

ORIGINAL

UNITED STATES OF AMERICA

**DEPARTMENT OF ENERGY
OFFICE OF FOSSIL ENERGY**

APR 09 2007

In the matter of,)
)
PHILLIPS ALASKA NATURAL GAS)
CORPORATION)
and)
MARATHON OIL COMPANY)
_____)

FE Docket No. 07-02-LNG

**MOTION TO INTERVENE AND INITIAL COMMENTS
OF ENSTAR NATURAL GAS COMPANY**

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**I.
INTRODUCTION**

Pursuant to 10 C.F.R. §§ 590.303, 590.304 (2006), ENSTAR Natural Gas Company ("ENSTAR"), a division of SEMCO Energy, Inc. ("SEMCO"), petitions for intervention in this proceeding. This proceeding raises critical issues regarding the future energy security of South Central Alaska. Cook Inlet natural gas supplies are being depleted faster than they are being replaced, and ENSTAR does not have firm commitments to supply its customers' needs past 2008. Shortages have occurred in South Central Alaska for the last two winters. There has not been enough gas to meet all domestic needs, and there have been significant curtailments of a major industrial customer. Gas intended for export as liquefied natural gas ("LNG") has been diverted to supply ENSTAR. Nevertheless, ENSTAR would not oppose the two-year export authorization requested by ConocoPhillips Alaska Natural Gas Corporation ("CPANGC") and Marathon Oil Company ("Marathon") (collectively "Applicants"), provided, however, that the Applicants are able to demonstrate conclusively that the authorization would be consistent with the public interest generally and, in particular, that it would not jeopardize the ability of ENSTAR and other public utilities to meet the needs of the individual and business customers in

the South Central Alaska region who rely on them for reasonably priced natural gas and electric utility services.

ENSTAR generally agrees with the Applicants that continued operation of the Kenai LNG Facility would provide certain benefits to the regional community. Because of Alaska's severe winter weather, ENSTAR's customers' gas consumption in the winter is approximately three times greater than the annual average. Winter peak demand can sometimes exceed ten times the average demand in the summer. To meet the community's winter peaking needs, it has occasionally been necessary to curtail deliveries to the Kenai LNG Facility. If the plant were shutdown, that source of peaking gas would no longer be available. As the Applicants assert, it is also possible that shutting in the gas fields that supply the plant could reduce their ultimate reservoir productivity. Keeping the Kenai LNG Facility in operation potentially has the additional benefits of increasing exploration incentives in Cook Inlet and improving the economics of a spur line to South Central Alaska from the proposed Alaska Natural Gas Pipeline to the Lower 48. As an "anchor tenant," the Kenai LNG Facility could help pay the substantial capital costs of a spur line and thereby help to reduce gas transmission costs for Alaskan utilities and their customers.

These potential benefits, however, will be of little value to ENSTAR or to the region generally if there is insufficient gas available to meet the community's needs, including the critical need for seasonal deliverability.

Sufficient supplies for domestic consumption must be the first priority as required by Section 3 of the Natural Gas Act ("NGA").¹ As described below, natural gas consumers in South Central Alaska are already experiencing supply shortfalls. These shortfalls suggest that

¹ See Part V below.

continued exports without adequate assurances that domestic needs will be met will be inconsistent with the public interest. The Department of Energy ("DOE") must therefore either require the Applicants to demonstrate conclusively that adequate supplies will be available or use its conditioning authority under Section 3 to require the Applicants to limit their exports during periods when available supplies are unable to meet domestic demand. ENSTAR can agree to the Applicants' request for blanket authorization only after the Applicants have first provided the DOE, the State of Alaska, ENSTAR, and the community with an acceptable plan for how the needs of the community will be met through the years to 2014.

II. INTERVENTION

ENSTAR has a material interest in the outcome of this proceeding which cannot be adequately represented by any other party. ENSTAR moves to be admitted as a party with full rights of participation.

Communications and correspondence related to ENSTAR's participation in this proceeding should be addressed to, and service should be made upon:

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III. DESCRIPTION OF ENSTAR

A. Corporate Structure

ENSTAR and its affiliate, Alaska Pipeline Company ("APC"), serve the natural gas needs of the greater Anchorage, Kenai Peninsula, and Matanuska-Susitna Valley areas. ENSTAR and APC are operated, managed, and regulated as a unified entity. APC is a wholly-owned subsidiary of SEMCO, a Michigan corporation. ENSTAR is a division of SEMCO. APC operates transmission facilities that transport gas from fields around the Cook Inlet to the local distribution facilities operated by ENSTAR.

B. Facilities

APC's transmission system is composed of approximately 227 miles of 12- to 20-inch diameter pipeline and approximately 72 miles of smaller diameter pipeline. The APC gas transmission system consists of two separate pipeline systems that extend from various natural gas fields on both sides of Cook Inlet into the Anchorage metropolitan area. One pipeline system, the Kenai Pipeline System, serves the east side of Cook Inlet and enters Anchorage from the south. The other pipeline system, the Beluga Pipeline System, serves the west side of Cook Inlet and enters Anchorage from the north.

ENSTAR distributes natural gas through approximately 2,737 miles of gas mains to approximately 126,000 residential, commercial, industrial, and electric power generation customers. The ENSTAR network consists of four separate distribution systems plus several isolated sub-systems. Each of the systems operates at the conventional pressure of 60 psig.

ENSTAR initiated natural gas service to Anchorage, Soldotna, and Sterling in 1961 and began serving the Nikiski area in 1967, and Eagle River in 1972. With construction of the Beluga Pipeline System in 1984, ENSTAR brought natural gas service to residents of the Matanuska-Susitna Borough and the cities of Palmer and Wasilla. ENSTAR acquired the gas distribution company serving the city of Kenai in 1985. ENSTAR commenced service to Girdwood, Whittier, and other small communities along the corridor from Anchorage to Whittier in October 1996. ENSTAR is also authorized to serve the community of Homer and is continuing to work toward that goal.

C. Markets

The area in which ENSTAR operates encompasses approximately half of the population of Alaska. Within ENSTAR's service territory, natural gas accounts for over 90 percent of the space heating load, with electric heating accounting for most of the balance.

ENSTAR has recorded customer growth in every year since 1961 through development of existing service areas and through extensions to nearby communities. Table 1 below shows ENSTAR's customer additions for the last 10 years, net of disconnects and lost customers.

Table 1

ENSTAR Net Customer Additions	
1997	2,699
1998	3,005
1999	2,658
2000	2,542
2001	3,075
2002	3,359
2003	3,367
2004	3,532
2005	4,474
2006	2,793

ENSTAR continues to expand its service area. It has regulatory authority to expand its service to the town of Homer on the southern Kenai Peninsula and plans to do so if adequate and reliable gas can be found to provide service. In ENSTAR's experience, once gas becomes available in an area it serves, virtually all new construction and 80 percent of existing buildings will use natural gas within five years.

ENSTAR's service territory is located within an interconnected electric grid that extends from the southern end of the Kenai Peninsula to Fairbanks. The area encompassed within this electrical grid is home to over 75 percent of Alaska's population. Within that grid a major portion of the electric energy is generated with gas. ENSTAR delivers gas to the Municipal Light and Power ("ML&P") division of the Municipality of Anchorage at two plants within the town limits. ENSTAR also delivers gas to three plants operated by Chugach Electric Association Inc. ("Chugach"). In addition to the three plants located on the ENSTAR system, Chugach operates a 350 MW plant located within the Beluga gas field that receives gas directly from producers. Since the establishment of an intertie with Fairbanks in 1986, ML&P and Chugach regularly make economy and emergency sales of power to the Fairbanks area.

Table 2 below shows for each of the past three years ENSTAR's throughput by class of customer, ENSTAR's peak day, and the number of heating degree days experienced.

Table 2

	2004	2005	2006
Annual Throughput by Customer Class (Mcf)			
Residential - Gas Sales	17,843,454	17,667,609	20,240,112
Commercial - Gas Sales	6,097,413	5,806,997	7,484,456
Commercial - Transportation	8,134,402	8,205,402	8,053,920
Power Plant - Transportation	15,257,058	14,078,173	16,580,544

	2004	2005	2006
Annual Throughput by Customer Class (Mcfs)			
Industrial - Transportation	15,387,633	16,491,283	10,307,397
Total Throughput	62,719,960	62,249,464	62,666,429
Peak Day Data			
Peak Day	1/17/2004	1/12/2005	11/22/2006
Peak Day Throughput (Mcfs)	281,386	290,615	285,978
Peak Day Degree Days	73	69	59
Annual Degree Days	9,573	9,572	10,630

Anchorage has averaged 9,925 heating degree days per year during the past three years. For purposes of comparison, Washington, D.C. has experienced an average of 4,583 heating degree days during a similar period.²

D. Gas Supply Contracts

All of ENSTAR's gas supply, indeed all of the gas supply for South Central Alaska, comes from the Cook Inlet basin. At present, ENSTAR's firm gas supply is purchased from four producers. Marathon sells gas to ENSTAR under the so-called "APL-4" contract. ENSTAR buys gas from ML&P, ConocoPhillips, and Chevron U.S.A. Inc. ("Chevron") under the "Beluga" contract. The majority of ENSTAR's gas is now supplied under a contract signed in 2000 with Union Oil Company of California, which has since merged with Chevron USA, and will be referred to as "Union/Chevron."³

² See National Climatic Data Ctr. ("NCDC"), National Oceanic and Atmospheric Admin., HISTORICAL CLIMATOLOGY SERIES 5-1, STATE HEATING DEGREE DAYS – MARYLAND & D.C. (2003/2004-2005/2006). The NCDC records the state heating degree days from July to June of the subsequent year, instead of by calendar year.

³ The descriptions of the Beluga, APL-4, Moquawkie, and Union/Chevron contracts contained in this pleading have been simplified to facilitate an understanding of the contracts and cannot substitute for a reading of the contracts themselves.

The Beluga contract was originally entered into by ENSTAR and a predecessor affiliate of Shell Western E&P Inc. ("Shell"). The contract provides for a stated annual contract quantity that the seller is required to deliver and for which ENSTAR is obligated to pay. The annual quantity peaked at 20 Bcf during the period 1991-95, from which level the annual quantity is scheduled to ramp downward to zero in the year 2010. In 2007, ENSTAR expects to purchase 3 Bcf under the Beluga contract. The contract requires the seller to provide a *pro rata* share of ENSTAR's peak day requirements. In 1990 Shell assigned a one-third interest in the Beluga contract to Arco, which later merged into what is now ConocoPhillips. In 1993 Shell assigned to Chevron an interest in the contract equal to one-half of Shell's remaining interest (*i.e.*, one-third of the original contract). In 1996 Shell sold its remaining interest to ML&P. The Beluga contract expires in 2009.

The APL-4 contract initially committed Marathon to sell, and ENSTAR to buy, the entirety of ENSTAR's requirements over and above the amount of gas ENSTAR is required to purchase under other firm supply agreements. When the Beluga contract was ENSTAR's only other firm supply arrangement, APL-4 essentially required Marathon to supply and ENSTAR to purchase all of its requirements in excess of the amount available under the Beluga contract.

The requirements-type obligation under APL-4 continued through the year 2001. Beginning in 2002 and thereafter, Marathon's obligations became limited by a stated annual contract quantity. The annual contract quantity ramps downward from 21 Bcf in 2002 to 5 Bcf in 2010 and will remain at the 5 Bcf level until Marathon has delivered a total of 456 Bcf gas.

The deliverability that Marathon is obligated to provide is limited to the average swing rate of all of ENSTAR's firm suppliers.⁴

The Union/Chevron contract was approved by the Regulatory Commission of Alaska ("RCA") in 2001 and ENSTAR began taking deliveries under it in 2004. The contract includes a modest initial commitment, with a further commitment by Union/Chevron to engage in new exploration in Cook Inlet. Each October, ENSTAR must provide Union/Chevron with a rolling 10-year forecast of its unmet requirements. As new discoveries are made, Union/Chevron has the option, under certain conditions, to increase its annual commitments to ENSTAR and to fill those unmet requirements. The Union/Chevron contract price is based on the 36-month trailing average of gas futures prices reported on the New York Mercantile Exchange, or "NYMEX." The contract was approved by the RCA in 2001.

In October 2003, Union/Chevron committed sufficient volumes such that 100% of ENSTAR's gas requirements were covered by the various contracts through 2007. In its forecast to Union/Chevron in October 2004, ENSTAR projected that its customers' 2008 gas requirements would exceed its contractual commitments by approximately 6.2 Bcf and by 12.2 Bcf in 2009.⁵ Union/Chevron committed to provide the additional volumes to "fill up" ENSTAR's requirements for 2008 but was unable to commit to provide all of the additional gas needed for 2009. Union/Chevron's total commitments for 2008 and 2009 are 19.5 Bcf in each year. ENSTAR needed a commitment of 22.1 Bcf for 2009 to meet all of its projected

⁴ Deliverability refers to the ratio between ENSTAR's average daily demand over the year and its peak demand on the coldest day in the winter. Sometimes referred to as "swing," ENSTAR's deliverability ratio is approximately 3.0, which means its forecasted peak winter demand for 2006 of 218 Mmcf/day was about 3 times greater than its daily average of 73 Mmcf/day. Compared to the lowest volume day in the summer of 19 Mmcf/day, the ratio is more like 11 to one.

⁵ Under the Union/Chevron Contract, each October ENSTAR provides Unocal with a forecast of its future requirements. Once Unocal makes commitments under its contract with ENSTAR, ENSTAR provides the requirements forecast reflecting the commitment by Union/Chevron to its other suppliers.

requirements for that year. Thus, ENSTAR faces a shortfall of 2.6 Bcf in 2009, plus additional shortfalls in the later years. Attached as Exhibit 1 is a bar graph that illustrates ENSTAR's supply situation. The graph shows the declining Beluga, Moquawkie and the Marathon APL-4 Contract commitments, plus the effects of the limited Union/Chevron commitment for 2009. The graph reflects current gas requirement projections and the Union/Chevron commitment made in October 2006.

To fill the unmet requirements that Union/Chevron has declined to fill for the years 2009 through 2016, ENSTAR negotiated a new "all requirements" contract with Marathon. Executed on October 14, 2005, the contract, referred to as "APL-5," would have insured a reliable supply of gas for ENSTAR to carry it through a period of great uncertainty in Cook Inlet. The basic purchase price under the APL-5 contract was the trailing twelve-month average of NYMEX natural gas futures prices at the Henry Hub, with discounts triggered at specified levels, a floor and a ceiling price, and other price terms generally comparable to the Union/Chevron contract.

The parties submitted the APL-5 contract for RCA approval on November 16, 2005. After protracted and hotly contested proceedings, on December 31, 2005, the RCA followed the recommendation of intervenors Tesoro Alaska Petroleum and the Alaska Attorney General and declined to approve the contract. The decision, by a 3-to-2 vote, was sustained after a round of petitions for reconsideration.⁶ The RCA's principal objection to APL-5 centered around the Henry Hub-based pricing, which three of the five commissioners thought was excessive and inappropriate for the South Central Alaskan market.

⁶ RCA Order No. U-06-02(15), dated Sept. 28, 2006, and Order No. U-06-02(17), dated Dec. 29, 2006.

The rejection of APL-5 surprised ENSTAR because the agreement was closely patterned after the Union/Chevron contract and the NorthStar agreement,⁷ both of which included Henry Hub-based price terms and both of which the RCA had earlier approved. The decision was inconsistent with the overwhelming evidence in the record that Henry Hub pricing was indeed appropriate for this market and that the Union/Chevron and NorthStar contracts had sent a positive price signal to the market, which had, after many years of inactivity, begun to stimulate badly needed exploration in Cook Inlet.

**IV.
COOK INLET GAS SUPPLIES ARE
BEING CONSUMED FASTER THAN THEY ARE BEING REPLACED**

A. Geography

Alaska is vast, and it is remote. Alaska is nearly two and one-half times the size of Texas, and the state's maximum dimension is roughly equivalent to the distance from Washington, D.C. to San Francisco. The climate is harsh. Many parts of the state have not yet been penetrated by modern infrastructure. Of the five largest cities in Alaska, only the two largest (Anchorage and Fairbanks) are connected to each other by highways or railroads. The Alaska rail system is not connected to the rest of the United States.

The Anchorage area might as well be an island for purposes of energy supplies. In contrast to markets in the Lower 48 states, which are connected by a national pipeline grid to multiple basins with thousands of producers, Anchorage is entirely dependent on the Cook Inlet area and a handful of producers for its gas supplies. In contrast to electric markets in the Lower 48, which are interconnected on a nation-wide basis, Anchorage is served by an isolated electrical system that is largely dependent on energy generated with Cook Inlet gas.

⁷ NorthStar is a supply contract for gas to expand ENSTAR's service area to Homer, Alaska. It is fundamentally the same as the Union/Chevron contract except for the lower volumes.

The greater Anchorage area includes about half of Alaska's population. The electrical system of which Anchorage is a part encompasses an area that is home to 75 percent of Alaska's population. Thus, the gas supply from Cook Inlet is critical to the health of the state's economy.

B. Historical Natural Gas Supplies in Cook Inlet⁸

Almost all of the gas reserves in Cook Inlet were discovered during the search for oil in the late 1950s and early 1960s. Gas was a disappointment at best and a nuisance at worst. It was "stranded" because there was no local market and no pipeline to move it. Fields containing gas but no oil were shut in, in the hope that someday a market would develop. Fields where gas was found in association with oil, however, were developed in order to sell the oil. The first market for gas was for re-injection to re-pressure producing oil fields to increase the ultimate production of oil from those fields. As oil production increased, some gas fields began production specifically to provide re-injection.

Over time, a small market also developed using gas for electricity and space heating, but by the mid 1960s, gas sales, not counting gas used in field operations and re-injected (that could be produced at a later date), were only about 8 Bcf. This represents a reserves-to-production ratio of 750, indicating there were sufficient reserves at that time to deliver gas at the same annual rate for 750 years. Even including field operations and re-injection use, the reserves-to-production ratio was about 120 during this period.

In this environment, even though there were only a few producers, there was little likelihood of producers keeping the price of gas high to generate excess or "monopoly" profits.

⁸ The following summary is excerpted from the March 10, 2006 Prefiled Direct Testimony of Dr. Oliver Goldsmith, in RCA Docket U-06-2. Dr. Goldsmith is a professor of economics at the Institute of Social and Economic Research ("ISER") at the University of Alaska Anchorage. He has been on the staff of ISER for over 30 years, during which time he has been actively involved in research on the Alaskan economy, state fiscal issues, and energy and natural resource economics, with special reference to Alaska.

The large supply and small market prevented it. Producers were willing to sell gas at a low price because their options were limited. A sale at any price that covered the cost of producing and delivering the gas, even if it were not high enough to pay off their investment in exploration and development, was better than no sale at all.

The discovery of oil at Prudhoe Bay in the late 1960s caused a shift in focus for the petroleum industry away from Cook Inlet and toward the North Slope. Because of the large gas reserves and the reduced interest in searching for oil in Cook Inlet, there were no new gas fields added to the inventory for about 30 years after the initial discoveries. Neither were there reserves additions during most of the time from more intensive exploitation of existing fields.

But there was a sharp increase in annual demand when the Kenai LNG Facility and fertilizer plant were brought into production in 1969.⁹ In their first full year of operation in 1970, the combined use of gas in these two industrial facilities was 75 Bcf, nearly four times the total use by the electric and gas utilities.

These facilities were developed by the owners of Cook Inlet gas reserves as a market outlet for their gas supplies. The facilities were commercially successful because they could overcome the higher cost of manufacturing in Alaska by charging themselves a low price for their own gas as the primary input to the manufacturing process. (Subsequent attempts over the next 30 years to bring additional petroleum processing to Alaska for export have all been unsuccessful, partly because petroleum inputs priced at world market prices drive the cost of manufacturing in Alaska too high to be competitive.)

⁹ The fertilizer plant is located in Nikiski, Alaska, adjacent to the Kenai LNG Facility. Originally built by Union Oil Company, it was purchased by Agrium USA, Inc. ("Agrium"), in 2000. It converts natural gas into urea and ammonia fertilizer for export.

The increase in demand created by the industrial users along with the growth of utility demand driven by the growing South Central Alaska economy and population began to demonstrate the value of Cook Inlet gas as an important energy resource for South Central Alaska. The electric utilities increasingly came to depend on natural gas for generation because of its price and other attractive qualities. Most South Central Alaska electricity is now produced by natural gas. (Some dual capability generation remains, but the infrastructure is almost entirely gas based except for some hydroelectric capacity).

Residential and commercial space heating also converted to natural gas over a period of years, and now South Central Alaska households and businesses are almost totally dependent upon gas for space heating and related uses. The infrastructure to space heat using fuel oil, the former fuel of choice, has virtually disappeared.

The industrial users of gas, the Kenai LNG Facility and the Agrium fertilizer plant, became important drivers for the Kenai Peninsula economy through their highly-paid work force, their local procurement of goods and services, and their additions to the local tax base.

However, the reserves-to-production ratio during this time still reflected an excess supply of gas in Cook Inlet compared to the overall U.S. gas market. Whereas in the U.S. as a whole that ratio has historically been about 10:1, in Cook Inlet it was 30:1 in 1970 (including re-injection which at that time constituted one third of gross production). For the last three and half decades, the ratio has declined almost continuously.

The official reserve figures for Cook Inlet gas, published annually by the Alaska Department of Natural Resources, are prepared by estimating future production from each field that is currently producing and by adding to that total an estimate of total possible production from fields discovered but not currently producing. Most reserves are in producing fields. The

reserves-to-production ratio is an estimate of the current inventory of gas that can be produced without significant investment in additional production capacity. It does not attempt to estimate additional gas that might be produced from existing fields if additional investments were made in those fields. Neither does it attempt to estimate additional gas that might be ultimately produced from fields that have yet to be discovered.

An important function of the reserves-to-production ratio consequently is to signal when it becomes necessary to increase the gas inventory in anticipation of being able to meet future demand. The lower the ratio, the more likely it is that current and future demands cannot be met from the current inventory. The reason that it is necessary for producers to "carry" several years' worth of inventory is that only a part of the inventory is instantaneously producible. Each gas well has a maximum rate at which it can produce and being able to meet current demand means having adequate current production from existing wells to be able to do that.¹⁰

In almost all years, reserves and the reserves-to-production ratio fell, which means there was no incentive or need to add to inventories. Because of the historical accident of huge early discoveries, inventories were more than sufficient to meet current and projected demand throughout this period. By 2002 the reserves-to-production ratio had fallen to 10.7:1, close to the rest of the U.S. gas market, suggesting that the capacity to meet demand out of inventories had declined and the system had less capacity and flexibility to meet future requirements than in earlier years.

Reserve additions were reported in only three years between 1977 and 2004. The two reasons for the year-to-year increases reflected in the Alaska Department of Natural Resources

¹⁰ Dr. Goldsmith also noted in his testimony that it is not financially prudent to invest capital and other resources to build reserves beyond the level necessary to be able to produce for current demand and near-term future anticipated demand. As with any business, there is a cost to carrying more inventory than necessary to meet demand.

figures are either that there were re-evaluations of the production capability of a field based upon more and better information about the field, or that there were investments to increase the production capacity of an existing field. There were no significant increases due to the discovery of new fields.

Most significantly, between 1995 and 1997 there was an increase of proved reserves reported of about 1.4 Tcf of gas, concentrated in the North Cook Inlet, McArthur River, and Beluga River fields. Because this occurred at about the same time that the Kenai LNG Facility was applying for an extension of its export license authority, it is possible that investments were made at that time to increase reserves in order to demonstrate that there was sufficient gas for domestic consumption to warrant the export license extension. Or, it could be that there was an increase in the projected future production from these fields.

The likelihood that some reserves estimate changes are based on these reevaluations is indicated by the fact that in some years reserves have declined by a larger amount than production during that year would have suggested. This in fact occurred in the three-year period between 1992 and 1995 when reserves fell by about 1.3 Tcf even though production (net of re-injection) during that three-year period was only about 600 Bcf.

C. The Supply/Demand Balance Since the DOE's 2000 Order

In the last several years, starting about when the Cook Inlet reserves-to-production ratio fell to approximately the U.S. average, there have been a number of indicators of increased activity directed at increasing gas reserves. The annual number of reported exploratory gas wells drilled in Cook Inlet jumped from three in 2000 and 2001 to seven in 2002 and 2003. New gas fields were discovered and brought into production by several producers. The annual Cook Inlet areawide lease sale of the State of Alaska attracted much more interest in 2004 than prior years, as reflected by a tripling of the number of bids received and total acreage sold. Production

companies that are new to Cook Inlet and Alaska, such as Pioneer Oil Company and Pelican Hill, have either been exploring for or have expressed interest in exploring for gas in Cook Inlet and have actively been seeking partners to move forward.

Concern over the fall in Cook Inlet gas reserves has led the RCA in recent years to approve two contracts between ENSTAR and its suppliers at significantly higher prices than previous contracts: the Union/Chevron contract and the NorthStar contract. The weight of evidence suggests that the increased activity in Cook Inlet has been the result of the higher prices for gas reflected in these contracts.

In 2004, there was a net increase in total reserves over the prior year for the first time in eight years. The reserves figures for 2006 showed a decline of more than the amount of production between 2004 and 2006, but that appears to be as a result of changes in the methodology that the State used in arriving at the 2006 reserve estimate.

It is possible that the increase in activity in the Cook Inlet was due to the fact that the excess inventories of gas had finally been sold off and it became time to replace them. In that case, the increase in the price of gas, occurring about the same time, would not have been a factor in the decisions of producers to increase activity in Cook Inlet. However, supply curtailments in the winter of 2005-2006 suggest otherwise. At that time there were occasions when deliveries to customers were curtailed because of insufficient deliverability. This happened to the fertilizer plant, which was forced to temporarily suspend operations, and to the Seward electric utility, which was forced to temporarily switch to its own backup generation using fuel oil when its supplier, Chugach Electric Association, suspended deliveries of electricity generated by natural gas. These incidents of supply curtailment suggest that the reserves-to-

production ratio is lower than it should be and that it is due to insufficient incentives to invest in new reserves.

In support of this conclusion, Dr. Goldsmith referenced several studies financed by a variety of public and private sources that have supported the idea that supplies of gas are becoming short in Cook Inlet. He cited the study entitled A REVIEW OF COOK INLET GAS SUPPLY AND DEMAND by Northern Economics for the Anchorage Economic Development Corporation and a recent study by the U.S. Department of Energy entitled SOUTH CENTRAL ALASKA NATURAL GAS STUDY which analyzed remaining Cook Inlet gas reserves and the need for additions. The DOE calculated possible reserve additions under a number of different scenarios, all predicated on a gas price tied to the Henry Hub price. One scenario suggested that about 1.4 Tcf of additional reserves might be forthcoming over the next 20 years from currently known fields in response to a gas price reflected in recent contracts. This conclusion was based on the history of reserve additions from known fields over their lifetime in more mature regions of the United States.

Dr. Goldsmith summed up the current situation by noting that Agrium was scheduled to cease operations in late 2006, and the Kenai LNG Facility export license authority will expire in early 2009.¹¹ Based on the analysis contained in the recent DOE study, these closures would leave sufficient gas for other users from existing fields only through 2012. However, even if all unused gas from industrial consumers became available for utility and power generation use, deliverability shortfalls could occur before 2009. Furthermore, if all the gas from the fields whose production is dedicated to industrial customers is used for that purpose, demand could exceed supply by 2009.

¹¹ Agrium did, in fact, cease operations on October 24, 2006 and is expected to recommence production in mid-April 2007 at rate well below full capacity.

The peak day deliverability shortages that had been anticipated in the mid-1990s and early 2000s have actually come to pass. During every winter since 2003-2004, industrial loads have had to be curtailed to insure that there was sufficient gas for all utility uses when there were operational problems in some of the fields during cold weather periods. During the winter of 2005-2006, Agrium's operations had to be curtailed during cold weather periods, even when all the fields were operating normally. For example, Agrium tried to secure gas to run its fertilizer plant at Nikiski beyond October 31, 2005 (the date its long-term supply agreement with Union/Chevron expired). Agrium was able to secure only enough gas to operate at about half production, and all of that volume (except a limited amount necessary to keep the plant "warm") was subject to interruption by Agrium's suppliers to cover cold weather demands by other customers. Agrium has publicly stated that, even during the summer, when there are no peak demands, it has been unable to secure commitments of enough gas to operate the plant at full production levels.

Gas deliveries to the Agrium plant were again curtailed during the winter of 2005-2006. In November and early December, volumes were cut during cold weather periods, but Agrium had sufficient gas to maintain a minimal level of production. However, in late January 2006 it had to cease production for a ten-day period as its suppliers needed the gas for cold weather deliveries to other customers. The situation was still more serious in 2006-2007, which has been a particularly cold winter in South Central Alaska. It has been reported that deliveries to the Tesoro refinery at Nikiski were curtailed so that suppliers could meet their commitments to the utilities.

When the Applicants last sought an extension of their export authorization in 1997, ENSTAR opposed the extension. ENSTAR produced studies that predicted that Cook Inlet

production would be unable to meet annual demand during the extension period and that shortages would cause increases in the cost of gas, would require fuel switching, and would require abandonment of feedstock uses of gas. Ten years later, the summary of the gas supply situation in ENSTAR's 1997 Petition to Intervene is still true. In its earlier petition, ENSTAR accurately foresaw that, although exploration was likely to continue in the Cook Inlet basin, it was very unlikely that large oil or gas reserves remained to be discovered. ENSTAR stated that, instead, new reserves were likely to come from extension drilling, from new completions in previously producing reservoirs or from newly discovered fields of relatively small size. The application of new technology such as three-dimensional seismic surveys could identify additional development opportunities within existing fields and could help identify small, subtle exploration targets that were not obvious in the past. However, ENSTAR concluded that none of these developments was likely to materially slow, much less reverse, the long-standing decline in Cook Inlet gas reserves.

More troubling than the overall decline in Cook Inlet gas reserves is the decline in deliverability during periods of peak wintertime demand. Aurora Gas, LLC ("Aurora Gas"), a small gas producer, did not deliver under a contract to sell gas to ENSTAR and has been unable to produce or purchase gas sufficient to supply all of the customers of its gas marketing affiliate, Aurora Power Resources, Inc. ("Aurora Power"), during the winter. Consequently, ENSTAR has sued Aurora Gas and Aurora Power and has had to obtain approximately 5 Bcf of gas to supply Aurora Power's former customers and replace the gas that Aurora Gas did not deliver to ENSTAR. Fairbanks Natural Gas ("FNG"), which manufactures LNG near Anchorage and trucks it to Fairbanks for sale, was unable to find a supplier beginning in late 2006. FNG and ENSTAR agreed to a short term, emergency contract that expires in 2008. During the winter of

2006 and 2007, producer deliveries to the ConocoPhillips/Marathon LNG plant were curtailed at least twice to supply gas to ENSTAR and the other utilities.¹² Each of these events demonstrates that there is not currently enough gas available to serve all of the local needs during the winter.

D. North Slope Production Will Not Resolve the Short-Term Crisis

The delivery of North Slope gas to South Central Alaska is unlikely to solve the shortages facing South Central Alaska in the near term. The project faces many economic, regulatory, political, environmental, and other hurdles, any of which could prevent this alternative source of supply to Cook Inlet from becoming reality for 10 years or more. According to current thinking, gas from the North Slope would most likely reach South Central Alaska via a "spur" pipeline – a small-diameter pipeline that would draw gas off the main pipeline carrying North Slope gas to Alberta or Chicago. The only other viable option would be to construct a small-diameter pipeline that would carry gas from the North Slope to Anchorage. This project has been discussed, and it has been estimated to take 5 years or less to complete construction and commence service. ENSTAR is exploring the viability of this type of pipeline. However, there are no current plans to build the pipeline, and it would not be economically viable without significant industrial loads such as the LNG plant and the Agrium plant.

Transporting gas to South Central Alaska from the North Slope via a spur pipeline depends first upon construction of a pipeline to take North Slope gas to markets in Alberta and the Midwest. The status of this huge project is uncertain and will remain uncertain for at least the next four years and possibly longer. Alaska Governor Palin has proposed legislation that, if passed, will create financial and other incentives for construction of a gas pipeline from the North Slope to markets outside Alaska. The legislation establishes a system for interested parties

¹² For example, on January 9, 2007 (ENSTAR's peak day this winter) the producers advised ENSTAR that approximately 35 MMcf was diverted from the plant to the utility customers.

to make proposals to build the pipeline. Proposals will be evaluated, and the "winner" will be granted a license to build the gas pipeline. The licensee will be required to provide delivery points along the pipeline where gas could be taken off for in-state use, but there is no requirement in the legislation that the licensee build a spur line to serve South Central Alaska.¹³

The Alaska Department of Revenue has previously projected that it would be 10 years from the execution of a contract until project completion. The decision to move forward with actual construction, "project sanction," is unlikely to be made before 2010. Actual construction would begin two years later, with gas delivery beginning four years after that. The decision to build a spur line would depend on expected conditions in the Cook Inlet gas market at the time it began delivering gas as well as the price of North Slope gas and the cost of pipeline construction and operation. It is possible that it could be built simultaneously with the larger gas pipeline, but also possible that it would be built later. Further, it is possible that it would never be built, even after the larger pipeline has been constructed. A spur line could be sized to supply the needs of the utilities or large industrial users.

In addition to market risks, there is the risk of cost overruns of both construction costs as well as operations and maintenance costs. Even during the recent period of contract negotiations between the state and the oil companies, the cost estimates for the pipeline have increased from \$20 billion and now, depending on the source, range up to more than \$30 billion. It is, therefore, unrealistic to expect that Cook Inlet's gas shortages will be relieved in the foreseeable future by deliveries of North Slope natural gas to South Central Alaska.

In addition to the obstacles faced by the main gas pipeline from the North Slope to the Lower 48, a spur line to the South Central Alaska also faces difficult challenges. The capital

¹³ The legislation is Senate Bill No. 104. It is popularly known as the Alaska Gasline Inducement Act (or "AGIA").

costs of constructing a spur line would be substantial and, in order to make economic sense, those costs would have to be spread across as many Mcfs of gas as possible. ENSTAR understands that having the industrial plants share the capital costs would help to reduce the transportation charges that ENSTAR and the other utilities would have to incur. It is unlikely that a spur line would be economically feasible without the industrial plants as long-term shippers.

There are two categories of serious risk associated with running short of gas. First, there is the peak day risk of losing pressure in ENSTAR's system on a bitter cold winter night. The disruption, damage and expense of having to shut down the ENSTAR system and re-light every pilot light in Anchorage and its environs would be catastrophic. The second category is the long-term risk of having too little gas to supply the community, which would require conversion to alternative, far more expensive fuels. Based on today's prices, ENSTAR has estimated that conversion would cost the community collectively upwards of half a billion dollars per year in additional fuel costs alone. If a North Slope pipeline to Anchorage is never built and no new gas is developed in Cook Inlet, that may be the unfortunate result.

V.

SECTION 3 OF THE NATURAL GAS ACT PROHIBITS EXPORTS THAT CAUSE REGIONAL SHORTAGES

A. Section 3 Protects U.S. Consumers

Section 3(a) of the NGA states in part:

[N]o 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 Commission authorizing it to do so. The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that

the proposed exploration or importation will not be consistent with the public interest.¹⁴

Although the NGA does not define the "public interest," its meaning must be consistent with the primary purpose of the NGA, which is "to protect consumers against exploitation at the hands of natural gas companies."¹⁵ In the case of exports, consumer exploitation can result from the creation of shortages. The legislative history of Section 3 demonstrates that the prevention of shortages was Congress's primary concern. In early drafts of the NGA, Section 3 required the Federal Power Commission to approve export applications unless "it finds that the proposed transportation would impair the sufficiency of the supply of natural gas within the United States."¹⁶ Although in the final version of the NGA Section 3 was amended so that the language would be more generally applicable to both import and export proposals, there is no evidence that Congress changed its belief that the purpose of export review was to prevent domestic shortages of natural gas.

Congressional debate over Section 3 supports this interpretation. In response to a question on the floor of the Senate about Section 3, Senator Burton K. Wheeler, Chairman of the Committee on Interstate Commerce, stated, "[t]hat is for the purpose of conserving our natural gas in the event we wanted to conserve it. Suppose, for instance, that natural gas were being transported from this country into Canada when we had a shortage of natural gas, or suppose we were selling quantities of natural gas to foreign countries when we should not do it."¹⁷

¹⁴ 15 U.S.C. § 717b(a) (1994). As originally drafted, "Commission" referred to the Federal Power Commission. However, jurisdiction over natural gas exports was transferred to the Secretary of Energy as part of the creation of the DOE. Department of Energy Organization Act, Pub. L. 95-91, 91 Stat. 565 (1977).

¹⁵ *W. Va. Pub. Servs. Comm'n v. DOE*, 681 F.2d 847, 854-855 (D.C. Cir. 1982) (citing *Atlantic Refining Co. v. Pub. Serv. Comm'n*, 360 U.S. 378, 388 (1959)); *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 610 (1944) (footnote omitted).

¹⁶ H.R. Rep. No. 11662, 74th Cong., 2d Sess., § 3 (1936); S. Rep. No. 4480, 74th Cong., 2d Sess., § 3 (1936).

¹⁷ 81 Cong. Rec. 9,313 (1938). The Senate was debating whether the power to approve exports or imports should be delegated to an agency or should remain with Congress. The Senate ultimately decided that Section 3

The consumer-oriented purpose of Section 3 survives to the present day. Congress re-examined Section 3 in 1992, having had fifty-four years of experience since its enactment. At that time, there was a movement toward less regulation in the industry. Congress had removed controls on wellhead prices in 1989,¹⁸ and the Federal Energy Regulatory Commission ("FERC") issued Order No. 636 in April of 1992.¹⁹ In the face of these developments, Congress might have declared the United States' borders unconditionally open to imports and exports. Instead, Congress directed DOE to provide for expedient approval of only a limited category of import and export applications.²⁰ It directed DOE to deem any application to import natural gas from or export natural gas to any country that has a free trade agreement with the U.S. to be in the public interest. It also directed DOE to deem any application to import LNG from any country to be in the public interest. But Congress determined that applications to export natural gas or LNG to countries—such as Japan—that do not have free trade agreements with the U.S. should remain subject to the public interest test and the substantive consumer protection provisions of the NGA.

The Secretary of Energy's Delegation Order to the Assistant Secretary for Fossil Energy explicitly recognizes that the primary focus of the public interest test in Section 3 in the export context is regional need: "The Administrator shall regulate exports (including place of exit) based on a consideration of the domestic need for the gas to be exported and such other matters

should be deleted. However, the House of Representatives rejected the Senate amendment striking Section 3, and the Senate acquiesced without further debate. 83 Cong. Rec. 9,146 (1938).

¹⁸ Natural Gas Wellhead Decontrol Act of 1989, Pub. L. 101-60, 103 Stat. 157.

¹⁹ *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation*, III FERC Stats. & Regs. ¶ 30,939 (Order No. 636), *reh'g*, III FERC. Stats. & Regs. ¶ 30,950 (Order No. 636-A), *reh'g*, 61 FERC ¶ 61,272 (1992) (Order No. 636-B), *notice of denial of reh'g*, 62 FERC. ¶ 61,007 (1993), *affirmed in part and remanded in part sub nom. United Distrib. Cos. V. FERC*, 88 F.3d 1105 (D.C. Cir. 1996), *on remand*, 78 FERC ¶ 61,186 (Feb. 27, 1997) (Order No. 636-C).

²⁰ Energy Policy Act of 1992, Pub. L. 102-486, § 201, 106 Stat. 2776, 2866.

as the Administrator finds in the circumstances of a particular case to be appropriate."²¹ In specific cases, DOE has further refined the need test by prescribing a three-step analysis. The threshold question is whether the export will cause a shortage. The second inquiry is whether the needs unmet by gas may be more efficiently served by alternate fuels. The final stage of the inquiry is whether the export will reduce the quantity of energy available or increase the total cost of energy in the relevant market.²²

B. DOE Has the Authority to Conditionally Approve the Extension

Under Section 3 of the NGA, DOE has the authority to conditionally approve applications to export LNG and should use such authority if it approves the Applicants' request.

Section 3 provides:

The Commission may by its order grant such application, in whole or in part, with such modification and *upon such terms and conditions as the Commission 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 it may find necessary or appropriate.²³

The D.C. Circuit has long recognized that the conditioning authority under Section 3 is "at once plenary and elastic" and that this authority can be applied both to the construction of import and export facilities, which is currently regulated by FERC, and to imports and exports of natural gas, which are regulated by DOE.²⁴ Following the division of responsibility under

²¹ Delegation Order No. 0204-111, 1 ERA ¶ 70,032 (1984) (made applicable to the Assistant Secretary for Fossil Energy by Delegation Order 0204-127, 1 FE ¶ 70,051, at 70,052 (1989)).

²² See *Yukon Pacific Corp.*, 1 FE ¶ 70,259, at 71,134 (1989).

²³ NGA § 3(a) (emphasis added).

²⁴ *Distrigas Corp., et al. v. FPC, et al.*, 495 F.2d 1057, 1064 (1974) ("*Distrigas*") ("[W]e find it fully within the Commission's power, so long as that power is responsibly exercised, to impose on imports of natural gas the equivalent of Section 7 certification requirements both as to facilities and—what we suspect is of more vital concern to the Commission and to petitioners—as to sales within and without the state of importation."). Following the division of responsibility under Section 3 between DOE and FERC, the D.C. Circuit recognized that DOE may use its Section 3 authority to impose conditions on its approval of an import or export. *W. Va. Pub. Servs. Comm'n v. DOE*, 681 F.2d 847, 858 (1982) ("The language of this delegation [of Section 3 authority] evidences an anticipation

Section 3 between DOE and FERC, FERC has consistently utilized its plenary and elastic authority under Section 3 to impose conditions to ensure that the construction of import/export facilities are not inconsistent with the public interest.²⁵ Indeed, FERC has found that it may impose "any or all of its sections 4, 5 and 7 terms and conditions" under Section 3.²⁶ DOE should recognize that it has the same plenary and elastic authority to ensure that exports of natural gas are not inconsistent with the public interest.

DOE should use its plenary and elastic conditioning authority under Section 3 to protect the greater Anchorage, Kenai Peninsula, and Matanuska-Susitna Valley areas from potentially suffering supply shortage while LNG is being exported. As previously stated, total Cook Inlet reserves have declined while demand in the region continues to increase. Further, concern over the declining reserves has led to price increases that affect end users. It is inconsistent with the public interest to permit the Applicants to export potential domestic supply to Japan and other Pacific Rim countries without ensuring that demand in South Central Alaska is met. Thus, a grant of blanket authority should be conditioned to require Applicants to limit their exports during periods when available supplies are unable to meet domestic demand. Such a condition is not without precedent. In 1948, the Federal Power Commission granted authorization to Reynosa Pipe Line Company to export gas from Texas to Mexico, subject to the following condition: "Users of the gas in the U.S. are to receive preferential service over Gas Industrial,

that the ERA might impose conditions which would overlap with areas . . . over which FERC normally would have jurisdiction.").

²⁵ See, e.g., *Sound Energy Solutions*, 107 FERC ¶ 61,263, at P 41 (2004); *Dynegy LNG Prod. Terminal, L.P.*, 97 FERC ¶ 61,231, at 62,054 (2001).

²⁶ *Sound Energy Solutions*, 107 FERC at P 41.

and the existence of the export permit shall not be ground for refusal of Reynosa or LaGloria, its parent corporation, to sell [to] users in the U.S."²⁷

VI.
DOE MUST REQUIRE THE APPLICANTS TO PROVE
CONCLUSIVELY THAT THE STATUTORY STANDARD CAN BE SATISFIED

The rejection of APL-5 has left ENSTAR in a difficult position, given all of the uncertainties and deliverability constraints discussed above. ENSTAR has issued a new RFP and is in the process of reviewing and evaluating new proposals from at least two Cook Inlet producers. ENSTAR remains hopeful and cautiously optimistic that it can strike a new deal to obtain the gas it urgently needs, at a reasonable price and on other terms that the fairly recognize the RCA's concerns in the order rejecting APL-5. However, until ENSTAR has secured those critical supplies for its customers, it is reluctant to give an unqualified endorsement of any extension of the export license for the Kenai LNG Facility. ENSTAR is concerned that if the license is extended before ENSTAR has a firm supply of gas under contract until at least 2014, there could be insufficient reserves and deliverability in Cook Inlet to meet the domestic needs of ENSTAR and the other utilities in the region. Indeed, the supply shortfalls that South Central Alaska has already experienced demonstrate that continued exports without assurances of adequate supply for domestic needs are inconsistent with the public interest. For these reasons, ENSTAR respectfully requests that the DOE (a) require the Applicants to establish conclusively that *both* reserves and deliverability will be sufficient to meet those needs, or (b) exercise its conditioning authority under Section 3 of the NGA to require the Applicants to limit their exports during periods when available supplies are insufficient to meet domestic demand.

²⁷ *Cia Mexicana De Gas v. FPC*, 167 F.2d 804, 808 n.4 (5th Cir. 1948).

Respectfully submitted this 9th day of April 2007.

Attorneys for ENSTAR Natural Gas Company

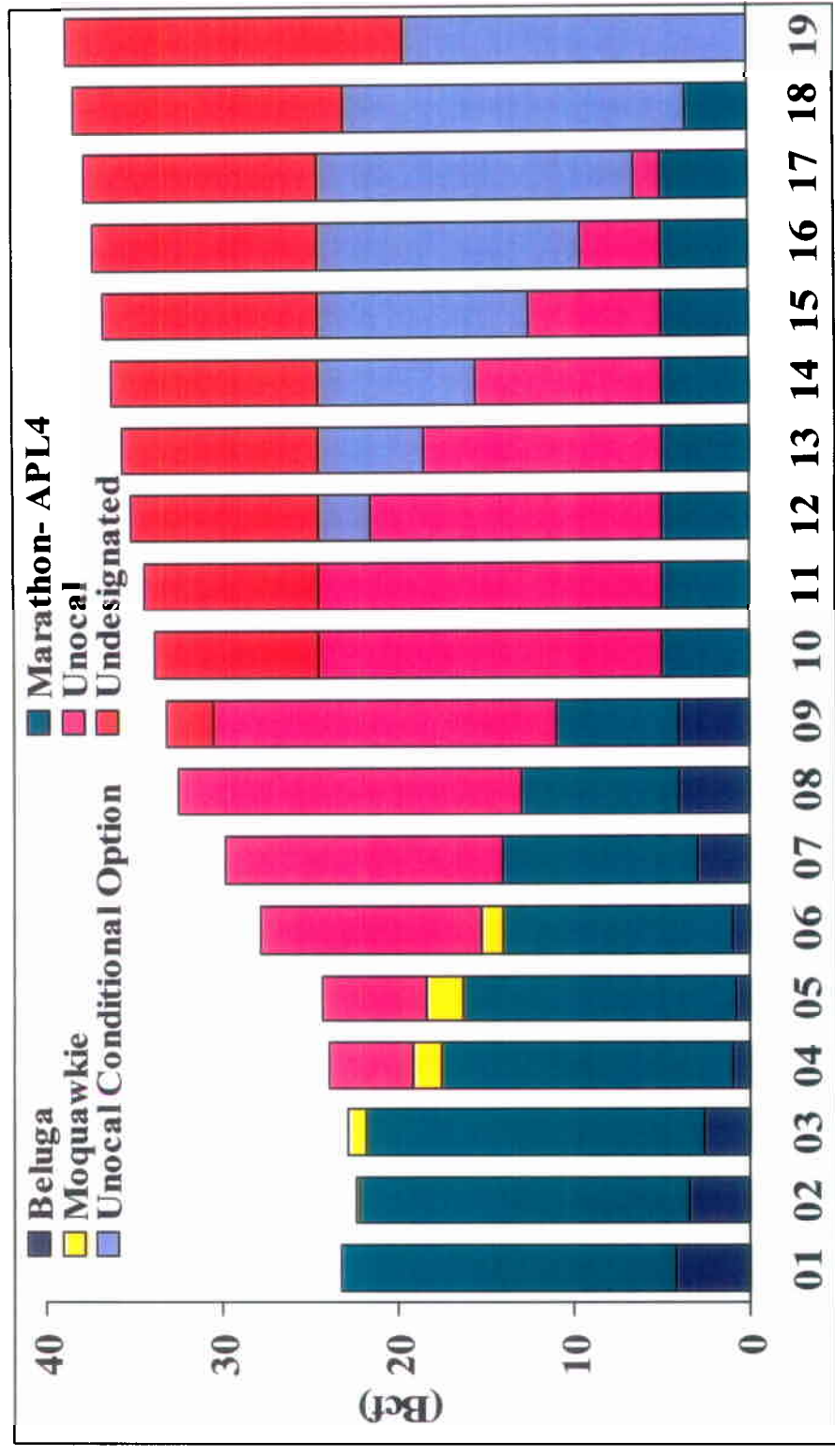
A handwritten signature in black ink, appearing to read "John S. Decker", is written over a horizontal line.

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EXHIBIT 1

ENSTAR Gas Supply Jan. 2007



VERIFICATION

STATE OF ALASKA)
) ss:
THIRD JUDICIAL DISTRICT)

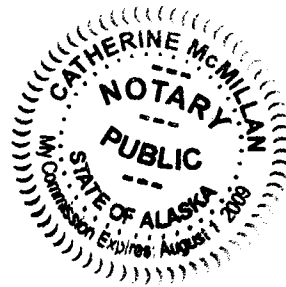
Thomas S. East, being first duly sworn, on oath states that he is the Regional Vice President of ENSTAR Natural Gas Company and is authorized to execute this verification; that he has read the foregoing document and that all allegations of fact therein contained are true and correct to the best of his knowledge, information, and belief.

Thomas S. East
Thomas S. East

Subscribed and sworn to before me this 9th day of April, 2007

Catherine McMillan
Notary Public, Alaska

My Commission Expires: 9/1/2009



CERTIFICATE OF REPRESENTATIVE

I hereby certify that I am a duly authorized representative of ENSTAR Natural Gas Company and that I am authorized to sign and file with the Office of Fossil Energy, on behalf of ENSTAR Natural Gas Company, the foregoing document.

Dated at Washington, D.C. this 9th day of April, 2007.


John S. Decker