middle Atlantic States will decline through the decade of the 1980's, and only barely exceed 1981 levels in 1990. Noting that these new projections differ markedly from its 1981 projections, DRI asserts that the change is attributable to ". . . the fact that oil prices have fallen in the past year so that the average industrial natural gas prices are likely to be higher than the price of the competitive fuel, residual oil, in the Northeast for the rest of the decade. . . ." 50/

(d) Analysis and Opinion

(i) National Need

Many studies, including numerous supply and demand projections, have been submitted or cited to the ERA on the issue of national need. We have carefully reviewed these studies and projections, as well as the arguments of the parties, and have concluded that they support Boundary's contention that over the ten-year life of the Boundary Project these additional gas supplies will be needed. We further find that the evidence offered to the contrary is not persuasive. Over the life of the Boundary Project there is likely to be a continuing decline of supply of natural gas from conventional domestic sources. The ERA disagrees with the claim by the ESPA and NEFI that a "consensus of opinion" supports a finding that domestic gas supplies will be adequate to meet national demand during the term of Boundary's proposed import. In fact, the ERA finds that the consensus among the studies cited by the parties in this proceeding and other publicly available studies cited in this opinion, has been just the opposite. The general conclusion of most supply forecasters is that production of conventional gas in the lower 48 states will decline in the foreseeable future.51/ As Boundary and its supporters pointed out, another indicator of the projected decline in domestic supplies is the ongoing trend since 1967 of a steady decline in the proved reserves of natural gas in the lower 48 states. Even when Alaskan supplies are included in the reserves figure, only the year 1970 shows an increase.52/ Moreover, the proved natural gas reserves to annual production ratio for interstate pipeline companies has declined steadily from 18.9 in 1964 to 8.4 in 1980.53/ As a consequence of these ongoing trends and projections, additional imports mf natural gas as well as unconventional domestic sources of gas supply will be needed in the future to supplement the declining production of conventional gas.54/

The ESPA and NEFI also cited two studies that allegedly supported their position: (1) the NEPP-III and (2) the 1980 EIA Study. Additionally, in response to our February 10 Order, the ESPA and NEFI also submitted an independent analysis, the DAC Study. The DAC Study disputed Boundary's supply and demand forecasts by comparing them with those made by the AGA in a published report entitled Consumer Impact of Indefinite Gas Price Escalator Clauses Under Alternative Decontrol Plans (AGA Report).55/

After careful review of the ESPA and NEFI assertions regarding the NEPP-III and the 1980 EIA Study, we find that they have seriously misinterpreted the results of these studies. For example, the NEPP-III projects, in its mid-range estimates, that conventional gas production in the lower 48 states will decline 15.5 percent during the 1980's and that natural gas imports will double from 1 Tcf to 2 Tcf during the same time period.56/ The ESPA and NEFI misconstrued the report to say that after 1985 domestic production will return to levels equal to present supplies, while the report actually states that production will return to current production levels only if Alaskan, unconventional and synthetic gas supplies are included. In actuality, the NEPP-III supports the conclusion that there is a need for gas beyond that which can be produced from domestic conventional supplies; as a consequence, these supplies must be supplemented by additional volumes from unconventional domestic sources and by the importation of price competitive gas from reliable sources.

The ESPA and NEFI also misrepresented the findings of the 1980 EIA Study by ignoring the study's projection of a sharp increase in gas imports by 1985,57/ and by predicting reductions in national demand for gas because of recent amendments to the FUA that repeal certain prohibitions of natural gas use, when just the opposite results likely will occur.58/ With respect to the DAC Study, the ERA, as well as the AGA, believes that it is inappropriate to compare Boundary's supply and demand projections with those in an AGA study designed to compare the possible impacts of indefinite price escalator clauses in gas purchase contracts. The AGA study is essentially a worst case analysis of what could happen to the natural gas market if corrective steps are not taken with respect to these price escalation clauses and which, the AGA asserts, cannot be used for demand projections. In a letter to Boundary, AGA stated that

> ". . . a key goal of our preparing and publishing this

analysis was to make others aware of the problem [of indefinite price escalator clauses] and help ensure that these projections would not come true. Certainly, projections prepared for such a purpose can play no role in evaluating either the need for gas imports in general, or the prospects for any gas import project in particular." 59/

In summary, the ERA finds that the record evidence strongly supports Boundary's assertion of national need. In particular, the ESPA and NEFI have not persuaded us that the otherwise unanimous assertion of national need by all other parties that commented on this issue is erroneous. The ERA determines that with respect to national need, granting Boundary's application will not be inconsistent with the public interest.

(ii) Regional Need

The ERA has determined that the record also shows there is a regional need for the gas Boundary proposes to import. Our decision on this issue follows a thorough review of the extensive comments and information submitted by all of the parties. We are not persuaded by the ESPA and NEFI's contention that there is no regional need for the gas. We find that the ESPA and NEFI have failed to rebut Boundary's assertion that it is unable to obtain sufficient domestic supplies to meet current customer requirements.60/ Nor do we find that the ESPA and NEFI have demonstrated any fundamental inaccuracy in Boundary's demand projections.

Boundary has submitted to the ERA natural gas demand projections, by priority service category, for each of its repurchasers under three different demand scenarios: (1) present commitments, (2) current load-growth commitments, and (3) potential requirements.61/ In the ten-year period between 1982 and 1992, the projected demand under the "present commitments" scenario is expected to show a cumulative increase of about 1.55 percent; this can be compared with the projected demand increase of 8.59 percent under the "current load-growth commitments" scenario and a 15.33 percent demand increase in the "potential requirements" scenario. The "present commitments" scenario is characterized by a modest increase in demand for the first priority category and a corresponding decline in demand in priority categories two and five through ten.62/ The "current load-growth commitments" scenario showed a moderate demand growth in the first priority category and a modest demand increase in the third priority category; however, all other priority categories showed relatively stable demand. In the "potential requirements" scenario, demand in the first priority category grew substantially, with lesser increases in the second and third categories, and relatively constant demand in all other categories.

Boundary stated in its application that unless its repurchasers obtain additional gas supplies, they ". . . will be unable to meet current customer commitments beginning in the early 1980's." 63/ In view of the fact that Boundary's demand projections under its "present commitments" scenario showed only a negligible increase between 1982 and 1992 (1.55 percent), Boundary's argument for need of this gas rests primarily on its projected losses in its traditional sources of supply over the term of the contract, rather than an increase in demand.

In response to our February 10 Order, the ESPA and NEFI submitted two studies that focused on future natural gas demand in the Northeast and Middle Atlantic States. The Hirst Study forecast natural gas use in residential and commercial buildings and the DRI Study examined the natural gas demand outlook for the industrial sector. In summary, the Hirst Study projected a slow decline in natural gas use (12 percent) over the next 20 years in residential and commercial buildings, and the DRI study projected a relatively constant demand figure for industrial use over the next 10 years. Even assuming that the projections contained in these two studies prove accurate, they do not weaken Boundary's case for needing this gas. As Boundary pointed out, the projections made by these studies do not differ significantly from those made by Boundary using its present commitments demand scenario.64/ As we stated earlier, Boundary's argument for needing this gas is based primarily on the loss mf its traditional supplies, rather than an increase in demand. As a result, these projections would not alter Boundary's need for this import.

Despite the similar results in demand projections, Boundary demonstrated several problems with comparing the demand projections of its repurchasers with those made by econometric forecasts, as was done in these two studies.65/ First, these studies do not depict the precise markets served by boundary repurchasers. Second, individual company requirements may differ significantly from regional averages because of different customer profiles. Third, broad econometric forecasts provide an inadequate basis for assessing the Boundary repurchasers' demand projections. For example, the Hirst Study rounds off volumes of gas which are greater than the entire annual send out of nine of the fourteen Boundary repurchasers. For these reasons, the ERA thinks that the demand projections made by Boundary's repurchasers are entirely reasonable and remain unrefuted by these two studies.

With regard to the supply side of the "need" equation, Boundary cited the projected decline in supply availability of the interstate pipelines currently serving Boundary's repurchasers. All three interstate pipeline companies serving the Boundary market area maintained that Boundary's statements with respect to their declining supplies were accurate. We are not convinced by the ESPA and NEFI's counterarguments that the current interstate pipeline suppliers of gas in the Boundary market will have adequate supplies to meet all the future requirements of Boundary's repurchasers. Specifically, we find unconvincing the ESPA and NEFI's assertions in their June 11 and July 19, 1982 motions that the possibility that Brooklyn Union might negotiate an off-system purchase or the fact that Transco is seeking permission to make limited off-system sales, indicate that any significant new supplies of domestic gas not previously accounted for in this proceeding have become available. As Boundary pointed out, Brooklyn Union's proposed purchase is on a "best efforts" basis, and further limited to periods when the temperature is above 50 degrees. Similarly, the gas allegedly available from Transco, if such sales were to be approved by the FERC, would be sold under short-term interruptible contracts only over a two-year period. Thus, these proposed off-system transactions could take place only under limited conditions, and neither establishes an increase in the domestic supplies available over the life of the Boundary Project.

In addition, the FERC report cited by them to illustrate that no gas curtailments were anticipated in the 1980-81 winter by any of the interstate pipelines serving the Boundary market area is irrelevant to the long-term requirements of Boundary's repurchasers. It should be noted that the projected natural gas deliverability forecasts based on year-end 1980 reserves for the three interstate pipeline companies serving the Boundary market area show an average reduction in contracted and owned supplies of approximately 87 percent by 1990.66/

In addition to the foregoing supply-related considerations, there are a number of possible future events that could increase significantly the demand for natural gas in the Boundary market area. For example, in the EIA's 1981 Annual Report to Congress,67/ there is a sensitivity analysis of the projected consumption of various fuels for the generation of electricity through 1995. The EIA concluded that many of the electric utilities' plans to convert existing oil and gas plants to coal and to displace oil and gas with nuclear energy may be delayed beyond 1990 because of financial and demand constraints; this, in turn, might lead to additional demand for gas and oil during this interim period. Since 1979 some of Boundary's repurchasers have shown substantial increases in the use of natural gas for the generation of electricity;68/ this trend could continue during the next few years because of the high-cost, high-quality oil alternative, and the projection that natural gas will continue to be the second least expensive fuel for electricity generation through 1995.69/ As also noted by Boundary, the FUA restrictions on natural gas use by electric utilities in existing powerplants were repealed by the Omnibus Budget Reconciliation Act of 1981.

For the foregoing reasons, the ERA determines that, with respect to regional need, granting Boundary's application will not be inconsistent with the public interest.

2. Price

Boundary proposes that the price of the gas to be imported will be the uniform international border price for Canadian gas which is presently U.S. $4.94 per MMBtu. In DOE/ERA Opinion and Order No. 29, the ERA found that the present Canadian border price was reasonable compared to the cost of alternate fuels in the U.S. market, and not inconsistent with the public interest.70/ The record is undisputed on this point and we conclude that the price for this import is reasonable.

3. Reliance on Canadian Gas

Natural gas from Canada has been imported into a wide range of domestic markets for many years, and there has been no instance of a major natural gas supply interruption that would call into question Canada's future reliability as a supplier of natural gas to this country. These facts are uncontested in this proceeding.

However, the ERA in its August 12 Order requested comment on whether the Boundary Project, along with other pending import proposals, has the potential to create a new, regional reliance on Canadian gas. While we recognized the historic reliability of Canadian supplies, the ERA believed that comments on this issue were appropriate in view of the various applications to import new Canadian supplies into the Northeast and Middle Atlantic States, the region's current heavy reliance on another imported fuel (oil), and Boundary's plans to use some of the gas for expansion of residential and other high-priority gas service.

All parties that commented on this issue, other than the ESPA and NEFI, discounted the significance of any newly created dependency on Canadian gas that could result from the Boundary Project and other pending import proposals serving some of the same market area. Boundary and ten other parties (including the New York State Energy Office, PSCNY, N.J. Dept. of Energy and N.J. Board of Public Utilities, and New England Conference of Public Utilities Commissioners) stressed the reliability of Canadian gas supplies, the advantages of diversifying overall energy supplies, the protection these volumes would offer the region from even greater reliance on imported oil, and the fact that these proposed volumes only represent a diminutive fraction of the area's total gas and energy supplies.

The ESPA and NEFI argued that the Boundary Project, together with other pending Canadian import proposals, ". . . could result in substantial adverse impact to the Northeast region." They stated that "an interruption is possible" because ". . . Canada is subject to domestic political and economic pressures that could threaten the stability and reliability of natural gas exports." 71/ (emphasis added). They also stated that the ERA has made clear in the past that, in order to prevent overdependence, imported gas should be considered only as a "marginal" supply and that natural gas imports should not be authorized unless the applicant can demonstrate that the demand to be served by the imported gas cannot reasonably be served by domestic resources. The ESPA and NEFI further maintained that

> ". . . regional dependence on imported gas can be even more dangerous than dependence on imported oil. Oil is a fungible and easily transportable fuel . , .. Imported pipeline gas, on the other hand, simply cannot, for physical reasons, be replaced by alternative gas suppliers if supplies are interrupted for any reason." 72/

For this reason, the ESPA and NEFI proposed that the ERA establish a reasonable limit on each repurchaser's peak period reliance on imported gas, possibly 10 percent of its peak daily demand in a colder than normal winter.

We have already concluded in this order that there will not be sufficient volumes of domestic gas available, either from conventional or unconventional sources, to satisfy national and regional need for the ten-year period of this import proposal. Any possible negative impacts associated with increased reliance on Canadian gas have to be evaluated in comparison to the potential negative impacts of reliance on other sources of supply, such as LNG, SNG, or imported oil, not with reliance on domestic conventional supplies of gas. In previous opinions, the ERA has attempted to differentiate between various sources of supplemental gas supplies on the bases of cost, transportation modes, technological uncertainties, and supply vulnerability. The ERA has held that "overland gas supplies" from neighboring countries rank second only to domestic supplies in terms of desirability.73/ The ERA has found no evidence in this proceeding to cause doubt about the reliability of Canada as a supplier with respect to the volumes of gas Boundary proposes to import.

As indicated earlier in this opinion, the ERA finds that the Boundary project will replace declining domestic conventional gas supplies. We also find that this import will not result in overdependence of any consumer group or geographical region. The predominant source of energy in the Boundary market area is oil and likely will remain so. The 185,000 Mcf of gas per day

Boundary proposes to import will be spread among fourteen repurchasers, serving a total of eight states, We have determined that in light of this wide dispersal of the Boundary volumes, overdependence is not likely to result. Even if the ERA ultimately approved all pending Canadian gas import applications, we do not foresee that overdependence on imported gas would result. The vast majority of these proposed Canadian natural gas supplies would be dedicated to the various interstate pipeline systems and would have the effect of widely dispersing these volumes throughout the entire country. For example, Canadian gas is used currently in 25 states; if all pending import projects were approved, it is estimated that 48 states would utilize Canadian gas.

The ESPA and NEFI further contended that a regional dependence on imported gas could be more dangerous than imported oil because gas is not as "fungible" a commodity as oil. However, it is the ERA's conclusion that the Boundary Project, with its associated pipeline construction, will improve the capability to deliver gas supplies in the entire Boundary market area.74/ Given the limited gas volumes involved in this project, their wide dispersal, the reliability of the supply source, and the predominant use of oil in the Boundary market area, we do not foresee an overreliance resulting from this import. We have noted in the past that the subject of reliance and other gas issues may be more appropriately considered in bilateral governmental discussions. Accordingly, in Section VI. of this opinion, we have reserved the right to adopt appropriate conditions following any such discussions.

4. Effect on U.S. Balance of Payments

In the August 12 Order, the ERA requested comments on the impact the Boundary Project would have on the U.S. balance of payments and world oil prices. Only three parties responded to the ERA's inquiry; Boundary had previously addressed this issue in its August 5, 1981 response to the ERA's July 2, 1981 data request (question No. 12).

In its August 5 filing, Boundary argued that the project will likely have a ". . . significant positive effect . . ." for the following reasons: (1) Canadians holding U.S. dollars are more likely to purchase U.S. goods and services than OPEC countries; and (2) backing out oil displaced by Boundary will help moderate OPEC's oil prices and will exert downward pressure on all U.S. energy imports. At worst, Boundary stated, the project will ". . . have a neutral effect on the U.S. balance of payments. . . ."

In support of Boundary's position on this issue, Tennessee, in its September 18, 1981 filing, stated that several benefits would result from

Boundary's importing of Canadian gas, including: (1) a decrease in the demand and price for imported oil; (2) the likely return of a large percentage mf the dollars spent on Canadian gas to the U.S. in the form of purchased U.S. goods; (3) much of the financing of TransCanada's new facilities needed for this import will be by U.S. sources; and (4) the fact that much of the gas currently produced in Canada is by subsidiaries of U.S. companies.

Although the ESPA and NEFI did not address this issue in their joint filing on September 18, 1981, the DAC Study they submitted on March 31, 1982, contended that the Boundary Project would result ". . . in adverse trade balance impacts. . . ." 75/

Based on the record, the ERA has concluded that the Boundary Project's impact on world oil prices will be statistically insignificant because of the comparatively small volumes of gas involved in this proposal. The Boundary gas volumes will be replacing, for the most part, dwindling domestic conventional supplies; therefore, the most likely alternative to these volumes would be additional imported oil. In fact, Boundary and Tennessee asserted that there are potential balance of payments advantages of importing Canadian gas rather than more oil into this region, particularly in view of the predominant use of oil in this market area.

In summary, on the basis of the record we conclude that the Boundary Project will not have a significant adverse impact on the U.S. balance of payments. Moreover, we also conclude that the limited potential for adverse balance of payments impacts does not outweigh the other factors stated in this opinion which lead us to determine that the import, on balance, will not be inconsistent with the public interest.

5. Impact on Domestic Transmission and Distribution Systems

In its application, Boundary asserted that its import project would increase the flexibility of the gas transportation system in its market area. In its August 12 Order, the ERA requested comment on the effects of a future curtailment of Canadian gas on the domestic transmission and distribution systems serving Boundary's customers, and specifically with respect to the abilities and limitations of those systems during a curtailment. All four parties that addressed this issue asserted that the Boundary Project, with its new pipeline capacity and increased deliverability, would enhance the ability of the transmission and distribution systems to respond to any future curtailment, irrespective of source. TransCanada, the exporter of the Boundary volumes, stated that the project would facilitate its ability ". . . to provide supplemental gas supplies . . ," in the event Boundary's repurchasers were being curtailed by domestic sources.76/ Tennessee, the transporter of the Boundary volumes, stated that ". . . the integrated U.S. pipeline system allows a remarkable amount of flexibility in moving supplies from all parts of the country. . ." and ". . . the Boundary Project would further aid in the movement of supplies in this area." 77/

Although the ability to deliver additional supplies of natural gas into this region during a future curtailment largely depends on the demand of other gas systems and supply availability, the record indicates that the Boundary Project, with the construction of required transportation facilities, will improve the logistical ability of Boundary's repurchasers to receive supplemental gas supplies from both domestic and foreign sources during a future emergency situation.

6. Impact on Domestic Production

In the August 12 Order, we noted that certain data suggested that the wellhead pricing provisions of the NGPA were fostering an increase in drilling activities and development of "new" domestic natural gas supplies, and that, in view of the scheduled expiration of most NGPA wellhead price restrictions on new gas by 1985, we expected this trend to continue in the foreseeable future. We also observed that the U.S. currently was experiencing a period of over-deliverability of gas supplies. In view of these factors, we requested comments from all parties on the possible effects approval of this import project would have on domestic production and what weight, if any, we should give such impacts in evaluating this application.

Six of the seven parties that commented on this issue anticipated that the Boundary importation would have no adverse impact on domestic gas production, either in the short-term or the long-term. With regard to potential short-term impacts, Boundary stated that "the Repurchasers have determined, through inquiries made to their traditional pipeline suppliers and other potential suppliers, that equivalent volumes of domestic natural gas are not available for delivery into Repurchasers' service areas in the time frame of the Boundary Project." 78/ Boundary also stated the repurchasers anticipated no incurrence of take-or-pay penalties on domestic gas in order to take Boundary gas. In support of its assertion that the proposed import would not have any long-term impact on domestic production, Boundary contended that the import would protect the repurchasers' existing market for natural gas which might otherwise be lost to fuel oil; and that the new pipeline capacity connected with this import could be used to transport domestic natural gas, even before the expiration of the Boundary contract term.

The lone dissent on this issue came from the comments submitted jointly by the ESPA and NEFI. They asserted that the Boundary Project would frustrate the national energy policy of utilizing domestic supplies of energy over imports whenever available and would create a disincentive for continued development of domestic natural gas supplies. They argued that, "[i]f Northeast regional demand for natural gas does not increase at the rate projected by Boundary Gas, approval of the application will have the primary effect of backing out domestic natural gas supplies now serving the region, or capable of serving the region in the future." 79/

The ERA finds little in the record to show that adverse impacts on domestic development and production of gas will result from this project. The arguments submitted by the ESPA and NEFI that approval of this project will have an adverse impact on the development and production of domestic natural gas are unconvincing. In the ERA's discussion of the "need" issue in this opinion (V.B.1.), we concluded that over the ten-year life of the project there will be a need for these additional gas supplies, both nationally and on a regional basis. Boundary's assertion that there are no long-term supplies of domestic gas available to its repurchasers is supported on the record by their pipeline suppliers. We again note that not one domestic gas producer or pipeline has questioned Boundary's need for the gas or said that they can make similar volumes available from domestic sources over the ten-year period. The only intervenors questioning the need for these volumes are the ESPA and NEFI, who represent marketers of a competing fuel. In light of these findings, the ERA has determined that the Boundary Project will have no long-term impact on domestic production.

Given our finding that there is a long-term regional and national need for this import, we find that over the life of the project it will not have an adverse impact on the development and production of domestic natural gas. While there may be some short-term underlifting of current supplies as the market adjusts to this new supply of gas, such short-term effects do not outweigh the long-term need for the gas. Additionally, the ERA's review of Boundary's repurchasers' actual annual gas sales for the period ending October 31, 1981,80/ its supply and demand projections, and the flexibility of Boundary's take-or-pay provision with TransCanada, convinces us that any underlifting would be temporary and cannot be expected to have a significant impact on domestic production.

7. Impact on Fuel Oil Market

The ERA, in its August 12 Order, requested comments from all parties on the potential impact of the Boundary import on the fuel oil market in the

Boundary market area, particularly with regard to the potential for switchovers from gas to oil during natural gas curtailments. We also asked whether any conditions should be attached to Boundary's proposal, if approved, in order to protect high-priority fuel oil customers.

The ESPA and NEFI responded that the Boundary Project could be subject to supply interruption, which in turn could disrupt significantly the independent fuel oil marketing distribution system and cause harm to the region's six million home heating oil customers, as well as to Boundary's ultimate customers. If Boundary's repurchasers use this imported supply to increase high-priority load, the ESPA and NEFI argued that the repurchasers would be forced to either (1) store greater amounts of gas, (2) increase peak "shaving" facilities, or (3) increase interruptions of industrial customers to meet the increased high-priority demand. Specifically, the ESPA and NEFI contended that interrupted gas consumers necessarily would turn to fuel oil to meet their needs during the heating season. They asserted that the resulting increased demand for fuel oil would increase prices for all fuel oil consumers (including interrupted gas consumers). In addition, they stated that such a situation could stretch the fuel oil distribution system beyond its physical limits and thereby jeopardize the energy security of the entire region.

In response, the ERA gave the ESPA and NEFI the opportunity to quantify anticipated impacts on the fuel oil market of a hypothetical, mid-winter, Boundary gas supply disruption in 1991. In response, the ESPA and NEFI submitted a study,81/ which estimated that the volume of residual oil needed to replace the gas supplies lost during an interruption of Boundary's import would be approximately 32,000 barrels per day, representing about five percent of the average daily residual fuel oil consumption in the Boundary market area. The London Study concluded that the oil marketers and their customers would pay $4 to $5 per barrel more than the average price for supplemental supplies for the duration of such an interruption and, as a result, this would cost its Northeastern oil customers as much as $160,000 per day. The London Study also questioned the ability of the oil infrastructure to cope with a five percent daily demand increase.

In its April 14, 1982 filing, Boundary argued that even if all the London Study's "questionable" assumptions concerning price impacts and market area were correct and accepting for the sake of argument that its assumptions that the full projected cost of a Boundary disruption would be borne by the residual fuel oil market and a 25 percent reduction in that market due to conservation and other factors would result, "the total price impact of a complete three-month Boundary disruption is 0.8 cents per gallon. . . ." 82/

The ERA concludes that the arguments and data submitted by the oil marketers regarding the potential impacts the Boundary Project could have on the fuel oil market and its customers have been significantly overstated in several respects. First, in contrast to the data used in the London Study, the average daily consumption of residual fuel oil in the eight states comprising the Boundary market area was approximately 937,000 barrels per day in 1979,83/ not 619,000. Thus, the potential impact of a natural gas interruption of the residual fuel oil market is less than the five percent estimated by the London Study. Second, the ERA disagrees with the assumption that residual fuel oil will be the only fuel substitute for gas during any supply disruption, as other sources of energy, such as distillate, coal and electricity, could also be used. Third, the potential for increased oil-for-gas switchovers attributable to the Boundary project during a gas supply interruption would not be the total import volume as asserted by the ESPA and NEFI, but only that fraction of the volume designated for incremental load growth. Fourth, there is no basis given for the London Study's projection of a potential $4 per barrel oil price increase as a result of a supply interruption of this import of natural gas. Finally, no evidence was presented by any party on how a small increase in residual fuel demand could disrupt the fuel oil distribution system.

The ERA concludes that the record does not support the oil marketers' contention that the Boundary Project could have a severe impact on the fuel oil market in terms of petroleum supply availability and increased prices, even in the unlikely event of a prolonged, mid-winter, natural gas supply interruption. This conclusion is based on several considerations. First, this import volume and its associated new pipeline facilities will diminish the likelihood of future natural gas shortages in the region, and the number of resulting oil-for-gas switchovers. Second, the Boundary gas volumes will be dispersed over eight states, rather than the six states stated in the London Study. Finally, the volumes of petroleum needed to replace the hypothetical curtailment of the Boundary volumes would be statistically insignificant in terms of supply, and would have a correspondingly minor impact on prices.

8. Direct Sales Presumption

In previous decisions involving imports of LNG, the ERA adopted a presumption in favor of direct purchases by distribution companies. In its August 12 Order, the ERA requested comment on the appropriateness of applying this policy to cases involving overland gas imports. Additionally, the ERA requested comment regarding the benefits and disadvantages of Boundary's proposed direct purchase of Canadian natural gas.

Three of the four interstate pipelines that commented on this issue stated that pipelines should retain the principal responsibility for domestic and imported gas acquisition and that extension of the direct sales presumption to overland gas cases would be to the detriment of the interstate pipelines, their customers, and the general public interest. These parties asserted that the advantages of pipeline purchases include the following: (1) competition from distribution companies would influence adversely economies of scale, reduce service to smaller customers and create additional costs in a capital intensive industry; (2) pipelines are large volume purchasers, and therefore tend to have greater flexibility to avoid or limit take-or-pay liabilities; (3) all customers of interstate pipelines are treated alike, regardless of size, economic importance, or ability to compete for gas supplies; and (4) the risks involved with supply curtailments are diminished because of the pipelines' much broader service area and extensive storage facilities. Tennessee commented that the ERA should not adopt any preference with regard to Canadian imports for or against direct purchases by distribution firms and that each proposed import should be decided on its own merits.

In contrast to these pipelines' comments, Boundary, the New York State Energy Office, and some of the repurchasers cited several advantages of direct purchases by distribution firms: (1) so long as pipelines have distribution company customers whose purchases are limited to less than full contract quantities, new volume purchases by the pipelines will not increase significantly the entitlements of Boundary's repurchasers that have high-priority customers' needs; and (2) direct purchases reflect the true cost of directly acquired supplies to the ultimate consumers and therefore allow them to evaluate better the economic need for the supplies.

The ERA has decided not to extend the direct sales presumption applied in earlier LNE import decisions to the instant proceeding involving an overland import proposal. No party requested the ERA to apply this presumption in this case. The ERA has determined that the application can be decided on its own merits and that there is no reason to extend this presumption to this proceeding.

C. Summary of the Decision

In making our decision in this proceeding, we dully examined Boundary's application in light of our responsibility under section 3 of the Natural Gas Act and the fundamental criteria set forth in Delegation Order 0204-54 plus additional factors raised by us and by the parties. The parties have addressed numerous issues and we have compiled a lengthy record. After reviewing the record as described in detail above, we conclude that granting this import will not be inconsistent with the public interest. Therefore, we are approving Boundary's application.

We conclude that there will be a national and regional need for this gas over the life of the project. Furthermore, by improving the pipeline distribution system in the Northeast, the project will also benefit gas consumers by increasing the capability of pipeline companies to deliver gas supplies. Approval of this project helps to ensure additional economic long-term gas supplies to the consumers in the Northeast and Middle Atlantic regions.

Furthermore, we carefully considered the stated views of the Boundary service area's public utility commissions, state government agencies, and elected officials, who have an interest in ensuring reasonably price secure energy supplies, all of whom supported the importation of natural gas from Canada into this region. In addition, in spite of ample opportunity, no potential consumer of this import came forward to oppose or to comment on this application. The only opposition has come from groups that sell competing fuel, most of which is derived from imported oil.

As long as Canadian gas supplies maintain their historical reliability and are reasonably priced, they can continue to help fill the gap between domestic production and total demand. the ESPA and NEFI have failed to present a convincing case to show otherwise.

VI. Additional Conditions

The ERA's concerns about increased U.S. reliance on Canadian natural gas and various related issues have been raised previously in consolidated ERA Docket Nos. 80-01-NG, et al., Inter-City Minnesota Pipelines Ltd., et al.84/ Because the ERA believes that such issues may be more appropriately considered in bilateral discussions with Canadian officials, it suspended final resolution of the consolidated dockets until after government-to-government talks.85/ We therefore specifically reserve the right to take additional action in this docket that will parallel any future proceedings in ERA Docket No. 80-01-NG, and parties are hereby placed on notice that any conditions subsequently adopted may be retroactive to the date of approval of this import if necessary and appropriate in the circumstances.

VII. Order

For the reasons set forth above, pursuant to section 3 of the Natural

Gas Act, the ERA hereby orders that:

A. Boundary Gas, Inc. (Boundary) is authorized to import up to 185,000 Mcf per day of natural gas for a period not exceeding ten years from the date deliveries commence or from November 1, 1982, whichever occurs first, plus one year for receipt of make-up gas in accordance with the Precedent Agreement and Gas Purchase Contract of October 14, 1980, as amended by the Amendment to Precedent Agreement of February 2, 1981, with TransCanada Pipelines Limited (TransCanada). Boundary is also authorized to import on a daily basis volumes of gas in excess of 185,000 Mcf per day which TransCanada is authorized to export for sale to Boundary on a best efforts basis in accordance with the Precedent Agreement and Gas Purchase Contract cited herein. The total natural gas import over the term of this authorization may not exceed 675.25 Bcf.

B, Boundary is authorized to import the volumes of natural gas from Canada as described in Paragraph A at a price not to exceed U.S. $4.94 per MMBtu.

C. The petition for leave to intervene out-of-time of Michigan Wisconsin Pipe Line Company is denied.

D. The authorization in Ordering Paragraph A is conditioned upon entry of a final ERA order after review by DOE of the FERC environmental analyses of this project, and the completion by DOE of its NEPA responsibilities.

E. The authorizations granted in Ordering Paragraphs A and B are subject to conditions as may result from further proceedings in this case. Applicants and intervenors in this proceeding shall be bound by opinions and orders issued in further proceedings in this case.

F. To the extent that any motion or other request for relief or action in this proceeding is not discussed in this opinion, it is denied.

G. The time for filing any petition for rehearing of this order shall run from the date of its issuance.

--Footnotes--

1/ On December 19, 1980, Boundary filed an application with the Federal Energy Regulatory Commission (FERC), requesting authority to resell the gas to its repurchasers (FERC Docket No. CP81-108-000).

2/ On May 19, 1982, DOE/ERA Opinion and Order No. 44 granted Tennessee conditional authorization to import 300,000 Mcf per day of natural gas from Canada (ERA Docket No. 81-24-NG, Tennessee Gas Pipeline Company).

3/ On April 22, 1981, Tennessee filed with the FERC an Application for Certificate of Public Convenience and Necessity (FERC Docket No. CP81-296-000) seeking authority to construct the facilities and provide the transportation services required for the Boundary Project.

4/ The ERA published a notice of receipt of Boundary's application in the Federal Register on January 19, 1981 (46 FR 5041). A corresponding application was filed with the FERC in Docket No. CP81-107-000.

5/ The amendment also supplemented the application with a letter of agreement and a form of Escrow Agreement agreed to by the applicant and TransCanada.

6/ See n.1, supra. On July 21, 1981, the FERC requested Boundary to provide additional data in order to assist its staff in the analysis of the Boundary Project (FERC Docket Nos. CP81-107-000 and CP81-108-000).

7/ Texas Eastern Transmission Corp., Consolidated Edison Company mf New York, Inc., Tennessee Gas Pipeline Co., Div. of Tenneco Inc., Midwestern Gas Transmission Co., TransCanada PipeLines, Limited, The Public Service Commission of the State of New York, New England Fuel Institute, Empire State Petroleum Assn., Inc., New York State Energy Office, Distrigas of Mass. Corp. and Distrigas Corp., Northern Natural Gas Co., Div. of InterNorth, Inc., Boston Gas Co., Manchester Gas Co., Connecticut Gas Co., Attorney General of the Commonwealth of Massachusetts, New England Conference of Public Utilities Commissioners, Inc., The Brooklyn Union Gas Co., Valley Gas Co., Fitchburg Gas & Electric Light Co., Northwest Alaskan Pipeline Co., Transcontinental Gas Pipe Line Corp., Pan-Alberta Gas, Ltd., The Berkshire Gas Co., Algonquin Gas Transmission Co., Haverhill Gas Co., National Fuel Gas Supple Corp., United Mid-Continent Pipeline Co., United Gas Pipe Line Co., Piedmont Natural Gas Co., Inc., New Jersey Dept. of Energy and New Jersey Board of Public Utilities, New Jersey Natural Gas Co., Bay State Gas Co., Northern Border Pipeline Co.

8/ Sulpetro Limited.

9/ As we stated in the October 16 prehearing conference, the ERA believes this is principally a section 7 matter that should be resolved by the FERC in its proceedings.

10/ Petitions for leave to intervene out mf time of the Independent Petroleum Association of Canada, Connecticut Natural Gas Corporation, Massachusetts Energy Facilities Siting Council, Pacific Gas Transmission Company, and Vermont Gas Systems, Inc., were granted in this order.

11/ Pub. L. 95-91 (1977), 42 U.S.C. Secs. 7151 and 7172(f).

12/ DOE Delegation Order No. 0204-4, 42 FR 60725 (November 09, 1977).

13/ DOE Delegation Order Nos. 0204-54 and 0204-55 (44 FR 56735, October 2, 1979). These superseded two other DOE Delegation Orders, Nos. 0204-25 (to ERA) and 0204-24 (to FERC), both dated October 17, 1978 (43 FR 47769, October 17, 1978).

14/ Compare public interest standard in section 7 of the NGA, e.g., Cia. Mexicana de Gas, S.A. v. F.P.C., 167 F.2d 804 (5th Cir. 1948).

15/ In this proceeding we considered other issues raised by the parties or as discussed below.

16/ Delegation Order 0204-55, op cit.

17/ As used in this decision, the term "trial-type" hearing means a formal, evidentiary hearing on the record providing all parties an opportunity to present their case to the presiding officer by oral and written evidence and to cross-examine the witnesses of the parties.

18/ E.g., Cerro Wire and Cable Co. v. FERC,. 80-2054, slip op. at 8 (D.C. Cir., April 30, 1982) and other cases cited at page 8 of the opinion.

19/ Our determination on Transco's motion for comparative hearings is discussed in part V.A.2. of this opinion. Our determination as to whether the ERA should apply a presumption in favor of direct purchases of imported gas by distribution companies in this proceeding is discussed in part V.B.8.

20/ Two parties to the proceeding (Algonquin and TETCO) also alluded to the possibility that Boundary might be in direct competition with their pending import application (ERA Docket No. 81-02-NG) with respect to market area. In response to our February 10 Order, both parties clarified their positions, stating that they regarded the potential for competition with the

Boundary Project largely in terms of Canadian gas supplies, not in terms of market area.

21/ 326 U.S. 327 (1945).

22/ Transco and Algonquin amended the original application on October 28, 1981, to add Texas Eastern as an applicant. Other amendments were filed with FERC. On June 7, 1982, the joint applicants submitted a letter to ERA indicating their application would be amended yet again, to reflect a change in the point of import. On July 26, 1982, this amendment was filed with the ERA.

23/ See Northwest Airlines v. CAB, 194 F.2d 339 (D.C. Cir. 1952), Midwestern Gas Transmission Company v. FERC, 589 F.2d 603 (D.C. Cir. 1978).

24/ Ibid.

25/ DOE/ERA Opinion and Order No. 44, issued May 19, 1982, in ERA Docket No. 81-24-NG, Tennessee Gas Pipeline Company.

26/ Studies cited by Boundary in its application and in response to the August 12 Order included the following: AGA, Gas Supply Committee, The Gas Energy Supply Outlook: 1980-2000 (Oct. 1980); Comptroller General, Report to the Congress: Oil and Natural Gas from Alaska, Canada, and Mexico--Only Limited Help for U.S. (Sept. 1980); DOE, National Energy Plan II (May 1979); EIA's 1980 Annual Report to Congress, Vol. 3 Forecasts (March 18, 1981).

27/ Boundary's September 18, 1981 filing, at page 8.

28/ This study was filed by the FERC staff as Exhibit No. -- (BES-1) in the matter of Tennessee Gas Pipeline Company, FERC Docket Nos. RP80-97 and RP81-54.

29/ The table was compiled from a report entitled "Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada as of December 31, 1979," published in June 1980, by the American Gas Association, the American Petroleum Institute, and the Canadian Petroleum Association.

30/ Testimony of J. Dexter Peach, Director of the Energy and Minerals Division of the General Accounting Office and Albert H. Linden, Jr., Acting Administrator of the Energy Information Administration, DOE, before the Subcommittee on Fossil and Synthetic Fuels, House Committee on Energy and Commerce.

31/ ERA Docket Nos. 79-08-NG, 80-01-NG, et al., 80-14-NG, R-80-14, and R-80-21.

32/ Exxon Corporation, Energy Outlook, 1980-2000 (December 1980); Foster Associates, The Short Term Outlook for the U.S. Natural Gas Industry, 1981-1987, 1990 (June 1981); Shell Oil Company, The National Energy Outlook, 1980-1990 (August 1980); Texaco Oil Company, United States Energy Outlook, 1980-2000.

33/ In its September 18, 1981 filing, at page 9, Boundary cited support from the following: the Governor of Massachusetts, Massachusetts' Congressional Delegation, Massachusetts State Energy Office, New England Conference of Public Utilities Commissioners, Inc., the Governor of Rhode Island, New Jersey Department of Energy, and New Jersey Board of Public Utilities.

34/ On August 17, 1981, the New York State Energy Office issued a draft of its proposed New York State Energy Master Plan II which endorses the Boundary Project as a "significant new source of gas for the state." The draft plan includes the Boundary volumes in its projections of available supply to meet new York State's gas requirements.

35/ In Boundary's October 2, 1981 filing at pages 21 and 22, Boundary cited repeal of certain provisions of the FUA by the Omnibus Budget Reconciliation Act, Sec. 1021, Pub. L. No. 97-35 (1981).

36/ Tennessee's September 18, 1981 filing, at page 7.

37/ New York State Energy Office's September 18, 1981 filing, at page 7.

38/ PSCNY's September 18, 1981 filing, at pages 2-3.

39/ The ESPA and NEFI's September 18, 1981 filing, at pages 2-3.

40/ DOE, National Energy Policy Plan-III, Energy Projection to the Year 2000 (July 1981).

41/ DOE/EIA, 1980 Annual Report to Congress (1980 EIA Study), at page 88.

42/ Natural Gas Use in Residential and Commercial Buildings: Federal Regions 1 and 2 by Eric Hirst (March 1982) (Hirst Study); Natural Gas Demand Outlook for the Industrial Sector New England and MidAtlantic Regions by Data Resources, Inc. (March 28, 1982) (DRI Study); A Comparison of Natural Gas

Projections by Boundary Gas, Inc. and the American Gas Association by Decision Analysis Corporation (March 26, 1982), (DAC Study).

43/ DAC Study, at page 37.

44/ Ibid., at page 36.

45/ FERC, Office of Pipeline and Producer Regulation, "Impact of 1980-81 Winter Gas Supply for Twenty Eight Pipeline Companies" (September 1980).

46/ The ESPA and NEFI's September 18, 1981 filing, at page 5.

47/ Federal Regions were defined as follows: Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont); Region II (New York, New Jersey). Puerto Rico and the Virgin Islands are in Region II, but were not included in the Hirst Study.

48/ Hirst Study, at page 6.

49/ Ibid., at page 10.

50/ DRI Study, at page 1.

51/ See AGA, Gas Supply Committee, The Gas Energy Supply Outlook: 1980-2000, Table IV-3, at page 11 (January 1982), which summarizes projections by major oil producing companies, gas transmission companies, government agencies and others.

52/ AGA, Gas Supply Committee, Gas Energy Review: Supply and Production Supplement, Tables 1 and 2 (May 1979); DOE/EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves: 1980 Annual Report, Table 12 at page 23 (October 1981).

53/ DOE/EIA, Gas Supplies of Interstate Natural Gas Pipeline Companies--1980 (December 1981).

54/ DOE/EIA, 1981 Annual Report to Congress, Vol. 3, Energy Projections, Table 17, at page 70 (February 1982).

55/ This study was published by the AGA on November 6, 1981, in one of its "Energy Analysis" reports.

56/ NEPP-III, at pages 6-1 to 6-3.

57/ 1980 EIA Study, at pages 87-90.

58/ FUA as amended by the Omnibus Budget Reconciliation Act, Section 1021, Pub. L. No. 97-35 (1981).

59/ April 14, 1982 letter from Dr. Benjamin Schlesinger, Vice President, Policy Evaluation and Analysis, AGA, to Mr. James A. Rooney, Executive Vice President, Boundary Gas, Inc.

60/ We have already discussed our reasons for rejecting the ESPA and NEFI's motion for a trial-type hearing to resolve allegedly disputed factual questions concerning the methodology behind Boundary's supply and demand projections, section V.A.2., supra.

61/ Boundary defined these three demand scenarios as follows:

(1) Present Commitments: Requirements of customers to whom the companies have permanent commitments.

(2) Current Load-Growth Commitments: Requirements which can be reasonably met from current supplies and anticipated additions.

(3) Potential Requirements: Requirements which could be met if supplies were not constrained.

62/ Boundary's definition of priority categories can be found at page 2 and 3 of its August 5, 1981 data filing. However, Boundary generally defined its priority categories as follows:

Priority 1--Residential use (including apartment buildings and small commercial establishments using less than 50 Mcf on a peak day).

Priority 2--Essential agricultural uses.

Priority 3--Large commercial requirements (50 Mcf or more on a peak day) and firm industrial requirements up to 300 Mcf per day.

Priority 4--Firm and interruptible industrial uses.
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63/ Application of Boundary for Authorization to Import Natural Gas from Canada, at page 7 (December 19, 1980).

64/ Boundary's April 14, 1982 filing, at page 15.

65/ Ibid, at pages 15-22.

66/ DOE/EIA, Gas Supplies of Interstate Natural Gas Pipeline Companies--1980 (December 1981), Table 30, at pages 110-111. Algonquin obtains 100 percent of its pipeline supplies from TETCO.

67/ Ibid., at pages 53-51.

68/ DOE/EIA, Cost and Quality of Fuels for Electric Utility Plants 1980 Annual (June 25, 1981); Cost and Quality of Fuels for Electric Utility Plants (November 1981).

69/ DOE/EIA, 1981 Annual Report to Congress, Vol. 3, Energy Projections, Figure 17, at page 46.

70/ On January 15, 1981, the Government mf Canada announced a border price of U.S. $4.94 per MMBtu for natural gas exported to the United States, effective April 1, 1981. In DOE/ERA Opinion and Order No. 29, issued March 07, 1981, ERA Docket No. 81-08-NG, et al., Pacific Gas Transmission Company, et al., (1 ERA para. 70,528, Federal Energy Guidelines), the ERA authorized twelve (12) U.S. importers to pay that price for Canadian natural gas. Subsequent ERA orders have also authorized imports at the $4.94 price.

71/ The ESPA and NEFI's September 18, 1981 filing, at page 11.

72/ Ibid.

73/ See DOE/ERA Opinion and Order No. 2, issued on September 29, 1978, ERA Docket No. 77-001-LNG, Pac Indonesia LNG Company, et al. (1 ERA para. 70,102, Federal Energy Guidelines); DOE/ERA Opinion and Order No. 3, issued December 18, 1978, ERA Docket No. 77-010-LNG, Tenneco Atlantic Pipeline Company, et al. (1 ERA para 70,103, Federal Energy Guidelines).

74/ See Section V.B.5.

75/ DAC Study, op. cit., at page 37.

76/ TransCanada's September 18, 1981 filing, at page 9.

77/ Tennessee's September 18, 1981 filing, at page 12.

78/ Boundary's September 18, 1981 filing, at page 19.

79/ The ESPA and NEFI's September 18, 1981 filing, at page 6 (emphasis in original).

80/ Boundary's March 17, 1982 filing, at page 26.

81/ Impact of Boundary Gas Supplies on the Northeast Fuel Oil Market, by Paul A. London (March 1982) (London Study).

82/ Boundary's April 14, 1982 filing, at page 23.

83/ DOE/EIA, State Energy Data Report, Section 3: Summaries by State 1960 through 1979 (September 1981).

84/ See DOE/ERA Opinion and Order Nos. 14, issued February 16, 1980 (1 ERA para. 70,502, Federal Energy Guidelines), 14A, issued April 1, 1980 (1 ERA para. 70,507, Federal Energy Guidelines), 14B, issued May 15, 1981 (1 para. 70,508, Federal Energy Guidelines), and Prehearing Order, issued July 9, 1980 (1 ERA para. 70,505, Federal Energy Guidelines).

85/ See DOE/ERA Order Suspending Consideration of Import Cases Pending Outcome of Inter-Governmental Discussions, issued December 16, 1980, in ERA Docket Nos. 80-01-NG, et al., Inter-City Minnesota Pipelines Ltd., et al.