

United States General Accounting Office

Fact Sheet for the Chairman, Subcommittee on Energy and Power, Committee on Energy and Commerce, House of Representatives

November 1987

# SYNTHETIC FUELS

Status of the Great Plains Coal Gasification Project

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GAO/RCED-88-53FS

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United States General Accounting Office Washington, D.C. 20548

Resources, Community, and Economic Development Division

B-207876

November 10, 1987

The Honorable Philip R. Sharp Chairman, Subcommittee on Energy and Power Committee on Energy and Commerce House of Representatives

Dear Mr. Chairman:

As requested in your August 5, 1985, and November 14, 1986, letters and in related meetings with your office, we have obtained updated information on the Great Plains coal gasification project in North Dakota following the default of a \$1.54 billion federal loan by the project's sponsors. Your office asked that we provide periodic briefing documents on the status of the project. We issued our last fact sheet to you on February 27, 1987 (GAO/RCED-87-90FS).

This fact sheet provides updated information through September 25, 1987. Since our last fact sheet, a federal appeals court has denied appeals by three gas pipeline companies to void the project's gas purchase agreements. The agreements require four pipeline companies to purchase all the gas produced by the project at a controlled price. In June 1987, the project received \$3.82 per million British thermal units (Btu's) of gas produced, compared with the average wellhead price of \$1.81 per million Btu's. The federal appeals court also denied an appeal by one of the partners of the Great Plains Gasification Associates that sought to overturn the Department of Energy's (DOE) foreclosure of the project.

Studies to determine the plant's maximum and optimum operating levels for gas production have also been completed. They showed that the optimum operating level is 152.5 million cubic feet per day and that the plant can produce 93 percent of that amount, or an average of 141.8 million cubic feet per day, on a sustained basis. In addition, tests to resolve the sulfur emissions problem that has prevented the project from obtaining a state operating B-207876

permit are continuing and DOE has formed a committee to evaluate alternative sulfur removal options. The committee's recommendations for solving the problem are expected in December 1987.

In July 1987, DOE accepted \$12.5 million from the Great Plains Gasification Associates as the final settlement for amounts owed under a special operating agreement that preceded the loan default. As of September 1, 1987, the project's cash balance had increased to \$109.5 million.

Arthur Andersen & Company audited the project's financial statements for the year ended June 30, 1987, and the 11month period that ended June 30, 1986. Arthur Andersen reported that the financial statements presented fairly the financial position of the Great Plains project, subject to future determination of the project's true market value and the outcome of ongoing litigation and disputes.

DOE is proceeding to sell the Great Plains project and has contracted with Shearson Lehman Brothers, an investment firm, to assist with the sale. Shearson Lehman Brothers delivered its marketing plan to DOE in May 1987 and a descriptive memorandum outlining the major characteristics of the project in October 1987. DOE expects to complete the project sale by September 1988.

This fact sheet is organized into four sections. Section 1 provides background and information on our objectives, scope, and methodology. The other three sections provide information on plant operations and financial performance; DOE's options, objectives, and efforts to sell the project; and other matters affecting the project.

We obtained the information in this fact sheet from discussions with, and documents provided by, federal, state, and industry officials involved with or affected by the Great Plains project. We also discussed a draft of this fact sheet with DOE officials and project administration representatives. Based on these discussions, clarifications have been made where appropriate.

As agreed with your office, we are sending copies of this fact sheet to other interested congressional offices and committees, to the Secretary of Energy, and to other interested parties. Please call me at (202) 275-8545 if you have any questions about this fact sheet. B-207876

Major contributors to this fact sheet are listed in the appendix.

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Sincerely yours,

Flora H. Milans

Flora H. Milans Associate Director

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	ABBREVIATIONS	

ANG	ANG Coal Gasification Company
Btu's	British thermal units
DOE	Department of Energy
EPA	Environmental Protection Agency
FFB	Federal Financing Bank
GAO	General Accounting Office
GPGA	Great Plains Gasification Associates
MMcf	million cubic feet

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#### SECTION 1

#### BACKGROUND AND SCOPE

The Secretary of Energy awarded a loan guarantee to the Great Plains Gasification Associates (GPGA) on January 29, 1982, for the construction and startup, in North Dakota, of the nation's first commercial-scale plant producing synthetic natural gas from coal. The federal government, through the Department of the Treasury's Federal Financing Bank (FFB), loaned GPGA 75 percent of project construction and startup costs. GPGA financed the rest with its own equity. Project construction was completed by December 1984 and plant startup had begun. As of July 31, 1985, GPGA had borrowed about \$1.54 billion from FFB, guaranteed by the Department of Energy (DOE), and had contributed about \$493 million in equity to the project.

#### GPGA DEFAULTED ON THE GUARANTEED LOAN AND DOE ACQUIRED THE GREAT PLAINS PROJECT

On August 1, 1985, the GPGA partnership<sup>1</sup> terminated its participation in the Great Plains coal gasification project and defaulted on its DOE-guaranteed \$1.54 billion loan from the FFB. In September 1985, DOE obtained a new loan from the Treasury at a lower interest rate and used the proceeds to retire the guaranteed debt. DOE retired the new Treasury loan in July 1986 using funds from a supplemental appropriation. DOE's total expenditure resulting from its loan guarantee for the project, including principal and interest, was \$1.64 billion.

In 1985, to obtain title to the project, DOE filed action in the federal district court in North Dakota for, and the court granted, a judgment to foreclose on the property. The foreclosure sale was held on June 30, 1986, and the Great Plains property was formally sold to the United States of America on behalf of DOE. DOE's bid of \$1 billion, representing a portion of the loan DOE had guaranteed, did not involve the expenditure of any additional federal dollars. No other bids were presented at the sale.

One of the GPGA partners filed a notice of appeal to overturn the North Dakota federal district court order under which DOE foreclosed on the Great Plains project. The appeal was denied by the U.S. Court of Appeals for the Eighth Circuit on March 11, 1987.

<sup>&</sup>lt;sup>1</sup>The GPGA partnership includes subsidiaries of American Natural Resources Company; Tenneco, Inc.; Transco Energy Company; MidCon Corp.; and Pacific Lighting Corp.

#### DOE HAS CONTINUED TO OPERATE THE PROJECT FOLLOWING THE PARTNERSHIP'S DEFAULT

After GPGA defaulted, DOE directed the plant operator, ANG Coal Gasification Company (ANG),<sup>2</sup> to continue operations temporarily while DOE completed a transition plan. In December 1986, DOE and ANG entered into a project administration agreement under which ANG is to continue operating the plant. The agreement, which initially covered a 1-year period ending September 30, 1987, is renewable at DOE's option for 6-month periods with 30 days advance notice. DOE intends to continue operating the plant as long as additional taxpayer funds are not expended.

DOE'S Office of Assistant Secretary for Fossil Energy has been providing direction to ANG through DOE'S Chicago Operations Office. ANG submits operational and financial reports to DOE on a regular basis, and DOE and ANG managers meet each month to discuss the plant's operations and financial status.

#### MAJOR PROJECT OPERATING AND SUPPLY AGREEMENTS HAVE REMAINED IN FORCE UNDER DOE OWNERSHIP

Major operating and supply agreements, which are critical to the operation of the Great Plains project, have continued in effect under DOE's management and ownership of the plant. Generally, these are legal agreements between ANG and other parties. They include (1) agreements with four pipeline companies that purchase the gas produced by the project, (2) supply contracts for obtaining the coal and electricity needed to run the project, and (3) agreements covering certain project facilities shared with a nearby electric-generating plant.

#### Gas Purchase Agreements

In January 1982, four pipeline companies, subsidiaries of parent companies of four of the Great Plains partners, agreed to purchase all the gas produced by the Great Plains plant. The price of the gas is controlled by a pricing formula contained in the gas purchase agreements. The pricing formula provides that the gas will be sold to the pipeline companies at a base price of \$6.75 per million British thermal units (Btu's), with quarterly adjustments based on changes in the Bureau of Labor Statistics' Producer Price Index and changes in the price of No. 2 fuel oil.

However, the pricing formula sets various caps on the prices. For example, through June 1989 the price cannot exceed the price of unregulated No. 2 fuel oil, and all gas sold at the plant has been at that equivalent price. Beginning in July 1989, the average

<sup>2</sup>ANG is also a subsidiary of American Natural Resources Company.

prices the pipeline affiliates pay for Canadian and Mexican gas and the highest 10 percent of domestic natural gas are also to be considered in establishing the price of Great Plains gas.

Following the August 1, 1985, default by the partners, three of the four pipeline companies contested the enforceability of the gas purchase agreements. DOE took the position that the separate 25-year gas purchase agreements with the affiliated pipeline companies remained valid and enforceable, and that the pipelines were obligated to continue purchasing gas from the project under the pricing formula stated in the agreements. DOE's position was upheld by a January 1986 decision by the federal district court in North Dakota.

In June 1986, three of the four pipeline companies filed notices of appeal of the federal district court order upholding the validity of the gas purchase agreements. The appeal was denied by the eighth circuit court on May 19, 1987. The companies requested the court to reconsider its ruling, but that request was also denied on July 28, 1987.

#### Supply Contracts

The October 1980 contract for supplying electric power to the plant is a 35-year contract between Basin Electric Power Cooperative and ANG that requires a 10-year advance written notification to terminate. The power is obtained from Basin Electric's Antelope Valley Station, which is located adjacent to the Great Plains gas plant. In June 1986, the Antelope Valley Station's second generating unit was placed in service, triggering a contract provision that changed the rate paid by Great Plains. Under the new rate structure, the cost of power to the gas plant has been reduced by about \$8.1 million annually.

The 1979-82 contracts for supplying coal to the project and to Basin Electric's power plant are separate 25- to 35-year contracts between ANG and Coteau Properties Company, Basin Electric, and Great Plains.

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#### Agreements Covering Shared Facilities

Basin Electric and ANG share the use of certain facilities that Basin constructed, including a water supply pipeline, a railroad spur, and an access road. Under agreements with Basin, the project is obligated to pay Basin for all of the depreciation and interest and part of the maintenance costs pertaining to those facilities.

#### DOE HAS DECLARED THE PROJECT IN-SERVICE FOR FINANCIAL REPORTING PURPOSES

In June 1986, DOE declared that for financial reporting purposes, the project should be considered in-service as of August 1, 1985. Before August 1, 1985, the plant was considered under construction and startup, but not in-service. The declaration of in-service status caused certain changes in project financial reporting procedures. For example:

- o Operating revenues and expenses are reported on a profit or loss basis. During the startup phase that preceded inservice status, operating costs incurred in excess of revenues were capitalized as property, plant, and equipment.
- o Accumulated depreciation is recognized from the point where in-service status began. For depreciation purposes, project assets are valued at DOE's acquisition cost of about \$1.6 billion. Plant depreciation is being computed on a straight-line basis, assuming a 25-year life and no salvage value.

The Great Plains project has converted from a calendar business year to a fiscal business year ending each June 30th. DOE approved the fiscal year 1988 operating budget on June 23, 1987. The prior operating budget covered the 6-month period from January through June 1987 to accomplish the business year conversion.

#### OBJECTIVES, SCOPE, AND METHODOLOGY

The Chairman, Subcommittee on Energy and Power, House Committee on Energy and Commerce, asked us to provide periodic briefing documents on the status of the Great Plains coal gasification project. Our first briefing document was transmitted to the Chairman on September 18, 1985. We have also issued fact sheets on the status of the project on November 8, 1985 (GAO/RCED-86-49FS); February 28, 1986 (GAO/RCED-86-109FS); July 3, 1986 (GAO/RCED-86-190FS); and February 27, 1987 (GAO/RCED-87-90FS). This fact sheet provides information obtained as of September 25, 1987, on plant operations and financial performance, the status of DOE's efforts to sell the project, and other matters affecting the project.

We interviewed project officials and federal and state officials involved in or affected by the project. We also obtained and reviewed reports and other pertinent materials from DOE and ANG. We spoke with officials at DOE headquarters in Washington, D.C.; DOE's Chicago Operations Office; the North Dakota State Department of Health; and ANG. DOE and ANG officials have reviewed a draft of this fact sheet, and their clarifications were incorporated where appropriate.

#### SECTION 2

#### GREAT PLAINS OPERATIONS AND FINANCIAL PERFORMANCE

This section provides updated information on project operations including administration, gas production, plant employment, plant maintenance, environmental concerns, and development of by-products. It also presents updated financial information on the project's cost to produce gas and the gas selling price, cash flow from operations, revenues earned and expenses incurred, financial audit activity, and capital project expenditures.

#### **PROJECT OPERATIONS**

#### Project Administration

o DOE told us that it renewed the project administration agreement with ANG for the 6-month period starting October 1, 1987. As provided for in the original agreement, ANG will receive a fee of about \$1.5 million for that period.

#### Gas Production

o Table 2.1 shows the average daily gas production delivered to the pipeline companies each month from December 1986 through August 1987. During that period, gas production averaged about 104.8 percent of the plant's design capacity rating of 137.5 million cubic feet (MMcf) per day.

Table 2.1				Production	From	December	<u>1986</u>
	Through	August	t 198	87			

	Average daily production	Average percentage of design capacity rating
	(million cubic feet)	
1986		
December	141.5	102.9
<u>1987</u>		
January February March April May June July August	147.7 149.8 139.6 143.8 137.1 145.9 145.4 146.5	107.5 109.0 101.5 104.6 99.7 106.1 105.7 106.6

- o The plant's design capacity rating is based on an operating mode using 12 of the 14 gasifiers. DOE recognized that the plant can operate at a higher level and directed ANG in February 1987 to (1) target monthly average gas production at about 145 MMcf per day and (2) limit daily gas production to 150 MMcf to avoid damage to the plant.
- o Monthly gas production since December 1986 has consistently exceeded the design capacity rating, except for May 1987. However, gas production dropped on some days for several reasons. For example, in May 1987, five production drops occurred. Two resulted from using coal that was too small for efficient coal gasification. ANG brought two new coal sizers on line, at a cost of \$225,000, to solve this recurring problem. The other production drops occurred from unusual problems with the oxygen plant, superheater unit, and Rectisol unit (which removes sulfur, naphtha, and carbon dioxide from the gas).
- o ANG tested the production capacity at various levels and found that the maximum operating level is 156.6 MMcf per day using all 14 gasifiers. However, that level cannot be sustained. ANG concluded that the optimum operating level (the most desirable and efficient production level) is 152.5 MMcf per day and that the plant can produce 93 percent of that amount, or an average of 141.8 MMcf per day, on a sustained basis. DOE agreed with ANG's assessment.

#### Plant Employment

o Table 2.2 shows the month-end employment at the gas plant of both permanent employees and contract personnel from December 1986 through August 1987.

	Permanent	Contract	<u>Total</u>
1986			
December	860	150	1,010
1987			
January February March April May June July	860 858 854 854 851 847 845	132 122 105 104 108 117 141	992 980 959 958 959 964 986
August	843	135	978

Table 2.2:	Great	Plains	Employ	yment	From	December	1986
	Throug	h Augus	st 198'	7			

- o The number of permanent employees has declined slightly because of attrition. ANG said that not all of the vacated positions are being filled because fewer staff are required as operational efficiency improves. ANG has not experienced any major difficulties in hiring new employees with the required technical skills. Neither DOE nor ANG anticipated any significant changes in the size of the permanent staff.
- o Contract personnel increased in December 1986 to winterize the plant and in July 1987 to perform special maintenance of the facility for removing water from ash waste.
- o ANG told us that the following two issues concern employees at the present time:
  - -- Uncertainty over whether the plant will be sold and whether a new owner would replace employees and restructure salaries and benefits.
  - -- Uncertainty about how the new gas pricing formula that goes into effect in 1989 will affect the plant's economic viability. (See p. 6.)

#### Plant Maintenance

- ANG has continued to maintain plant equipment and facilities to assure efficient plant operations. Routine maintenance has been performed on schedule.
- o The principal scheduled, routine plant maintenance is to replace spent catalyst material in methanation systems downstream from the gasifiers. The plant's gasification

systems are configured into two equipment trains, allowing a portion of the plant to be shut down for the catalyst change while the rest of the plant continues to operate at or above 50 percent of production. In the past, the catalyst material for each train was replaced annually. ANG now plans to perform this maintenance for each train every 2 years. Catalyst changes also require fewer days to complete than they used to as the result of increased operating experience. The less frequent catalyst changes and shorter shutdown periods will result in less lost production and reduced maintenance expense. The most recent catalyst change took place in September 1987.

#### Environmental Concerns

#### Testing of Alternative Sulfur Removal Technologies

The Great Plains project has not yet received a permit to operate from the North Dakota State Department of Health because sulfur emissions continue to exceed the 1,340-pounds-per-hour limit set by the health department. The sulfur recovery unit, called the Stretford unit, in its present configuration emits about 6,000 or more pounds per hour.

In late 1986, ANG built a pilot plant in the sulfur recovery unit to conduct tests of ways to reduce sulfur emissions.

- In February 1987, ANG tested the potential of special equipment for improving the performance of the sulfur recovery unit. The test indicated that this equipment, which would cause the gas to be washed twice rather than once for sulfur removal, would reduce emissions to about 5,000 pounds per hour, which is still significantly more than the state allows.
- o During June and July 1987, ANG also tested two alternative chemical solutions that would replace the Stretford solution being used. Pilot test results for one of the chemical solutions, called Sulfolin, showed that sulfur removal was as good as or better than removal with the Stretford solution. Also, the sulfur recovered by the process was of excellent quality. ANG said that the adoption of this solution could reduce chemical costs by about \$2 million annually. However, this solution caused plugging in the sulfur absorbers, which ANG said could be a major economic problem.
- In October 1987, ANG, with DOE approval, began using the Sulfolin chemical solution in place of the Stretford solution in full-scale operations.

DOE has approved \$442,000 for ANG to expand the pilot plant in the sulfur recovery unit and to test ways to improve the sulfur absorber operations and resolve the plugging problem. DOE estimated that it may cost from \$5 million to \$20 million to resolve the sulfur emissions problem, depending on how much equipment is added or modified.

DOE notified the state health department in June 1987 that it had established a committee to perform a technical and economic evaluation of sulfur removal options and recommend feasible courses of action. The committee is expected to make its recommendations in December 1987. A state health department official told us that the length of time needed for the project to obtain a permit to operate depends on how well the sulfur removal method that DOE proposes to use can be expected to perform.

#### Disposal of Wet Ash

On June 5, 1987, the project received an operating permit from the North Dakota State Department of Health for its solid waste disposal facilities. The permit was delayed because of environmental concerns about (1) the project's inability to adequately remove water from ash waste, as the permit requires, and (2) the disposal of wet ash produced by the coal gasification process.

Water in the ash contains arsenic and selenium, which can leach into ground water. The permit allows the project 270 days to resolve the problem. ANG plans to reduce the severity of the problem by improving the ash-handling facility, at a cost of \$325,000. DOE has approved additional capital expenditures of \$225,000 to test water removal methods.

#### Request for Exemption From Hazardous Waste Requirements

On October 28, 1986, ANG submitted a request to the state health department for exemption from hazardous waste management requirements under the Resource Conservation and Recovery Act. ANG believes that the project qualifies for that exemption because the wastes produced are similar to those produced by electricgenerating facilities in the area, which are exempt from the act's hazardous waste management requirements. The state health department referred the request to the Environmental Protection Agency (EPA) for its consideration. According to ANG, EPA has concluded that the project is essentially excluded from the act's hazardous waste management requirements, but that certain wastes, such as spent catalyst from the methanol plant, are still potentially subject to such requirements.

#### Development of By-products

#### ANG's By-product Study

The project currently produces ammonia, sulfur, and liquid nitrogen for sale. ANG has studied the potential for producing and selling additional commercial by-products such as benzene, cresylic acids, and carbon dioxide. However, in June 1987, DOE decided against modifying the plant to produce and sell new by-products, pending the fate of the project. DOE did authorize \$1.5 million for ANG to conduct further studies of the technical and economic feasibility of producing an expanded slate of commercially valuable by-products at the plant. DOE believes that these studies, which are to be completed by June 1988, could boost the plant's attractiveness to future buyers.

#### Jet Fuel Study

DOE'S Pittsburgh Energy Technology Center is studying the potential for producing jet fuel from the project's tar oil. ANG is assisting in the study by providing technical support and samples of the tar oil. Tests using a refinery simulation program are expected to be completed in late 1987 or early 1988. However, ANG believes that jet fuel is not likely to become an economically viable by-product for the project unless it is developed in conjunction with cresylic acids (another tar oil derivative).

#### FINANCIAL PERFORMANCE

#### Comparison of Selling Prices With Operating Costs

o Table 2.3 compares the monthly selling prices for gas produced by the project with the operating costs from December 1986 through August 1987. Both the operating costs and the net operating costs do not include project depreciation. In determining the net operating costs, ANG also excluded revenues from sources other than gas, such as pipeline transportation charges, by-product sales, and interest earned on cash investments. All amounts are expressed in millions of Btu's.

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	operating costs		
	Selling price	Operating <u>cost</u>	Net operating <u>cost</u>
	(per	million Btu'	s)
<u>1986</u>			
December	\$3.19	\$3.22	\$2.91
<u>1987</u>			
January February March April May June July August	3.63 3.69 3.43 3.60 3.70 3.82 3.92 4.08	2.95 3.06 3.39 3.06 3.22 3.51 2.96 2.87	2.65 2.77 2.99 2.62 2.87 3.19 2.59 2.44

#### Table 2.3: Comparison of Monthly Gas Selling Prices and Operating Costs

- o Plant operating costs per million Btu's of gas remained relatively stable, while gas selling prices generally increased.
- o ANG told us that the June through August gas selling prices were unexpectedly high because the usual seasonal decline in the price of No. 2 fuel oil did not occur this summer.
- o In June 1987, the project received \$3.82 per million Btu's of gas produced, compared with the average wellhead price of \$1.81 per million Btu's.

#### Cash Flow From Operations

o Table 2.4 shows the project's monthly cash flow from operations from December 1986 through August 1987. As of September 1, 1987, the project had a cash balance of \$109.5 million.

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	Beginning cash balance	Receipts	Disbursements
	(mi	llions of dollar	s)
1986			
December	\$ 62.1	\$ 16.4	\$ 15.5
<u>1987</u>			
January	63.0	19.2	18.9
February	63.3	22.5	15.4
March	70.4	19.3	14.5
April	75.2	19.4	16.4
May	78.2	20.0	14.8
June	83.4	19.8	15.7
July	87.5	33.7	18.6
August	102.6	22.7	15.8
September	109.5	<u>a</u>	a
Total		\$ <u>193.0</u>	\$ <u>145.6</u>
Monthly			
average		\$ 21.4	\$ 16 <b>.</b> 2
<b>D</b>			

#### Table 2.4: Great Plains Cash Position

<sup>a</sup>Data not available as of September 25, 1987.

o The July 1987 receipts of \$33.7 million included \$12.5 million that DOE collected from the GPGA partners as final payment of a debt incurred prior to the loan default. (See p. 21.) The payment was forwarded to ANG and deposited in the project's account.

Revenues Earned and Expenses Incurred

o Table 2.5 shows the monthly revenues and expenses from December 1986 through August 1987. The expenses do not include project depreciation charges of about \$5 million per month.

	Total revenue earned	Total expenses incurred
	(millions	of dollars)
1986		
December	\$ 14.8	\$ 13.6
<u>1987</u>		
January February March April May June July August	17.4 16.1 15.6 16.8 16.5 17.5 18.6 19.7	13.1 12.4 13.7 12.7 13.2 14.8 12.9 12.5
Total	\$ <u>153.0</u>	\$ <u>118.9</u>
Monthly average	\$ 17.0	\$ 13.2

Table 2.5: Monthly Revenues and Expenses From December 1986 Through August 1987

- o The total revenues shown in table 2.5 consisted of sales and delivery of synthetic natural gas (95.5 percent), sales of by-products (1.8 percent), and income from cash investments (2.7 percent).
- o Income from cash investments exceeded \$1 million for the first time during the quarter ended March 1987, and was nearly \$1.4 million for the quarter ended June 1987.

#### Audits

o Arthur Andersen & Company audited the project's financial statements for the year ended June 30, 1987, and the 11month period that ended June 30, 1986. In its August 14, 1987 report, Arthur Andersen expressed its opinion that the financial statements presented fairly the financial position of the Great Plains coal gasification project, subject to future determination of the project's true market value and the outcome of ongoing litigation and disputes.

#### Capital Projects

- o As of September 25, 1987, ANG had completed three of the four capital improvement projects that DOE approved for the 6-month period ended June 30, 1987. One involved the testing of special equipment for improving the performance of the Stretford sulfur recovery unit, at a cost of \$100,000. Another project involved the construction of a maintenance building, at a cost of about \$200,000.
- ANG had also completed a study to determine what specific plant modifications need to be made to eliminate certain design bottlenecks that affect production. The study, which cost \$433,000, indicated that the plant's maximum operating rate can be raised from 156.6 MMcf per day (see p. 10) to 160 MMcf per day if design bottlenecks identified in the study are eliminated.
- o The fourth capital improvement project, to test methods for removing water from ash waste at a cost of \$225,000, was deferred until fiscal year 1988.
- o DOE approved expenditures of about \$5.3 million for fiscal year 1988 to replace plant and mine equipment. DOE also approved seven capital improvement projects (for environmental compliance and workers' safety) estimated to cost \$875,000. The most expensive project will address the problem of wet ash disposal.

#### SECTION 3

#### DOE'S OPTIONS FOR GREAT PLAINS

DOE's options for the Great Plains project are to continue to operate the plant, sell or lease it, shut down the plant until a buyer or lessee is found, mothball it, or scrap the plant.

#### DOE'S OBJECTIVES

Although DOE has not ruled out any option, DOE stated in a February 1986 news release that its objectives are to

- o transfer ownership of the plant and remove the federal government as a direct competitor in the gas production business,
- o recover as much of the federal funds provided to cover the loan default as possible, and
- o assure continued long-term operation of the plant to avoid disruptions to the local economy and to capture the benefits associated with the extended plant operations.

#### STATUS OF DOE'S EFFORTS TO SELL THE PROJECT

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- o In February 1986, DOE placed an announcement in the Federal Register requesting any public and private sector organizations that may be interested in acquiring the plant to submit statements of interest and informational proposals. The announcement emphasized that DOE was not soliciting specific proposals for purchasing the facility.
- o DOE received nine statements of interest in response to its notice. The statements ranged from interest in purchasing the plant, to operating it for the government, to buying its gas or by-products.
- o In October 1986, DOE mailed a request for proposals to 116 investment banking-type companies to acquire assistance in selling the Great Plains plant and assets. The request for proposals identified several major issues that affect the sale, including ongoing and potential litigation; tax issues; project economics; resolution of sulfur emissions violations; and enhanced sales of by-products.
- o DOE awarded the contract to Shearson Lehman Brothers in February 1987. Under the contract terms, Shearson Lehman Brothers is responsible for

- -- submitting a marketing plan for the divestiture of the plant and its assets,
- -- preparing a sales prospectus,
- -- providing DOE with briefings of the project's status and proposed sales arrangements,
- •- conducting a diligent search for acceptable purchasers and providing DOE with analyses of prospective buyers and financial arrangements, and
- -- performing all other activities necessary to assist DOE in completing the sale.
- o The contract provides that DOE will pay Shearson Lehman Brothers \$100,000 for each quarter, not to exceed six quarters, subject to the following conditions:
  - -- If the Great Plains project is sold, Shearson Lehman Brothers will receive as its fee 1 percent of the first \$50 million of the selling price, one-half percent of the next \$450 million, and three-eighths percent of the remainder of the selling price, less the amount of quarterly payments received.
  - -- If the project is not sold, Shearson Lehman Brothers will retain the quarterly payments received from DOE for services rendered in support of the sales effort.
- o Shearson Lehman Brothers delivered its marketing plan for the Great Plains project to DOE on May 11, 1987, and a descriptive memorandum outlining the major characteristics of the project in October 1987. The descriptive memorandum, which will be provided to prospective buyers, outlines the plant's history, production processes, financial status, and other relevant information. DOE expects to complete the project sale by September 1988.

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#### SECTION 4

#### OTHER MATTERS

#### REVISED RULING ON PIPELINE CAPACITY

Agreements exist between the four pipeline companies which purchase the gas that Great Plains produces and Northern Border Pipeline Company, which transports the gas to the pipeline companies. In July 1987, the Federal Energy Regulatory Commission extended Northern Border's authorization to ship up to 160 MMcf per day of Great Plains gas to the four pipeline companies. DOE said the extension will apply indefinitely.

#### SETTLEMENT OF CLAIMS

- o DOE and the GPGA partners have settled on the amount owed by the partners under a special June 24, 1985, operating agreement. This agreement, which was intended to keep the plant in operation until negotiations for federal price support were completed, enabled the Great Plains partnership to delay certain payments on the guaranteed loan until August 1, 1985. However, the Great Plains partners and their parent companies were liable for all project expenses incurred during that period. Although GPGA paid \$13.4 million in 1985 as final payment under the special agreement, DOE maintained that an additional \$36.2 million was still owed. On July 28, 1987, after much negotiation, DOE accepted \$12.5 million from the GPGA partners as final payment under the agreement.
- o According to ANG, Transcontinental Gas Pipe Line Corporation (Transco), one of the four pipeline companies, still owes the project about \$400,000 including interest for gas purchases before the August 1, 1985, loan default. Litigation of this past due amount is still pending action by the North Dakota federal district court.
- o ANG audited Basin Electric's charges for shared facilities for the 21-month period from July 1984 through March 1986. The audit disclosed that ANG had been charged for some costs that were not covered in the shared facilities agreement. On the basis of the audit, ANG requested that Basin (1) refund \$9.7 million for improper charges for the 21-month period and (2) reduce ANG's annual payments for shared facilities by \$4.9 million. Basin subsequently refunded \$2.3 million to ANG (\$7.4 million less than requested) and reduced ANG's annual payments by \$1.3 million (\$3.6 million less than requested). According to ANG, as of July 1, 1987, Basin Electric owed the project \$12.1 million for improper charges. DOE stated that legal action will be taken against Basin, if necessary, to recover improper charges.

#### TAX LIABILITIES

In April 1987, North Dakota revised its tax laws pertaining to (1) the sale of gas and by-products derived from coal gasification and (2) the tonnage of coal mined in the state.

- o The state law had levied a tax of 2.5 percent on the gross receipts from sales of gas and by-products derived from coal gasification, or \$0.15 per MMcf produced, whichever was greater. The 1987 tax change exempts gas production in excess of 110 MMcf per day from this tax and reduced the rate from \$0.15 to \$0.07. It also exempts a coal gasification plant from paying 65 percent of this tax for 5 years after it becomes privately owned. Another tax change exempts coal gasification by-products from this tax as long as the by-product receipts do not exceed 20 percent of the total gross receipts from gas and by-product sales.
- o A state coal severance tax is included in the price that the Great Plains project pays for its coal. The 1987 tax change reduces that tax from \$1.04 per ton of coal mined in the state to \$0.77 cents per ton. The tax reduction will be passed on to the project in the form of a reduced price for its coal. According to ANG, the project uses about 16,000 tons of coal per day.

• APPENDIX I

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#### APPENDIX I

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