

NSC review completed - may be declassified in part

NSC Meeting on Poland

Contents

Tab A	Agenda
Tab B	Polish Debt Paper
Tab C	Private Sector Initiative Paper + DDI Paper on Public Agriculture
Tab D	Pipeline Update
Tab E	Internal Situation
Tab F	MEMCONs from SIG & IG Meetings
Tab G	SNIE: Poland's Prospects Over the Next 12-18 Months

Late addition to agenda:

Sec. Regan will brief on the Latin American situation. Maurice believes this means Mexico, Argentina + Brazil. Please see material from Maurice.

State Dept. review completed

A

ES/MI # 196

27 September 1982

MEMORANDUM FOR: See Distribution

SUBJECT : Meetings

Type of Meeting : NSC

Date : Thursday, 30 September

Time : 11:00 - 12:00

Place : Cabinet Room

Chaired By : President

Principal Only? : Yes

Subject/Agenda : (1) Polish official debt,
(2) Polish private sector initiative,
(3) Alternative energies studies

*(3) Briefing on Latin America situation
(probably financial)*

When to Expect Papers : Will advise

Time Info Received : Per Carol Cleveland, NSC, 12:00 noon



STAT

Distribution:

- O/DCI
- O/DDCI
- ExDir
- DDI
- Chm/NIC
- DDO
- SA/IA
- OCO/SOO
- ES
- D/ES

STAT

STAT

STAT

STAT

STAT

B

Polish Debt SituationBackground

Beginning in the early 1970s, the Poles financed a large portion of their economic growth by borrowing from the West, enjoying relatively easy access to Western capital markets. As their development plans began to falter, they became less able to service their debt.

In 1972, Poland's gross hard currency debt totaled \$1.6 billion. Its debt service, consisting of \$200 million of principal and \$74 million of interest, amounted to only 15% of its foreign exchange earnings from exports of goods and services to non-Communist countries. Poland's imports from non-Communist countries exceeded its exports to these countries by \$1.3-\$3.3 billion annually between 1973 and 1979 as the authorities continued to pursue their development program. By 1979, Poland's external hard currency debt stood at \$21 billion and its debt service (\$3.6 billion in principal and \$2.2 billion in interest payments) equalled 92% of its hard currency export earnings. By mid-year 1981, Poland's hard currency debt stood at approximately \$26 billion. It owed roughly \$20 billion of this to 16 Western countries, \$11 billion to official creditors or guaranteed by them, including \$1.9 billion to the U.S. Government; and \$9 billion of unguaranteed debt to private banks, including \$1.3 billion to U.S. banks.

Developments in 1981

At the beginning of 1981, it was estimated that Poland would require some \$11 billion in hard currency financing to cover its projected trade deficit for 1981 and to service its debt. Poland was clearly not in a position to raise such sums and on March 26, 1981, Poland notified its creditors that it would no longer be able to guarantee payment of its external debts.

The governments and private banks responded to the Poles by agreeing to enter into debt rescheduling negotiations. Separate debt rescheduling exercises were organized by the official and private creditors. Fifteen official creditor nations (later increased to 16 with the addition of Spain) concluded negotiations with the Government of Poland and a multilateral debt rescheduling agreement was signed in Paris April 27, 1981. This agreement served as an umbrella agreement for subsequent government-to-government agreements to reschedule 90% of Poland's debt service obligations to these creditors of both the principal and interest falling due during the last three-quarters of 1981. These obligations, totaling \$2.4 billion, are to be repaid during a

4-year period beginning in 1985. Interest on the rescheduled interest is to be charged during the grace period, 1981-1985. The U.S.-Poland government-to-government for rescheduling \$380 million agreement was signed on August 27, 1981.

Western banks, moving on a parallel track, established a consortium to negotiate a debt rescheduling agreement with the Polish Government by September. The consortium reached an ad referendum agreement with the Poles for rescheduling 95% of the principal (\$2.3 billion) of their debt falling due during April-December 1981, over 8 years, including a 4-year grace period.

The consortium of Western banks set a pre-condition for signing the document, namely that Poland pay all of the 1981 interest--an estimated \$700 million--which fell due in the last 9 months of 1981. The Poles were unable to fulfill this condition until May 1982.

The interest rate charged by the banks on the rescheduled debt was 1 3/4 percent above LIBOR. These interest charges are to be paid over the life of the agreement, including during the grace period. The banks also levied a 1% signature fee -- \$27 million -- which they collected when the agreement was signed.

Payment of the 5 percent of principal -- about \$200 million -- that was originally due in 1981 was subsequently postponed until 1982 when it was to be paid in three equal installments beginning in May.

Developments in 1982

A. Official Creditors

On December 13, 1981, the Government of Poland declared a state of martial law. In January 1982 Poland's official creditors decided not to enter into discussions to reschedule Poland's 1982 debt servicing obligations due them until the GOP: 1) terminated martial law; 2) released the prisoners, and 3) entered into substantive negotiations with the Church and Solidarity. They reaffirmed this agreement in August after reviewing the political gestures announced by General Jaruzelski on July 22, 1982 celebrating the 35th anniversary of the installation of the communist regime in Poland. Notwithstanding their reaffirmation of the three political preconditions for rescheduling discussions, European Governments indicated their willingness to proceed with technical talks on Poland's debt.

On September 23, 1982 Poland's official creditors discussed Poland's performance under the terms of the 1981 rescheduling agreement. The Polish Government has not completely fulfilled its obligations under that agreement. The U.S. Government, for example, has received only \$16 million of the \$42 million that

- 3 -

was not rescheduled and therefore due in 1981. Other governments have also not fully collected the nonrescheduled 10% of 1981's debt service obligations due them. For calendar year 1982 Polish debt service obligations to the U.S. Government total an estimated \$340 million.

B. Western Banks

The Poles are current on their obligations to western banks under the terms of the 1981 rescheduling agreement. They have 1) made all the 1981 interest and signature fee payments necessary to implement the agreement, 2) paid two of the three installments on the 5 percent of principal that was postponed into 1982 when they came due (the third installment is due in November) and 3) are apparently current on the interest payments on the rescheduled debt. The western banks and the GOP have also agreed to terms on a rescheduling of Poland's 1982 private debt service obligations. The rescheduling terms are essentially the same as in the 1981 agreement: 1) 95 percent of principal -- approximately \$2.2 billion -- is to be rescheduled for 7 1/2 years including a four year grace period; 2) the remaining 5 percent is to be paid in two installments in 1983. 1982 interest payments falling due between a) January and April 1982 is to be paid on October 20, 1982, b) May and August 1982 is to be paid on December 20, 1982 and (c) September and December 1982 is due March 20, 1983. There is a 1 percent signature fee and the interest charge on the rescheduling is again 1 3/4 percent above LIBOR.

The bank and the Poles also arrived at a separate agreement regarding the provision of a trade facility. Western banks will make half of the 1982 interest they collect available to the Poles in the form of 6 month loans to finance exports to Poland from the banks' home country. As these loans are repaid they can be rolled over. An interest rate of 1 1/2 percent above LIBOR is charged on these new loans. This trade facility will expire in one year but can be renewed for a second and again for a third year.

The signing deadline for these two agreements has been set for October 20, 1982.

The above agreements only cover the non-guaranteed portion of Poland's debt to western banks. U.S. banks have filed claims and collected \$247 million from Commodity Credit Corporation as of September 21, 1982.

C. Kasten Amendment

The Urgent Supplemental Appropriations Act (P.L. 92-216) enacted July 18, 1982 contained an amendment (Section 205) introduced by Senator Kasten, which prohibits the Commodity Credit

- 4 -

Corporation (CCC) or any other U.S. agency for the remainder of fiscal year 1982 from paying funds to cover guaranteed or insured loans to Poland unless (1) Poland is declared in default or (2) The President reports monthly to the Congress that such payments serve the national interest of the United States. The President delegated the reporting responsibility to the Secretary of State, who, after consultation with the heads of interested Executive agencies, has filed reports for July and August. The amendment expires September 30, 1982.

SECRET

C

Discussion Paper on Private Sector**Assistance to Poland**

The attached draft executive order and background paper address the possibility of establishing a Presidential Commission on Private Sector Assistance to Poland, primarily in the agricultural sector. That draft indicates that the Commission shall assess the current condition and needs of the Polish private agricultural sector, and devise and implement an economic and technical private sector assistance program. Funding will come from private donations, use of CCC-owned zlotys and possibly dollar appropriations.

This proposal raises a number of questions and options for discussion:

Included

-- A recent CIA study (Polish Agriculture: Policy and Prospects, September 1982) indicates that the major problems facing the private agricultural sector in Poland are the need for: substantial investment in agricultural equipment, seed and fertilizer, an increase in financial returns to the farmer, and further reduction/elimination of unfavorable State procurement prices.

- What are the major short and medium term agricultural objectives of the proposal?
- Will the proposal be able to make any impact on these major problem areas by itself or should we link our proposal to the Polish Government adopting significant reforms and providing resources to the private agricultural sector?

-- We understand that the proposal is planned to be announced by the President on October 13, 1982.

- Do we want to tie the announcement to some positive development in Poland, or is there a compelling argument for proceeding on October 13, 1982?
- Do we want to involve the private sectors of other western countries? Do we want Secretary Shultz to raise this proposal in his bilateral discussions with the Europeans next week? Should there be a "quid pro quo" from the Europeans in return for our effort?

SECRET

SECRET

- Should this proposal stand on its own or should it be seen as an alternative to the Church's proposal for a \$2 billion "Polish Recovery Plan"? How do the two relate to each other?

-- Funding needs and sources are unclear.

- How will funding be arranged for the administrative dollar expenses of the Commission's operations in the United States as well as travel and per diem costs for the Commission?
- Do we plan to use all of the CCC-owned zlotys or will some be held in reserve? Is there concrete evidence that the Poles would agree to use of zlotys for this purpose?
- At a time of very stringent budget operations, do we want to suggest that we may have some flexibility on dollar appropriations?
- What are the various institutions who could accept and efficiently distribute private donations?
- How could we insure that any hard currency donations did indeed wind up in the hands of Polish farmers and not the Polish regime? Would the regime permit this?

Attachments:

Draft Executive Order
Draft Cable

SECRET

**PRESIDENTIAL COMMISSION ON PRIVATE SECTOR ASSISTANCE
TO POLAND**

By the authority vested in me as President by the Constitution and statutes of the United States of America, and in order to assist and improve the well-being of the Polish people who have endured many hardships, it is hereby ordered as follows:

Section 1. Establishment. (a) There is established the Presidential Commission on Private Sector Assistance to Poland, which shall be composed of not more than twelve members from the private sector appointed by the President.

(b) The President shall designate a Chairman and Vice Chairman from among the members of the Commission.

Section 2. Functions. (a) The Commission shall assess the current condition and needs of the Polish private agricultural sector; and, devise and implement an economic and technical private sector assistance program to bolster the Polish private agricultural sector.

(b) This private sector assistance program shall include plans for:

(1) generating public support for this private sector assistance program;

(2) coordinating the United States private sector program with similar programs undertaken by our European allies; and

(3) submitting a quarterly progress report to the President.

Section 3. Administrative Provisions. (a) The Secretary of Agriculture shall, to the extent permitted by law and subject to the availability of funds, provide the Commission with such administrative services, funds, facilities, staff and other support as may be necessary for the effective performance of its functions.

(b) Members of the Commission shall serve without compensation. While engaged in the work of the Commission, members may receive travel expenses, including per diem in lieu of subsistence, as authorized by law (5 U.S.C. 5701-5707).

Section 4. General Provisions. (a) The Commission is authorized to conduct meetings and utilize such other procedures as it may deem necessary, and under such conditions it deems appropriate, for the effective performance of its functions.

(b) The Commission shall terminate one year from the date of this Order.

THE WHITE HOUSE

DRAFT**USE OF CERTAIN POLISH CURRENCIES**

Section . Delegations of Authority. (a) The functions vested in the President by section 709 of the International Security and Development Act of 1981 (Public Law 97-113) with regard to programs in agriculture, including activities to assist the private agricultural sector in Poland, are delegated to the Secretary of Agriculture.

(b) In carrying out these functions the Secretary of Agriculture shall coordinate his activities with those of the Presidential Commission on Private Sector Assistance to Poland, make available Polish currencies received by the United States from the April 1981 and October 1981 sale of United States Government-held dairy products to Poland in such amounts as designated by the President in advance to United States private sector groups in support of activities of common benefit to the people of the United States and Poland which assist in meeting the objectives of the private sector assistance program.

I. Background: The United States Government has proposed an initiative whereby the U.S. private sector would render assistance to the Polish private sector -- with primary emphasis on agriculture. The initiative was conceived prior to the Polish Church's recommendation for a five-year, \$2.02 billion "Poland Recovery Plan" to aid the private sector, but coincides with the Church's proposals. This initiative is perceived as a humanitarian "people-to-people" effort, consistent with the Administration's policy toward Poland. Its purposes include: a) strengthening the Polish private sector which has suffered from years of inconsistent and arbitrary government interference and lack of suitable investment, (b) sending a signal of moderation to the Polish government without compromising the integrity of our sanctions, (c) promoting in the long term a more moderate domestic Polish policy as a result of strengthened free market forces.

- As this is a private sector initiative, the official involvement of the U.S. Government will be kept to a minimum.
- This initiative will not nullify but rather support the Allied declaration of January 11, 1982, and the three criteria it endorsed.
- No detailed blueprint of the initiative can or should be prepared at this time for the private sector organizations will be responsible for its preparation and implementation.
- The funding sources are subject to possible change per relevant discussions with Polish authorities. The U.S. is prepared to manifest some flexibility; however, the Polish government must be prepared to accept the general framework of the initiative.

II. Establishment of Commission: The United States Government is establishing a Presidential Commission to spearhead the private sector assistance program for Poland. The Commission shall be composed of no more than 12 members to be appointed by the President. The 12 members will be drawn from the Polish-American community, labor, academia, the Church, farm associations, agricultural industries. One Commission member will serve as a liaison to the European Community. Functions of the Commission shall include a) assessing the current condition and needs of the Polish private agricultural sector, b) devising and implementing an economic and technical assistance program to bolster the Polish private sector -- with emphasis on agriculture, c) generating public support for the private sector assistance initiative, d) coordinating the U.S. program with similar initiatives undertaken by our allies and/or developing a program jointly with them, and e) providing a quarterly progress report to the President. The Commission will conduct regular meetings and utilize such other procedures as it may deem necessary for the effective performance of its functions.

SECRET
Declassify on: OADR

SECRET

secret

Wang 1584 A

EUR/EEY:drherspring

09/17/82 ext. 20575

EUR/EEY:JRDavis

IMMEDIATE BONN, WARSAW IMMEDIATE

decl: oadr

jrd

drh

**Presidential commission on Private Sector
Assistance to Poland**

1. S - entire text.

2. background: the president is planning to announce the formation of a Presidential commission on private sector assistance to Poland to stimulate assistance to the Polish private sector--with primary emphasis on agriculture. The initiative was conceived before the Polish Church's proposal for a five-year, 2.02 billion dollar "poland recovery plan" to aid the private sector, but does not conflict with the church's proposals. This White House initiative is perceived as a humanitarian "people-to-people" effort, consistent with the administration's policy toward poland. It foresees minimal Polish government involvement. Its purposes include: a) strengthening the Polish private sector which has suffered from years of inconsistent and arbitrary government interference and lack of suitable investment, b) sending a signal of moderation to the polish government without compromising the integrity of our sanctions, c) promoting a more moderate domestic Polish policy as a result of strengthened free market forces.

3. Official USG involvement will be kept to a minimum.

-- this initiative will not nullify but rather support the allied declaration of January 11, 1982 and the three criteria it endorsed.

-- no detailed blueprint of the initiative can or should be prepared at this time, since private sector organizations will be responsible for its preparation and implementation.

-- Since some of the funding will be drawn from zloties owned by the commodity credit corporation whose expenditure is subject to Polish government approval, the amount of money available from this source cannot now be determined. The US is prepared to manifest some flexibility; however, the Polish government will have to be prepared to accept the general framework of the initiative.

4. establishment of commission: The commission shall be composed of no more than 12 members to be appointed by the President. The 12 members will be drawn from the Polish-American community, labor, academia, the church, farm associations, agricultural industries. One commission member will serve as a liaison to the

European community. functions of the commission shall include a) assessing the current condition and needs of the Polish private agricultural sector, b) devising and implementing an economic and technical assistance program to bolster the Polish private sector--with emphasis on agriculture, c) generating public support for the private sector assistance initiative, d) coordinating the U.S. program with similar initiatives undertaken by our allies and/or developing a program jointly with them, and e) providing a quarterly progress report to the president. The commission will conduct regular meetings and utilize such other procedures as it may deem necessary for the effective performance of its functions.

5. funding: funding for the initiative will be derived from two sources:

-- private: the American private sector is expected to make donations in support of this effort. The commission will designate an organization to conduct a fund raising drive and to receive donations.

-- public: the United States Department of Agriculture will provide zloty funds [up to \$70 million in CCC-owned zlotys] for in-country use. after the

commission has devised a private sector assistance program, and has determined how much assistance is needed, if any, the us government will evaluate the program and will consider rendering additional government funds [perhaps a supplemental] commensurate with the needs of the program and as may be necessary for its successful and effective implementation.

6. presidential statement: the president will announce the establishment of the commission on october 13.

7. for bonn. embassy should seek appointment with appropriate frg officials making points outlined above. you should also attempt to draw out your interlocutors on plans frg has for increased humanitarian aid, including their evaluation of polish episcopate proposals. You should emphasize that while the U.S. is not prepared to support a program on the scale of that put forth by the Polish bishops, we think the President's initiative is compatible in concept. In any case, the Commission will be consulting with the FRG on ways we might best coordinate our efforts. we would hope frg would be in a position to endorse president's proposal when it is made public.

8. for warsaw: ambassador may draw on above in his meeting with archbishop glemp. Ambassador should also attempt to draw Glemp out on extent of Polish church's involvement in Polish Bishops' proposal as well as Polish government's attitude toward it. Emphasizing that Presidential initiative on private sector assistance to Poland is still in preliminary stage, Ambassador should also explore Church's willingness to become involved in administering it as well as Glemp's reading of likely Polish government attitude toward it.



**Directorate of
Intelligence**

Confidential

SE

25X1

C

Polish Agriculture: Policy and Prospects

25X1

An Intelligence Assessment

Confidential

*EUR 82-10087
September 1982*

Copy **385**

Page Denied



**Directorate of
Intelligence**

Confidential

25X1

Polish Agriculture: Policy and Prospects

25X1

An Intelligence Assessment

25X1

Confidential
EUR 82-10087
September 1982

Confidential

25X1

**Polish Agriculture:
Policy and Prospects**

25X1

Key Judgments

*Information available
as of 27 August 1982
was used in this report.*

The Jaruzelski regime is making little progress in resolving Poland's agricultural problems, which have resulted from more than three decades of neglect and mismanagement by successive Communist regimes. Even if Poland has an average grain harvest of 20 million tons this year, it faces a shortfall of more than 3 million tons. The government has raised food prices to reduce excess demand, but it has not taken adequate steps to increase supply. The present regime is in a particular bind since it cannot import large quantities of grain or other food products from the West because of its financial problems and Western credit sanctions.

The regime has not provided incentives that would induce private farmers, who account for about 75 percent of agricultural output, to produce more. For years, the state has not allocated sufficient investment to the agricultural sector and has not ensured the profitability of private farms. The present government has threatened a return to compulsory deliveries, but it is reluctant to make good on the threat out of fear that the private farmers will cut production in response.

The regime's tougher approach to private farmers under martial law has yielded ambiguous results during the first seven months. Partially because of fodder shortages, farmers have increased livestock sales enough to satisfy rationing requirements, but they have not filled state grain needs. The shortfall has forced the government to buy additional grain in the West, using proceeds from the sale of high-quality meat. The regime could face serious supply shortages again later this year if the harvest turns out to be worse than is now indicated or if farmers decide for other reasons not to sell sufficient quantities to the state. Should Warsaw reimpose compulsory deliveries of grain, and perhaps other farm products as well, the regime could be dragged into a confrontation that might become a major turning point in the Polish crisis.

25X1

Confidential

25X1

25X1

**Polish Agriculture:
Policy and Prospects** []

25X1

Agricultural Problems in Perspective

In the years since World War II, Warsaw's agricultural policy has had two conflicting goals. One goal—increased farm production—requires increases in agricultural investment and in financial returns to farmers, which would be facilitated by high procurement prices. The other—low food prices for urban workers—militates against high state procurement prices and has led to huge consumer subsidies. The general problem is not unique, but its resolution is more difficult in Poland than in other Communist countries because most farmland remains in private hands and workers have reacted violently against attempts by the government to raise retail food prices.

25X1

[]

Poland has been a net importer of grain since the beginning of the Communist period. It became a net agricultural importer in the 1970s, when Polish farmers failed to keep pace with increasing consumer demand for foodstuffs and the regime decided to boost imports rather than ignore or curb that demand. In 1970, agricultural raw materials and food imports constituted 25 percent of total imports from the West; by 1981, these imports had jumped to 45 percent of total hard currency purchases. Agricultural exports, meanwhile, declined from one-fourth of Poland's exports to the West in 1971-75 to only 10 percent in 1981 (table 1). []

25X1

Emphasis on the Industrial Sector. Successive Communist regimes in Poland—like regimes in other Soviet Bloc countries—have considered improvement of the agricultural sector to be less important than industrial development. Only 11 to 15 percent of the Polish state investment budget was apportioned to agriculture in the 1950s and 1960s.¹ Even when food supply problems were widespread in the 1970s, state investment in the sector averaged just 15 percent of total state investment. In 1980, balance-of-payments problems caused Warsaw to cut total investment,

25X1

¹ Except as noted, all statistics in this paper are taken directly from or are based upon official Polish sources. []

including investment in agriculture, sharply. These levels of investment meant that farmers did not receive modern machinery and high-quality seeds, and the rural infrastructure (for example, roads, storage facilities, and irrigation projects) was not upgraded. To some extent, weather damage to crops—a primary cause of poor harvests in the late 1970s—could have been reduced had the state invested more in flood control and land improvement projects and in the construction of transport and storage facilities. Even in a good harvest, the inadequate rural infrastructure contributes to losses averaging around 15 to 20 percent of the crop. The situation is aggravated further by inadequate investment by private farmers. Many are reluctant to invest in land which they feel may be taken eventually by the state, either by force or after their retirement. As a result, inadequate storage facilities, outdated farm implements, and poor soil management are common problems which lower production. []

25X1

Discrimination Against the Private Farmer. Unlike its neighbors, Poland decided not to socialize farming forcibly in the 1950s because the regime feared that resistance by the farmers would disrupt food supplies for years. Warsaw instead tried to pressure farmers into joining collectives. It assigned compulsory delivery quotas of products that private farmers had to sell to the state, at the same time depriving them of many farm inputs, especially key items such as tractors and fertilizers. Because of the lack of proper inputs, yields per unit of land have been less for most crops on private farms than on state farms. []

25X1

By the mid-1970s, only one private farmer in 13 owned a tractor; most of the others depended on horses to farm their land. In 1975, the supply of fertilizer provided private farms per unit of land was only half that allotted to state farms. Relative to land area and livestock numbers, the state farms received

Confidential

Confidential**Table 1**
Polish Agricultural Trade

	1965	1970	1975	1978	1979	1980	1981
Imports							
Total (billion \$)	2.34	3.61	12.75	16.49	18.16	19.44	15.66
Of which: Western	0.79	1.13	6.80	7.37	8.04	8.49	5.42
Food and agriculture (billion \$)	0.43	0.45	1.41	2.11	2.34	2.86	2.98
Of which: Western	0.26	0.28	1.04	1.73	1.95	1.69	2.47
Grain (million tons)	2.68	2.46	4.03	7.37	7.34	7.67	7.04 ^a
Wheat (million tons)	1.38	1.10	1.48	2.31	2.93	3.47	3.44
Corn (million tons)	0.78	0.23	0.63	1.81	2.09	2.52	2.43
Barley (million tons)	0.49	1.09	1.38	2.41	1.50	1.13	0.88
Meat (thousand tons)	38	45	16	33	2	174	175
Exports^b							
Total (billion \$)	2.23	3.55	10.51	14.49	16.86	17.25	13.40
Of which: Western	0.82	1.26	4.12	5.48	6.35	7.51	5.49
Food and agriculture (billion \$)	0.44	0.45	1.41	1.27	1.41	1.30	0.78
Of which: Western	0.35	0.41	0.68	0.96	1.05	1.03	0.65
Grain (million tons)	0.09	0.20	0.10	0.01	0.07	0.0	0.0
Meat (thousand tons)	197	148	209	153	167	150	73

^a Estimated.^b Polish Statistical Office, Rocznik Statystyczny Handlu Zagranicznego, 1966, 1971, 1976-81.

more machinery and equipment and had greater access to services of veterinarians and soil scientists. Many private holdings, however, were too small or too divided for mechanized techniques to be economical.

Despite the pressures, most farmland remains in private hands. In 1980, private farms accounted for 76.9 percent of gross farm production; state farms, 17.8 percent; collectives, 4.3 percent; and associations, 1.0 percent of output. Associations provide services such as plowing and harvesting to private farmers and demonstrate new farming techniques.

Private farms are small because of direct and indirect constraints imposed by the government and because many farms were split into small noncontiguous parcels as a result of the now-forbidden tradition of

dividing a father's land among his surviving sons. About 2 percent of Poland's farmland was lying fallow in 1981 because many noncontiguous plots were too small to be used profitably. In the early 1950s, private farmers were not permitted to hold more than 15 hectares (1 hectare equals 2.47 acres). This subsequently was increased, and by the late 1970s farmers were allowed to own 50 hectares of land. This year, apparently recognizing the key role of private farming (and perhaps economies of scale), the regime doubled the amount. Local officials often have been a stumbling block: they have been slow to approve land sales to prosperous farmers and have used their controls over credit and their other powers to hinder farm expansion. Moreover, chronic shortages of machinery have made farmers reluctant to

Confidential

Confidential

acquire more land. As a result of these factors, the great majority of farms have been much smaller than the allowable maximum; in 1980 only 5 percent of farms were over 15 hectares. [redacted]

Unfavorable Pricing Policies. State procurement prices for farm products have rarely been high enough to provide much stimulus to production. Regimes have raised procurement prices substantially only in response to pressure from workers to increase food supplies—and then many times have raised input prices, eroding farmers' real gains. After crisis periods in 1956, 1970, 1976, and 1980, the government increased procurement prices of most livestock and grains. In the first three instances, farmers responded by selling more livestock to the state. In the case of hogs, for example, a procurement price increase of 21 percent in 1957 led to a hike in hog sales to the state of 26 percent the following year; the 1971 price increase of 26 percent led to a 38 percent rise in procurements in 1972; and the 17 percent purchase price rise in 1977 increased sales to the state by 16 percent the following year. The same trend is evident in the procurement of milk and cattle, although there is a lag of two years before cattle sales increase because of the time required to raise animals for market.² [redacted]

The costs of many inputs such as fertilizers, pesticides, and farm machines were doubled in the late 1950s, and some were increased by 20 to 30 percent again in the late 1960s. In the early 1970s, Gierek temporarily increased real farm income by raising procurement prices much more than input costs. In 1974, however, input prices were increased by 10 percent while purchase prices rose only 7 percent. For

² Simple regression analysis shows a strong positive relationship between the numbers of hogs and cattle or the amount of milk sold to the state and the procurement prices of these items. But not all grains show the same positive correlation between amounts sold to the state and procurement prices. Although wheat and barley deliveries are responsive to purchase price changes, rye—which is the biggest part of the grain crop—is much less so. In any case, this approach does not take into account variations in the weather or offsetting changes in costs. Sales of agricultural products to the state actually fell in 1980 and 1981 despite substantial increases in procurement prices because mediocre crops and a jump in non-agricultural wages led to much bigger increases in black-market prices. [redacted]

example, the state passed on the higher costs of imported feed grains to farmers but failed to take into account these higher costs when setting procurement prices. To avoid worker discontent, the government refused to raise retail prices (which did not cover prevailing procurement costs) and, because it wanted to avoid a greater subsidy burden in the state budget, refused to raise procurement prices. In real terms, private farm income declined 6.6 percent in 1974 and 6.2 percent in 1975, discouraging farmers from increasing production and helping to bring on the crisis of 1976. [redacted]

Deterioration in Agricultural Labor. Low farm incomes have forced many farmers to take second jobs to make ends meet. A survey in the mid-1970s showed that nearly 60 percent of Poland's private farm families depended to some extent on nonagricultural income. Because second jobs divert these people from farm work, yields reportedly are 20 to 30 percent lower on their farms than on others of similar size or soil fertility. [redacted]

As in other countries, the attraction of higher incomes and improved lifestyles has drawn many young farmworkers to the cities in the last three decades. Indeed, the number of private farmworkers declined 30 percent from 1970 to 1980. The quality of labor on private farms also has fallen; presently over one-third of the private farmers are over 60 years of age. Some older farmers are being enticed off the land, however, by liberalized retirement benefits—granted in 1980—which allow farmers to retire at age 65 for men and 60 for women if they surrender their land to the State Land Fund or to younger relatives. [redacted]

Recent Agricultural Performance

Despite all the problems, Poland had an agricultural boom in the early 1970s that was unprecedented in its postwar development. Between 1970 and 1974, grain production increased an average of 9.0 percent a year, cattle numbers by 4.7 percent, and hog numbers by 12.5 percent. Other farm products such as milk, vegetables, and fodder crops increased significantly (table 2). [redacted]

Confidential

Confidential

Confidential

Table 2
Poland Agricultural Production

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Agricultural production ^a (Index, 1970=100)	100.0	108.1	113.6	118.7	120.8	105.3	107.0	107.5	116.7	109.9	95.7	98.5
Crops ^b												
Grain (million tons) (1970=100)	16.3 100.0	19.9 122.1	20.4 125.2	21.9 134.4	23.0 141.1	19.6 120.2	20.9 128.2	19.4 119.0	21.5 131.9	17.3 106.1	18.3 112.3	19.7 120.9
Potatoes (million tons) (1970=100)	50.3 100.0	39.8 79.1	48.7 96.8	51.9 103.2	48.5 96.4	46.4 92.2	50.0 99.4	41.1 81.7	46.6 92.6	49.6 98.6	26.4 52.5	42.6 84.7
Sugar beets (million tons) (1970=100)	12.7 100.0	12.6 99.2	14.3 112.6	13.7 107.9	13.0 102.4	15.7 123.6	15.1 118.9	15.6 122.8	15.7 123.6	14.2 111.8	10.1 79.5	15.9 125.2
Livestock (June census)												
Cattle (million) (1970=100)	10.8 100.0	11.1 102.8	11.5 106.5	12.2 113.0	13.0 120.4	13.3 123.1	12.9 119.4	13.0 120.4	13.1 121.2	13.0 120.4	12.6 116.7	11.8 109.3
Hogs (million) (1970=100)	13.4 100.0	15.2 113.4	17.3 129.1	19.8 147.8	21.5 160.4	21.3 159.0	18.8 140.3	20.0 149.3	21.7 161.9	21.2 158.2	21.3 159.0	18.5 138.1

^a Source: L. W. International Finance Research, Inc., *Economic Growth in Eastern Europe*, OP-48, OP-54, 1975; OP-65, 1981.

^b Polish Statistical Office, *Rocznik Statystyczny*, 1971-81.

25X1

Table 3
Poland: Per Capita Consumption of Selected Food Products ^a

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Meat (kilograms)	53.0	56.1	59.3	62.1	65.6	70.3	70.0	69.1	70.6	73.0	74.0
Milk (liter)	262	266	263	263	261	264	258	263	264	264	262
Eggs (units)	186	193	196	202	205	209	214	214	219	221	222
Sugar (kilograms)	39.2	39.6	40.9	42.4	43.9	43.2	43.9	41.5	42.7	43.9	41.4
Fish (kilograms)	6.3	6.4	6.8	7.2	7.3	7.2	7.7	7.6	7.3	7.6	8.0
Cereals (kilograms)	131.0	128.0	127.0	125.0	123.0	120.0	119.0	121.0	120.0	120.0	124.0
Potatoes (kilograms)	190.0	189.0	187.0	183.0	177.0	173.0	171.0	168.0	166.0	163.0	158.0

^a Polish Statistical Office, Rocznik Statystyczny, 1971-81.



25X1

5

Confidential

Confidential

Confidential

As a result of increased production, Polish diets improved considerably in this period. Per capita consumption of meat increased 5.5 percent annually, eggs 2.5 percent, fats 2 percent, and sugar 2.6 percent. At the same time, supplies of less-desirable foods such as potatoes and grains decreased 1.6 percent annually (table 3). [redacted]

The improvement in farm output was due to a coincidence of favorable weather and Gierek's efforts to give greater support to private farmers. During these years, the government increased purchase prices of grain and livestock, reduced land taxes, abolished compulsory deliveries, and granted national health insurance and retirement benefits. [redacted]

The farming boom faltered in the middle of the decade. Between 1975 and 1980, production of many farm products stagnated or fell. Grain production stayed at 1975 levels; only in 1976 and 1978 did it surpass 20 million tons. The potato and sugar beet harvests fell to record lows in 1980 after four years of stagnation at the 1975 level. Cattle and hog production were at 1973 levels in 1980. Livestock numbers stagnated or fell every year after 1978. [redacted]

Although imports were increased, shortfalls in output slowed the growth of consumption of quality foodstuffs. Consumption of meat rose only 5 percent in the last half of the decade and consumption of eggs rose 6 percent. Consumption of milk stagnated, while consumption of sugar fell by 4 percent. At the lower end of the quality scale, cereal consumption rose only 3 percent, and potato consumption fell 9 percent. [redacted]

These downward trends can be blamed partly on the weather, but they also reflect a shift by the Gierek regime to policies that weakened incentives for private farmers. For example, the regime raised farmers' input costs more than procurement prices in order to reduce farm subsidies while maintaining low retail prices. At the same time, it kept down investment in agriculture for budgetary reasons and to keep resources flowing into industry. [redacted]

By 1977, the decline in farm production and an eruption of worker unrest prompted Gierek to shift his agricultural policies once again in favor of private farmers. The regime expanded farmers' pension

rights, raised procurement prices, promised to allow larger private farm holdings, and pledged to keep farmers' price-cost ratios favorable. This time Gierek's plan did not work. Private farmers did not increase production, apparently because they were uncertain about the regime's real intentions. Their doubts seem to have been justified, since the state failed to make good on many of these promises. Poor weather in 1977-80 also tended to keep production below the high levels of 1974. [redacted]

Solidarity Era. In early 1981, farmers organized their own Rural Solidarity, after urban workers had shown the way with the original Solidarity. The farmers' union, which claimed membership of 2 million of Poland's 3.5 million private farmers, won a number of concessions. The Kania regime promised legislation guaranteeing the right to own and inherit land. It also promised to increase investment in agriculture, sell more land to private farmers, increase farm credits and subsidies, and maintain a favorable price-cost ratio. The government moved slowly, however, to implement these commitments. Bills on inheritance and land consolidation were introduced into the Sejm committees but were not formally approved. Local officials in many cases continued to hinder the transfer of land to private farmers. Regime promises to increase state investment in agriculture also were broken. While agricultural investment was 18.6 percent of total state investment in 1981, total investment was reduced by 25 percent in real terms; hence real investment in agriculture was less last year than in 1975. [redacted]

[redacted] the regime's inability or unwillingness to fulfill its promises of more favorable treatment of private agriculture increased the farmers' historical mistrust of the government at a time when the Kania regime badly needed their support. The regime had yielded to Solidarity's demands for huge wage hikes, which sharply increased consumer demand and inflationary pressure. Supplies of foodstuffs in 1981, however, declined absolutely because farm output and the amount of food processed and stockpiled fell in 1979 and 1980. With prices controlled in the state distribution system,

Confidential

Confidential

25X1 a huge gap developed between supply and demand, resulting in long food lines, hoarding, and increased black-market activity. The regime increased imports of food and agricultural goods and reduced exports of these products, but failed to close the gap. []

The government hoped to reduce excess demand (and decrease the state food subsidy) by raising retail prices, many of which had been frozen for more than a decade. Solidarity refused to accept the price increases, however, and the government was forced to impose rationing on an ever-widening scale. Most workers blamed the regime for the shortages, and rumors spread that the government was hiding large food reserves. Polish press reports of discussions at Solidarity and party meetings indicate that workers generally considered the farmer as much a victim of the system as anyone, an attitude that reflected the populace's deep-seated enmity toward the regime and belief that it was trying to drive a wedge between farmers and workers. Few attributed the problem to the inflationary wage increases that had been won by Solidarity. []

25X1 Consumers responded to empty store shelves by increasing their purchases through private channels. Polish statistics and press commentaries indicate that farmers increasingly ignored delivery contracts with the state and sold their products in black markets, where they could get prices several times higher than the state's procurement prices—with payment often in scarce goods rather than money. The leaders of Rural Solidarity often told the regime that farmers were reluctant to sell to the state because of the government's failure to provide promised inputs to private farmers. The result was that the state was unable to procure sufficient amounts of food or meet its ration commitments even though the country in 1981 had a grain harvest of 19.7 million tons—equal to the average for the 1970s and 10 percent above the previous year—and a potato crop only moderately below normal. At one point the government estimated that 30 percent of meat sales were outside the state system, and by the end of the year state grain procurements fell to only one-third of the scheduled monthly amounts. By the time martial law was imposed, the state retail system was hamstrung by severe shortages, and the economy was operating largely on a barter basis. []

In an effort to increase the amount of food moving through the state distribution system, the regime gradually raised agricultural procurement prices by an average of 80 percent, but state prices still lagged far behind black-market prices. The government also increased purchases of food in the West, alleviating some shortages but worsening the foreign trade balance and preempting imports of goods critically needed by industry. In the second half of 1981, Jaruzelski increasingly used the military to conduct campaigns against the black market and to eliminate distribution bottlenecks, but even the presence of the military did not convince the farmers to sell their scheduled amounts to the state. []

Martial Law. Immediately after the imposition of martial law, the new regime made several threats in an effort to induce farmers to sell more produce to the state. A drop in some procurements and reports of farmers killing livestock and hiding food to protest martial law prompted the regime to raise the prospect of a return to compulsory deliveries in press commentaries and at Party meetings with farmers. Military teams were redeployed to the countryside to press farmers to fulfill their grain contracts. The government for the first time in recent years talked about legal action against farmers who failed to fulfill their contracts. More immediately, the state refused to sell key inputs—which were available only in limited amounts—to farmers who did not make sufficient sales to the state. []

The government raised procurement prices 33 percent for cattle, 15 percent for hogs, and 44 percent for grain. By February, these increases—along with regime threats and stringent prohibitions on black-market sales—had increased the amount of food reaching state stores. Retail price increases averaging 300 to 400 percent helped reduce excess demand. Although food appeared to be more available, the Polish press reported that retail sales of food, adjusted for inflation, were down 17 percent in the first five months of 1982 compared to the same period last year. Meat and egg supplies declined around 20 percent in the first quarter of 1982 compared to the same period in 1981. []

Confidential

Confidential

Because of these food supply problems, the regime reiterated its threats concerning compulsory deliveries of grain. To keep pressure on the farmers, it again spelled out in a press report during June some plans that were under consideration. Under one proposal, farmers would be compelled to deliver 60 percent of their total production to the state. Other proposals would restrict a farmer's purchases of inputs to half the value of his total sales to the state or increase the penalties for failure to meet commitments in procurement contracts. The regime thus far has not implemented any of these proposals. []

conditions, their need for grain to feed to livestock, and their frustration over the lack of availability of inputs. []

25X1

While stepping up pressure on the farmers, the regime on balance has offered them little positive inducement to produce and sell more to the state. Despite pledges to reduce input costs, the government in January raised wholesale farm input prices by 36 percent and the cost of services provided to private farmers by 330 percent. It increased procurement prices by only 21 percent on average and now estimates that farmers' real income will decrease this year by at least 20 percent. Warsaw did make the increases in livestock and grain procurement prices retroactive to November 1981. For several months it paid a premium of up to 20 percent for on-time fulfillment of grain contracts, but the delivery premium was canceled in July. The regime has extended credit for purchases of agricultural inputs and has continued subsidies on some machinery and fertilizer which remain in short supply. It has offered to pay farmers who deliver grain above contracted amounts with interest-bearing "grain bonds" redeemable at higher prices in 1983-85. The regime attempted to underscore its support of private farmers by securing parliamentary approval of several measures that had been introduced before martial law, including the bills liberalizing farm inheritance and pensions and increasing the maximum farm size from 50 to 100 hectares. []

In the early days of martial law, the government had to rely on Soviet meat deliveries to fill a quarter of its rationing commitment. Over the first quarter of 1982, however, it was able to procure enough to cover completely a rationing commitment that had been reduced 10 percent from the previous quarter. We believe that the government's ability to increase livestock and poultry purchases improved because of distress slaughtering of chickens due to feed shortages and the sale of animals held back from slaughter in late 1981 as farmers waited for higher procurement prices. Government threats and inducements probably played only a minor role. []

25X1

The government met the country's grain needs by exporting 60,000 tons of high-quality meat to the West in the second quarter to pay for the import of 400,000 tons of grain. Although grain imports should meet present consumer demand, the state may face shortages again later this year—perhaps very soon—because farmers are not selling sufficient amounts of grain to the state. By the end of August, with 90 percent of grain harvested, the press reported that procurements were only 40 percent of the total amount which the state planned to buy from farmers. []

25X1

The numbers of cattle and hogs on private farms rose 7.3 percent and 10.3 percent, respectively, between January 1981 and January 1982, probably because farmers bred more livestock to sell at last year's high black-market prices. Now, with that opportunity closed off to most farmers, they seem to be cutting their holdings. Farmers face a 30-percent decline in the availability of feed concentrates supplied by the state and higher costs. While human needs for grain apparently have been satisfied with the aid of imports, the regime was short 360,000 tons of fodder at the end of June. We believe the shortage of feed led to increased cattle and hog slaughter and higher meat procurement in June which, in turn, will mean meat shortages later this year. What could be most catastrophic for the future are a 71-percent increase in

Mixed Results. During the first seven months of martial law, Warsaw's approach yielded mixed results: farmers did not fulfill their grain procurement requirements but did increase livestock sales. During the first four months of the new "grain bond" program only 4,000 tons of grain (out of the more than 400,000 tons procured during that time) were sold to the state in return for bonds. Farmers probably held back grain because of their concern over unsettled

Confidential

Confidential

sales of breeding sows for slaughter and an 18-percent drop in hog breeding in May 1982 compared to the same month last year. [redacted]

The increase in private holdings of livestock in the year to January was offset by declines on state farms of 14.0 percent in cattle numbers and 18.2 percent in hog numbers. Livestock holdings on state farms dropped because these farms continued to find it unprofitable to raise livestock and because the regime drew heavily on the state farms last year to fulfill rationing commitments. The decline in state farm herds will put additional pressure on the regime to persuade private farmers to sell more to the state. [redacted]

Outlook

In the next year, the regime will have to depend heavily on domestic production, and especially the private farmer, to satisfy the food needs of the population; hard currency shortages will preclude large imports of meat or grain. Current assessments point to an average grain harvest of 20 million tons in 1982, which still would be 3 million tons below estimated need if 2 million tons were imported. Crop growth is hindered by severe shortages of fertilizers, pesticides, and other farm inputs, but (as of mid-August) harvest prospects were normal only because weather has been favorable. [redacted]

We estimate that meat production could fall to a level that would provide as little as 50 kilograms per capita, compared with 74 kilograms in 1980. To fill its promise to keep meat consumption at 60 kilograms, the regime would need to harvest about 25 million tons of grain, well above expected domestic production. [redacted]

Outside sources of grain are few. Other East European countries and the USSR will not be able to provide any significant amount of grain or other foodstuffs because those countries themselves have insufficient supplies. Poland has not received any new grain credits so far in the 1982-83 marketing year. The French and Canadian Governments, which supplied financing for 2.5 million tons of grain in 1981-82, have not renewed grain credits for the current marketing years. [redacted]

We believe the regime will do everything possible to avoid reverting to compulsory deliveries. The history of Polish private farming in the Communist era shows that the Polish farmer has responded to inducements rather than threats; government harassment of private farmers usually has been accompanied by stagnant or decreased production. The regime, seeking to channel more food through the state distribution system, has stated it needs to procure 5.5 million tons of grain from private farmers in the 1982-83 marketing year—over 3 million tons more than the 2.3 million tons procured in 1981-82. Sufficient inducements, however, still do not exist to encourage private farmers to sell to the state. Cost-price ratios have become less favorable, and officials have said that procurement prices for livestock and grain will not be increased in the second half of 1982. [redacted]

Moreover, the farmers have found that Warsaw cannot provide them with adequate supplies of concentrated feed and other inputs. In this situation, the worker-farmer may turn more attention to his industrial or service job. The US agricultural attache in Warsaw believes that many farmers will become subsistence farmers in the next year, producing mainly for themselves and their relatives. Other farmers may change to more profitable crops such as vegetables or even flowers. [redacted]

Any number of factors—such as a disappointing harvest, the ouster of moderate regime leaders, a decision to cut back food imports even further, or a heightened worker reaction to the poor food situation—would increase the chances of a tougher regime policy. The workers' tempers are already frayed by political repression and depressed living standards; at any time they might vent their frustrations in demonstrations over meat shortages or other specific grievances. [redacted]

If Polish officials decide they have no choice but to institute compulsory deliveries of grain and perhaps other farm products, they could begin quickly because military teams in the countryside have already inventoried stocks. Such a move would dramatically escalate the crisis. It would take a large-scale effort by

Confidential

Confidential

security forces to enforce compulsory deliveries; peasants would find ways to hide their produce and some would resist. In the longer run, farmers would cut back production and the decreased availability of food would further anger workers already disgruntled with high prices. In addition, the Polish Church, whose mainstay is the peasantry, might well feel compelled to come to the aid of its members and thus become more of a participant in the crisis rather than a calming moderator.

25X1

Confidential

Page Denied

Memorandum for:

25X1

VIA

: Bob Gates

Attached is the pipeline update you requested to prepare the DDCI prior to tomorrow's NSC meeting. The update was prepared by

25X1

25X1

Acting Director

Attachment:
as stated

28 September '82



Director,

E U R A

Office of European Analysis

CONFIDENTIAL

D 25X1

The Soviet Pipeline: A West European Update

25X1

Relatively little has happened during the last few weeks, following the flurry of activity associated with the first shipments of equipment to the USSR in violation of the US embargo.

Equipment Delivery Status

- o Dresser (France) has shipped three compressors out of a contract for 21.
- o John Brown Engineering has shipped six 25-MW turbines out of a contract for 21; these six turbines exhausted the company's stock of GE-built rotors.
- o Nuovo Pignone apparently has shipped three compressors and two 25-MW turbines, out of contracts for 57 in each category; the company had enough GE-built rotors to equip 14 turbines.
- o AEG-Kanis reportedly will ship two turbines this week, out of a contract for 47 (42 25-MW and five 10-MW); it has GE-built rotors for two of the larger turbines and three of the smaller ones.

25X1

Gas Contract Status

Unless Moscow grants an extension, West Germany must notify the USSR in October whether it will keep the contract volume at

CONFIDENTIAL

25X1

CONFIDENTIAL

25X1

10.5 billion M³ annually or reduce this amount by up to 20 percent. The West Germans would like to delay the decision as long as possible. If forced to decide now, they probably will take a reduction -- but less than the 20-percent maximum.

25X1

Italian officials have stated that they will not end Italy's "pause for reflection" before the latest Soviet deadline of 30 September. In fact, no action is likely on Soviet gas until the gas deal with Algeria is signed -- perhaps in October. We still believe the Soviet deal will be concluded, but because of pressure from the Socialists the amount is likely to be six billion M³ annually rather than eight.

25X1

Political Developments

All four European governments recognize that the pipeline dispute is damaging to the Alliance. The British, led by Foreign Secretary Pym, are pressing hardest for discussions with the United States to resolve the problem. The West Germans and the Italians are also willing to participate. The French have been the most negative, taking the position that the Europeans are the aggrieved parties and that the United States therefore must take the first step toward compromise. Paris rejected proposals for a mid-September meeting in the absence of concrete proposals from Washington. Later in the month Foreign Minister Cheysson told Pym that he might agree to a joint meeting of the Foreign Ministers with Secretary Schultz in New York, depending on the results of his bilateral talks with the Secretary. We believe the French will discuss proposals on COCOM, other technological trade, and energy alternatives. They are unlikely to move very

25X1

CONFIDENTIAL

25X1

far on the question of subsidized credit.

25X1

The impending change of government in Bonn will not significantly affect the pipeline situation. Franz Josef Strauss, the head of the Conservative CSU, opposed the pipeline deal from the beginning but even he says it is now too far along to be stopped. A CDU/CSU-led government probably will take a somewhat harder line toward the Soviets in general, but in terms of specific key issues the change will not be great. In the particular case of credits, the Schmidt government was already on record in favor of an end to subsidized credits for the USSR and was sympathetic toward tighter COCOM restrictions.

25X1

CONFIDENTIAL

25X1

CONFIDENTIAL

25X1

FOR REFERENCE:

Major Western Suppliers for Compressor-Station Equipment

General contractors for compressor stations	Mannesmann-Creusot-Loire (22 stations—\$940 million)	Nuovo Pignone (19 stations—\$560 million)
Subcontractors for:		
Head station (1)		
Gas turbines—Frame III 10-MW	AEG-Kanis ^a (5 turbines)	
Gasline compressors	Demag (5 compressors)	
Line stations (40)		
Gas turbines—Frame V 25-MW	AEG-Kanis ^a (42 turbines)	Nuovo Pignone ^a (57 turbines)
	John Brown ^a (21 turbines)	
Gasline compressors	Creusot-Loire (42 compressors)	Nuovo Pignone ^a (57 compressors)
	Dresser-France (21 compressors)	
Frame V turbine rotor sets	General Electric (63 rotor sets)	General Electric (57 rotor sets)
Computer system for central control of export pipeline	Thomson/CSF	Thomson/CSF
Soviet order (Nov. 1981) for 40 Frame V rotor sets (end use uncertain)	Alsthom-Atlantique ^a	Alsthom-Atlantique ^a

^a Indicates GE manufacturing associate.

25X1

Projected Soviet Gas Deliveries to Western Europe ^a
(billion cubic meters)

	1980	1984	1985	1987	1988
Austria:	2.4	3.0	3.5	4.0	4.0
Existing contracts	2.4	2.5	2.5	2.5	2.5
New contracts	—	0.5	1.0	1.5	1.5
France:	5.2	4.0	4.0	9.0	12.0
Existing contracts	5.2	4.0	4.0	4.0	4.0
New contracts	—	—	—	5.0	8.0
Italy: ^b	7.0	7.0	7.0	12.0	15.0
Existing contracts	7.0	7.0	7.0	7.0	7.0
New contracts	—	—	—	5.0	8.0
West Germany: ^c	10.9	15.0	18.0	22.5	22.5
Existing contracts	10.9	12.0	12.0	12.0	12.0
New contracts	—	3.0	6.0	10.5	10.5
Switzerland:	—	—	—	—	0.1
Existing contracts	—	—	—	—	—
New contracts	—	—	—	—	0.1
Total:	25.5	29.0	32.5	47.5	53.6
Existing contracts	25.5	25.5	25.5	25.5	25.5
New contracts	—	3.5	7.0	22.0	28.1

^a Excluding Finland; amounts of annual offtake under the new contracts are subject to reduction by up to 20 percent under scheduled semiannual negotiations with the Soviets.^b Italy has not yet signed the new purchase contract.^c Excluding potential deliveries of 0.8 billion cubic meters to West Berlin.

25X1

CONFIDENTIAL

25X1

CONFIDENTIAL

D25X1

US Coal and the Siberian PipelineKey Judgments

US coal is one of the alternatives being investigated as a means of reducing or supplanting West European purchases of Soviet natural gas. We believe that there is little prospect for expanding West European coal use during the 1980s beyond that already planned. Indeed, our analysis indicates that West European coal consumption in 1990 may fall short of planned levels by as much as 950,000 b/doe.

25X1

Beyond 1990, however, considerable potential exists for expanding coal use in Western Europe. As growth in nuclear power slows and electricity demand picks up, much of the burden for generating electricity will fall on coal. In the industrial sector, the bulk of existing oil and gas-fired boilers will need replacing. If West European governments help industrialists overcome the considerable capital costs of switching, we believe coal could capture much of this market--saving an estimated 1.8 million b/doe of oil and gas by the year 2000. Combined with North Sea and Dutch gas supplies, expanded coal use could well obviate the need for additional purchases of Soviet gas in the 1990s. Soviet gas imports, therefore, could be limited to the 900,000 b/doe already contracted for during this period.

25X1

Increased coal use will not only enhance the energy security of Western Europe but also improve prospects for US coal exports. West European plans to diversify sources of coal

CONFIDENTIAL

25X1

supplies will probably give the United States roughly a one-third share of the coal export market over the next two decades. At current prices, sales of US coal to Western Europe could amount to roughly \$3 billion in 1990 and \$4.5 to \$7 billion by 2000 compared with sales of \$1.9 billion in 1980.¹ [redacted]

25X1

To achieve maximum export levels, however, the US will have to expand sharply port capacity and dredge channels. Such measures would enhance the security of coal as an energy alternative and help restrain increases in coal prices. As the "swing" supplier in the coal market, the US share of the export market could be considerably higher depending on foreign coal supply disruptions. Largely as a result of filling Polish shortfalls, for example, US coal shipments to the European Economic Community increased by some 275,000 b/doe over the last two years. [redacted]

25X1

¹ Estimates based on current FOB coal prices at US ports. Delivery of coal by US flagships would further raise US revenues.

CONFIDENTIAL [redacted]

25X1

US Coal and the Siberian Pipeline

Energy Security

According to industry estimates, dependence on imported natural gas will increase sharply in Western Europe over the next two decades. Even with slow growth in West European gas demand, depletion of domestic gas supplies² will result in import dependence growing from less than 15 percent currently to about 50 percent by the turn of the century. If the Siberian pipeline proceeds as now planned, continental Europe will be dependent on the USSR for 25-30 percent of its total 1990 gas requirements. Beyond 1990, West European gas needs will probably continue to rise, possibly necessitating additional supplies of as much as 1.2 to 1.3 million b/doe from the Soviet Union or elsewhere. This growing level of gas imports will significantly increase Western Europe's vulnerability to disruptions in natural gas supplies.

While West European governments plan to increase imports of coal substantially over the next two decades, coal imports pose little security risk. The international coal market is currently demand constrained and export capability is likely to exceed demand for the foreseeable future. Abundant supplies will be available from the United States, Canada, Australia, South Africa

² Norwegian and Dutch gas used in Europe is included in domestic supplies.

CONFIDENTIAL [REDACTED]

25X1

and later Colombia. Moreover, Polish coal shipments are reemerging and the government is likely to foster a steady flow of exports to maintain a foothold in its traditional West European markets to earn hard currency. [REDACTED]

25X1

Coal Plans and Outlook

Plans for increased coal use closely followed the oil price hikes of 1979-80. Although there was heightened interest in coal after the first oil price shock in 1973-74, the price of oil relative to coal did not rise enough to cause major fuel substitution during the 1970s. Only in 1980 did coal become substantially cheaper than oil for industrial users. We believe the 1980s should see a major departure from the previous decade with a sharp increase in coal use spurred by the large differential between coal and oil and gas prices. In 1981 steam coal could be delivered to Western Europe at about 45 percent of the price of Middle East oil and at half the price of Soviet natural gas. Although declining oil prices this year have lessened coal's price advantage, a substantial differential is expected to be maintained during the 1980s. [REDACTED]

25X1

According to the latest government forecasts, West European coal requirements in 1990 are projected to reach 7.4³ million b/doe--up 2.4 million b/doe over consumption last year. We believe coal demand in Western Europe will grow substantially,

³ One million b/d oil equivalent is equal to 74 million tons of coal equivalent (MTCE).

CONFIDENTIAL [REDACTED]

4

25X1

but growth will be less rapid than indicated in these official projections. [REDACTED]

25X1

[REDACTED] for example, demand will total 6.6 million b/doe by 1990--800,000 b/doe below government projections.

Several factors account for this lower demand forecast:

- o low prospects for economic growth and high interest rates which both affect investment in new coal-fired plant and equipment,
- o lowered projections of electricity demand,
- o soft oil prices and rising coal prices which have lessened coal's economic advantage and created uncertainty over the future evolution of coal prices, and
- o continuing concern about the environmental impact of using coal and the costs of complying with environmental standards.

Our assessment is that West European coal use by 1990 will approximate 6.5 million b/doe compared with about 5 million b/doe in 1981. This evaluation is based on our review of the most recent private-sector forecasts as well as on our own analysis of key coal use sectors. [REDACTED]

Sectoral Demand

Electric utilities will add the largest increment to coal demand during the 1980s, accounting for about three-fourths of the increase. Low levels of electricity demand, however, have slowed the construction of new coal-fired plants and soft oil

CONFIDENTIAL [REDACTED]

prices are likely to halt the conversion of some existing facilities to coal. Over 50 percent of the expected additions to coal-fired capacity anticipated by 1990, for example, is not yet under construction; because lead times average 6-8 years, current government projections will probably not be realized. [REDACTED]

25X1

According to industry sources, industrial coal use will increase by some 200,000 b/doe during the 1980s. Much of this increase will come from conversion to coal in the cement industry. Coal use in industrial boilers--the largest industrial consumer of energy--will grow slowly. Industry is locked into an existing capital stock of oil and gas-fired boilers, most of which do not need replacing for several years. Moreover, the high capital costs of coal boilers will likely preclude the early retirement of existing boilers. Coal is likely to make inroads only where boilers are needed at new sites and when boilers reach the end of their useful life, primarily in the late 1980s and early 1990s. Other constraints slowing the move to coal in industry are:

- o lack of coal storage facilities,
- o inadequate coal distribution infrastructure,
- o lack of ash disposal sites, and
- o environmental restrictions. [REDACTED]

25X1

Other Sectors. Coal use in the residential sector will continue to decline. Gas is still the cheapest means of home heating and the capital intensive nature of coal-fired district heating systems largely limits their use to Scandinavian countries. Coal demand for synthetic fuels production is

expected to be small through the 1980s according to both government and private-sector forecasts. Rising project costs, the high cost of coal feedstocks in Europe, and uncertain profitability in view of the soft oil market have all combined to cause delays in coal gasification and liquefaction projects. [redacted]

25X1

During the 1980s, coal based synfuels are likely to be limited to applications where the cost effectiveness of a technology is enhanced by its use with a closely related industrial process such as production of reducing gas in the steel industry. In West Germany, the leading European developer of synfuels, the government continues to give liquefaction and gasification a high priority in research funding mainly in the hope of developing export sales. According to recent State Department reporting, only two gasification demonstration projects are likely to receive continuing government support and a third is proceeding as a commercial venture. However, a study

25X1

[redacted] concludes that the total contribution to 1990 German energy supplies will not likely exceed 60,000 b/doe from all synfuels projects including those producing low and medium Btu gas. In France, despite open source reporting that CDF (the French Coal Company) will produce synthetic natural gas with an energy equivalent of 66,000 b/doe by 1990, our estimate based on the [redacted] study is that only one-sixth that level is likely to be produced. [redacted]

25X1

25X1

(In Text Table)

Coal Demand Close Up

West Germany. Opposition to nuclear power and the relaxation of coal import quotas have paved the way for increased coal use. Since imported steam coal currently costs about \$67 per ton c.i.f. at West German ports while domestic coal runs above \$110 per ton, lowered barriers on imported coal provide ample financial incentive to plan coal-fired power plants. Based on State Department reporting, West Germany is expected to make the largest additions to coal-fired electric generating capacity in the European Economic Community during the 1980s, increasing coal-fired capacity by some 10,000 MW. Considerable problems of coal access and storage will severely limit industrial coal use. Natural gas is expected to experience the most dynamic demand growth in the industrial sector increasing by some 100,000 b/doe during the decade according to industry projections. [REDACTED]

25X1

United Kingdom. We believe coal use in electricity generation will decline during the 1980s. Additions of nuclear power and oil-fired plants are planned, and several aging coal-fired units--totalling 7,400 MW--are slated for retirement. Increased industrial coal use, however, should raise overall coal consumption albeit slightly. The National Coal Board is currently handling almost one thousand inquiries from industrialists considering a switch from oil to coal. The scope for oil to coal conversion is considerable given that 40 percent

CONFIDENTIAL [REDACTED]

25X1

of the 15,000 steam raising units are more than twenty years oil. Problems of coal access and storage, however, are likely to impede the substitution process relative to its potential.

Moreover, pressure by domestic coal producers on the Government for implementation of quotas on cheap imported coal, we believe, will lessen coal's competitive edge over oil products. [REDACTED]

25X1

France. We believe coal consumption will increase slightly above current levels by 1990. An aggressive nuclear program will continue to cut into coal consumption for electricity generation, but Paris expects increased industrial coal use to pick up the slack. Although there is yet no significant shift to coal in industry with the exception of cement, Paris has provided numerous incentives which should assure that industrial coal usage increases roughly in line with plans. [REDACTED]

25X1

Italy. [REDACTED]

25X1

25X1

[REDACTED] steam coal consumption in 1990 will reach about 300,000 b/doe--240,000 b/doe below the estimate of the National Energy Plan. Plans to convert existing oil-fired power plants to coal will probably proceed but only two new plants are likely to be in operation by 1990, rather than the 3-5 under discussion. Reasons for the slowdown in the construction of new coal-fired plants, officials contend, are: lower than expected growth in electricity demand, greater use of existing capacity, availability of electricity imports from France, and problems in siting new plants. Soft oil prices, moreover, are a disincentive for industries to convert to coal.

25X1

[REDACTED]

CONFIDENTIAL [REDACTED]

25X1

Netherlands. Because of strong opposition to nuclear power, much of the burden of diversifying Dutch energy sources away from oil and gas has fallen to coal. A program is currently being outlined to convert 2000 MW of existing oil- and gas-fired electric generating capacity to coal. Construction of new coal-fired plants, however, has been delayed until the late 1980s because of present over-capacity in thermal power generation. Industrial use of coal will increase: the rate of penetration will be limited by the fact that a large share of industrial fuel consumption is used for producing feedstocks. []

25X1

Belgium. Stagnant electricity demand over the last two years has resulted in a downward revision of growth forecasts by the government. Only one new coal-fired power plant is planned for the 1980s. Declining oil prices, moreover, are likely to delay the conversion of some existing oil-fired plants to coal. In industry, the high capital cost of conversions to coal and the physical problems of access and storage of coal will impede coal's penetration in this market. []

25X1

Denmark leads the way in converting oil-fired power plants to coal: coal use for electricity generation exceeded 80 percent last year, up from only 20 percent in 1973. With further conversions planned and all future base-load electricity plants to be coal-fired, coal consumption will continue to rise, albeit at a more moderate pace. []

25X1

Spain is relying primarily on coal in the near term to reduce its heavy dependence on oil until the nuclear program gets underway. Demand for coal is expected to surge through 1985 due

CONFIDENTIAL 10 []

25X1

to increased coal use by electric utilities and the cement industry according to market studies. Thereafter, growth is likely to slow unless the nuclear program falls substantially behind schedule. [redacted]

25X1

Greece. Plans for the construction of two 350 MW power stations using imported steam coal were dropped from the revised national energy plan last year. Domestic lignite is to be the primary fuel for electricity generation. Only private industry-- primarily cement--is switching to steam coal, all of which must be imported. [redacted]

25X1

Sweden. Environmental concerns will result in a cautious approach to coal. Coal consumption in 1990 is expected to be about half of estimated potential according to government estimates. Steam coal will be used mainly in industry and in hot-water plants for district heating. [redacted]

25X1

Ireland. The bulk of new base-load electricity generation will be coal-fired. A 900 MW coal-fired plant is currently being built at Moneypoint of which 600 MW are expected to be in service by 1986. In addition, the cement, sugar, and dairy industries are converting to coal. [redacted]

25X1

Austria. Environmental objections will slow down the construction of coal-fired power plants. High transport costs for coal because of Austria's landlocked position will likely hamper industrial coal use. [redacted]

25X1

Western Europe: Coal Requirements

(thousand b/dae)

	<u>1973</u>	<u>1979</u>	<u>1981</u>	<u>1990</u> ¹
Total	4,827	4,889	4,979	6,450
West Germany	1,600	1,546	1,650	1,950
United Kingdom	1,525	1,448	1,320	1,400
France	556	613	559	590
Spain	171	219	329	460
Belgium	222	219	216	230
Italy	207	229	268	460
Denmark	39	84	108	190
Netherlands	85	64	79	195
Greece	94	80	78	145
Austria	72	62	62	95
Turkey	92	131	157	385
Other	164	194	153	350

25X1

¹ projection based on review of most recent private-sector forecasts as well as our own reporting and analysis.

CONFIDENTIAL

25X1

Western Europe: Forecasts of Coal Demand¹

(million b/dae)

	<u>Forecast Date</u>	<u>Coal Demand</u>	
		<u>1990</u>	<u>2000</u>
Data Resources	May 1982	6.5	9.3
OECD/World Energy Outlook	Apr 1982	7.3-7.7	11.4
IEA/Country Review ²	Feb 1982	7.4	--
Exxon	Feb 1982	7.0	8.5
Chevron	June 1982	6.2	7.9
Shell	Jan 1982	6.8	8.9

 25X1

¹ Countries included in these projections vary slightly among forecasters.

² Data are for 16 West European members of the IEA plus France and Finland.

CONFIDENTIAL

25X1

Prospects Beyond 1990

Beyond 1990, considerable potential exists for further expansion in coal use in Western Europe. Projected fuel price trends favor coal. Recent private-sector forecasts point to upward pressure on oil prices after the mid-1980s, and gas prices are likely to increase, given their present linkage to oil prices. Although coal prices will also trend upward, they are unlikely to keep pace with alternative fuels. We expect coal to maintain or improve on its already substantial price advantage over competing fuels. [REDACTED]

Aside from price competitiveness, an expected slowdown in the growth of nuclear power will place added requirements on coal for electricity generation. Based on the most recent country projections for the 1990s, nuclear power capacity is expected to grow at less than half the rate of the 1980s. Concern over nuclear wastes and perceived accident risks have lessened public and political confidence in nuclear power. Moreover, long lead-times for licensing and construction of plants and great financial burdens due to the high capital costs accompanied by high interest rates are likely to continue. [REDACTED]

Shortfalls in nuclear power will likely be met by coal. Most countries have policies that generally prohibit new oil-fired capacity and some countries also prohibit new gas-fired capacity. Current coal-fired plant construction programs--delayed during the 1980s because of sluggish electricity demand--will likely be completed in the 1990s along with major expansions. As a result, West European governments are likely to

CONFIDENTIAL 14 [REDACTED]

trim oil and gas use in electric utilities to less than 4 percent of projected electricity generation by the end of the century.

25X1

[REDACTED]

The greatest potential for increased coal use exists in industry; the industrial sector consumes nearly twice as much oil and gas as do electric utilities. By the early 1990s, many of the oil and gas-fired boilers installed in the late 1960s and early 1970s will reach the end of their useful lives. If governments help offset the large capital costs of switching to coal through subsidies, tax incentives, and low interest loans, industrial coal use could reach 3.6 million b/doe by the year 2000, about 1.8 million b/doe above most current projections.

25X1

(In Text Table)

Western Europe: Energy Prices

Forecasting long-term energy price trends is difficult. Nevertheless, an analysis of key fuel markets leads us to believe relative energy prices in Western Europe will remain fairly stable over the next two decades. [redacted]

25X1

Most long term energy projections by industry assume flat or declining real oil prices through the mid 1980s. Oil prices are projected to rise by 2-3 percent per year in real terms from 1985-2000. As market conditions tighten, other energy prices are also assumed to increase. [redacted]

25X1

We expect coal prices to rise but remain competitive with oil. [redacted] coal will have about a 20 percent price advantage over oil in 1990 even after including the extra cost of building coal-fired power plants. The large resource base for coal, considerable scope for expanded production, and a diverse set of competing suppliers will all tend to restrain real increases in coal prices. [redacted]

25X1

25X1

25X1

We expect gas prices will continue to increase sharply over the next two decades. Cheap indigenous supplies are dwindling and new gas reserves--those in the North Sea, for example--will be costly to develop. Moreover, there is increasing linkage between oil and gas prices in new contracts. [redacted]

25X1

Sensitivity of Coal Demand

As a substitute for oil, coal demand is responsive to changes in oil prices. We believe, however, that further moderate declines in oil prices will probably have little effect on coal demand. The bulk of increased coal use during the 1980s will come from electric utilities where coal requirements are a function not only of relative fuel prices but also of government policy to reduce oil use. Moreover, coal currently enjoys a substantial price advantage over oil in the utility sector, and oil prices would have to fall significantly before having a major effect. [REDACTED]

In existing facilities, for example, coal requires only about a \$.20 per million BTU price advantage over oil to offset the added handling costs associated with burning coal. As a result, oil prices would have to fall by roughly 35 percent before existing coal-fired facilities would consider a switch to oil. When considering the installation of new coal-fired capacity, coal requires about a \$.75 per million BTU price advantage over oil to offset both higher capital and handling costs of coal-fired equipment. The price of oil would thus have to fall about 10-15 percent below current levels to make industry reconsider the installation of new coal-fired boilers. For European power stations, which rely heavily on cheaper imported coal, the price of fuel oil would have to fall about 30 percent before utilities reconsidered coal plans. [REDACTED]

Lowered projections of electricity demand have probably had a larger effect on future coal requirements than declining oil

25X1

prices. [redacted] *a one*
percent change in total electricity generation affects West
European coal requirements by about 100,000 b/doe. [redacted]

25X1

The Coal-Gas Trade-Off

According to industry estimates, nearly 40 percent of the increase in Western Europe's gas use over the next two decades is expected in the industrial sector. We believe increased use of coal could probably supplant about one-fourth of projected industrial gas demand by the year 2000. Higher industrial coal use, coupled with additional gas supplies from Norway and the Netherlands--for use in the residential sector, where coal use is severely restricted--could well obviate the need for additional purchases of Soviet gas in the 1990s. [REDACTED]

25X1

If industrial coal demand is to reach its potential in the next decade, however, some actions must be taken. These would include:

- o Development of the infrastructure system, including ports, railways, depots and ash disposal systems, essential to industrial coal use.
- o Development of coal ports in the major exporting countries.
- o Dissemination of information and demonstration projects on the conversion from oil and gas to coal.
- o Adoption of financial incentives or other measures to stimulate conversion to coal.
- o The removal of overly stringent environmental or other constraints on coal use.
- o Continued development of more efficient and environmentally clean technologies in the areas of combustion, coal handling and coal conversion. [REDACTED]

25X1

(In Text Table)

Sectoral Fuel Use and Substitution Potential

Coal can be directly substituted for gas in only limited circumstances--primarily in large industrial and utility boilers. In electric utilities, coal is expected to back out about 280,000 b/doe of gas during the 1980s according to industry projections. Gas consumption, however, will increase in both the residential and industrial sectors where coal use is currently constrained by physical and economic factors. []

25X1

Electricity Generation

Electric utilities are the major market for coal. Coal has a substantial economic advantage over oil and gas for electricity generation and is the primary fuel for new thermal power plants. Gas consumption by electric utilities will continue to decline; West European governments are pursuing policies to trim gas use to less than 5 percent of fuel for electricity generation by 1990. West German utility gas consumption, for example, the largest in Europe, is projected to fall by about 100,000 b/doe by 1990 according to industry sources. Beyond 1990, we believe the decline in gas consumption will slow, and gas use will probably stabilize at around 190,000 b/doe by 2000--representing some 3 percent of fuel for electricity generation. []

25X1

Residential

Residential heating demand will be the fastest growing market for gas. According to industry estimates, about 60

percent of the increase in Western Europe's gas use over the next decade is expected to be in the residential sector. Coal is unlikely to be directly substituted for gas in any significant quantity. In the longer-term, increased use of electricity produced from coal is an option for replacing gas with coal in the residential sector.⁴

Industry

Consumption of both coal and natural gas will increase in the industrial sector during the 1980s according to all government and private sector forecasts. Most industry analysts believe growth in coal use will be slow, however, its rate of penetration impeded by the physical restrictions of coal access, storage, and handling and by the high capital costs of converting or installing new coal-burning equipment. New coal boilers, for example, are between one and half and three times as expensive as oil or gas boilers. The ancillary equipment required--storage, handling and preparation equipment--is also considerably more expensive with coal. Taken together, capital costs are generally two to four times as much for coal. Non-fuel operating costs are also higher; coal requires additional handling equipment and boilers need more servicing. Electricity consumption for conveyors, handling and stoking equipment also pushes up operating costs.

⁴ No specific estimate of expanded coal use in electricity generation was made for the 1990s. For example, however, 1 million b/doe of additional coal, which would require about 55 new 700 MW units, could replace approximately 500,000 b/doe in residential gas consumption.

CONFIDENTIAL [REDACTED]

25X1

In balancing the higher capital and non-fuel operating costs of coal-fired equipment against reduced fuel costs, industrialists are likely to opt for a coal boiler over an oil or gas-fired boiler at a new site or when replacing worn out boilers. The economics of replacing existing oil and gas-fired boilers with coal, however, are not as favorable with pay back periods far in excess of two years. As a result, with boiler stocks in Western Europe dominated by relatively new oil and gas-fired boilers, growth in coal use will likely be slow during the 1980s. [REDACTED]

According to industry projections, gas use in the industrial sector is expected to increase by about 370,000 b/doe by 1990, accounting for roughly 40 percent of the increase in Western Europe's gas requirements during the 1980s. Although all industry analysts believe gas will be significantly more expensive than coal, it has several non-price advantages: the use of gas largely avoids the difficulties of fuel access, storage, and handling associated with coal use. Moreover, natural gas is a clean burning and controllable fuel. [REDACTED]

Beyond 1990, coal use could expand substantially in the industrial sector. With many oil and gas-fired boilers due for replacement and government incentives to overcome the high capital costs of switching, industrial coal demand could reach 3.6 million b/doe by 2000--1.8 million b/doe above current projections. We believe coal will largely displace oil--oil boilers being greater in number and older than most gas boilers. Moreover, nearly 20 percent of industrial gas

CONFIDENTIAL [REDACTED]

25X1

requirements are used for feedstocks in the chemical industry where coal is not directly substitutable. On the other hand, the higher price of gas compared with oil in many countries will likely spur industrialists to switch from gas to coal where technically feasible. Altogether, we believe about 450,000 b/doe of gas can be backed out of the industrial sector through expanded coal use by 2000.

25X1

CONFIDENTIAL

23

25X1

Comparative Economics of Coal and Oil-Fired Boilers¹

	<u>Thousand dollars</u> <u>per year</u>		<u>Cost of Coal</u> <u>over Oil</u>
	<u>Coal</u>	<u>Oil</u>	<u>Percent</u>
Capital charges	158	72	219
Fuel costs	916	1,297	71
Operating costs	174	96	181
Total costs	1,248	1,465	85
			(U)

Source: Cambridge Information and Research Services Limited and the Coal Industry Advisory Board.

¹ Assumes a steam-raising plant capable of producing 60,000 pounds of steam perhour operating at 75 percent of capacity for 4000 hours in the year. Cost of capital is 10 percent per annum.

Potential for US Coal Exports

US coal shipments to Western Europe have increased sharply in recent years--jumping from some 260,000 b/doe in 1979 to 670,000 b/doe last year. Future US coal exports will largely be the result of countries' plans for diversifying suppliers and their perceptions of supplier reliability. Supply disruptions caused by strikes in Australia and Poland over the last two years have heightened the awareness of the need for diversity of supply. By filling previous shortfalls, the United States has gained a strong foothold in the European steam coal market; in 1981, for example, the United States supplied nearly a third of the steam coal imported by Western Europe, up from less than 3 percent in 1979. [redacted]

Although the US market share may eventually decline due to the reemergence of Polish shipments and increased exports from South Africa in the mid 1980s, recent market studies [redacted]

[redacted] estimate a 26-30 percent share of the steam coal market for the United States in Western Europe over the next decade. Including US shipments of metallurgical coal--historically the mainstay of US-European coal trade--we believe the United States will capture roughly a third of the West European coal import market. US coal exports are thus likely to reach nearly 800,000 b/doe in 1990. [redacted]

By 2000, we believe US coal shipments could range between 1.2-1.8 million b/doe depending upon the development of industrial coal demand. As the swing supplier in the market,

however, the US share of West European coal purchases could be substantially higher if coal supplies from other countries are disrupted. [redacted]

25X1

CONFIDENTIAL

Western Europe: Coal Imports

(million b/doe)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
Total	1.30	1.49	1.52
Steam Coal	.76	.89	.97
Metallurgical Coal	.54	.60	.55

25X1

US Share of West European Coal Market

(percent)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
Total	20	32	44
Steam Coal	3	18	32
Metallurgical Coal	45	52	65

25X1

CONFIDENTIAL

Western Europe: Spot Steam Coal Prices 1981

(\$ US per million BTU)

	<u>FOB Price Coast</u>	<u>Ocean Freight</u>	<u>Delivered Prices</u>
Australia	\$1.97	\$.82	\$2.79
Canada	1.83	.71	2.54
Poland	2.11	.33	2.44
South Africa	1.67	.44	2.11
United States	1.97	.52	2.49

25X1

CONFIDENTIAL

28

25X1

Several factors in the United States could restrict European purchases of US coal, according to the Coal Director of the European Economic Community. Inadequate coal sampling methods have allowed wide variations in coal quality, causing problems with power station equipment and compliance with air quality standards. Continued sharp increases in rail transport rates, moreover, could rob US coal exporters of their competitive advantage in ocean transport. Cargo preference legislation, currently before Congress, would require that 40 percent of trade volume be shipped in American flag vessels. Europeans fear such legislation would not only create administrative hurdles but also price US coal out of the market because of the higher rates charged by US shippers. [REDACTED]

In the longer-term, the inability of US ports to accommodate vessels of 100,000 deadweight tons⁵ (dwt) could severely limit coal shipments to Western Europe. With ocean freight rates accounting for between 15-30 percent of the delivered price of steam coal, future world coal trade is likely to be dominated by large colliers of 100,000 to 150,000 dwt in order to capture economies of scale. Currently, all major foreign coal-exporting countries as well as Japan and the importing countries of Western Europe have at least one coal terminal that can accommodate vessels of 100,000 dwt and up, and more are planned. Unless

⁵ The port of Hampton Roads can load a vessel of approximately 100,000 dwt, but this can be done only under special tidal conditions. Normally, the port is limited to loading up to 80,000 dwt colliers.

CONFIDENTIAL

deeper channels are dredged or alternate coal loading technologies⁶ developed in the US, a significant portion of coal will move in ships too large to call at present US ports by the year 2000.

25X1

⁶ Some economic alternatives to port dredging are vessel-to-ship loading arrangements, i.e., small ships, barges and floating terminals topping off large colliers.

CONFIDENTIAL

Sizes of Ships Transporting Coal

Ship Size (Deadweight Tons)	<u>Percent of Seaborne Coal Trade</u>		
	<u>1970</u>	<u>1975</u>	<u>1980</u>
Under 60,000	90	66	49
60-100,000	10	24	25
Over 100,000	--	10	26

25X1

Source: HPD Shipping Consultants Limited.

Page Denied

Next 7 Page(s) In Document Denied

SECRET

E

29 September 1982

TALKING POINTS FOR DDCIPoland

The Polish regime appears to be moving toward the formal dissolution (delegalization) of Solidarity, which could cause a resurgence of popular unrest.

- For the past ten days regime spokesmen have publicly argued that the country needs a trade union movement, but one without Solidarity.
- The alternative most often suggested is the so-called "zero option" in which all current unions, including Solidarity, would be replaced by new unions which would be phased in over a three-year period beginning next year.

The Polish parliament could discuss, and conceivably pass, a new trade union bill when it next meets around 10 October.

- Some delay in the passage of the legislation is possible and would not be out of character with the regime's step-by-step return to "normality".

Jaruzelski may wish to press forward now because he believes that the trade union issue must be resolved before martial law is terminated, and he apparently still hopes to do this before the end of the year.

- Some officials probably are confident that the regime has the underground union under control and that the authorities can easily contain any negative reaction to the abolition of Solidarity.

If the union is formally dissolved, Solidarity's leadership would feel compelled to react. But [redacted] they believe they will not be ready for a general strike until next spring at the earliest.

25X1

25X1

- They could call for large demonstrations in protest on 10 November, the second anniversary of the regime's legal recognition of Solidarity, or 13 December, the first anniversary of martial law.

SECRET

SECRET

Reaction from the factories is less easy to predict. Many workers have been cowed by harassment and by threats of the loss of their jobs and probably are resigned to Solidarity's demise.

- We believe there would be some spontaneous demonstrations but doubt that they would be widespread enough to challenge seriously the regime's control.

The regime probably will go ahead and establish its new trade unions, but these will lack credibility and authority and will not be able to bridge the gap between the authorities and workers.

- Underground Solidarity will continue its efforts to organize an effective opposition movement. Some will become even more radical because of regime intransigence.

SECRET

E

Poland

Industrial Production Increases

25X1

The Polish Government has announced that industrial production increased 1 percent last month compared with August 1981. Officials attributed the gain to continued good results in extractive sectors—coal, copper, and sulfur—which depend little on Western imports. The increase—the first such year-to-year rise since martial law—also reflects a boost in food industry output. The harvest was larger and earlier than last year, when more of the harvest took place in September. Despite the gain, overall output continues to hover at the level of the last seven months, indicating that the regime has been able to arrest the 1981 output decline but not achieve any recovery.

25X1

Secret

**Poland:
Regime Tactics
Against Demonstrators**

Polish authorities had little trouble controlling the much-heralded demonstrations on 31 August, the second anniversary of Solidarity's landmark accord with the regime. They used different tactics, however, from those employed against protesters in early May and in the early days of martial law. The regime apparently has recognized the increasing willingness of many protesters to resist and apparently wanted to minimize the violence. It evidently directed its police units to try to prevent crowds from forming or growing to the point where significantly more force would be needed. Security forces did use firearms in two cities, allegedly in response to firebombs. As in the past, the authorities on 31 August relied primarily on the police, although in a few cases they brought in army units. The regime's main goal continues to be maintenance of control and it will use whatever force is necessary, although it apparently is willing to vary its tactics to minimize bloodshed.

Rising Violence

Immediately after the imposition of martial law, protesters rarely resisted the police. One significant exception occurred in the Silesian town of Wujek where seven miners were shot to death; the police claimed they had been assaulted by the protesters. Since December demonstrators throughout the country have shown more willingness to defend themselves or even attack—usually with rocks and paving stones, but occasionally with Molotov cocktails. This trend evidently has prompted the regime to change—at least for the moment—its techniques for crowd control.

Changing Tactics

In past skirmishes with demonstrators, particularly last December and during the disorders in May, the authorities gave the police a relatively free hand. The special riot forces usually formed into large phalanxes and waded into the crowds, batons flailing, with little regard for the age or sex of the people they attacked.

They also did not hesitate to chase protesters, often beating them to the ground before making arrests.

According to Embassy officers, the security forces employed different tactics on 31 August. In most cases they acted as though they had orders to avoid using riot batons and to confront demonstrators only from a distance. Police used large amounts of tear gas, often firing randomly or even at individual protesters, to prevent crowds from forming. If this proved ineffective, they employed—again at a distance—heavier barrages of tear gas and water cannons; for the first time in most cities they also used signal flares and artillery simulators to disperse the crowds into smaller groups. They then deployed as small squads and cordoned off areas to prevent demonstrators from regrouping.

Police were generally careful to leave escape routes open to retreating demonstrators, evidently not wanting to provoke violent reaction from a cornered mob. Moreover, the police pursued small bands of protesters through the streets in only a few cases and usually not very far.

While the regime tried to minimize the violence, it did not hesitate to use more force to maintain the upper hand. Security forces—apparently under orders to use firearms if sufficiently threatened—opened fire and killed four demonstrators in Wroclaw and Lubin. The authorities claim the security forces took such action only after they were attacked by protesters with firebombs

The Military's Role

Since the imposition of martial law, the army generally has been kept away from direct confrontation with demonstrators, although many units have been alerted or deployed during periods of unrest. Some military

Secret

EUR ER 82-028
29 September 1982

Page Denied

Secret

25X1 forces were used in December to support police forces that were clearing worker-occupied factories and mines—as in Gdansk and Wujek. Since then, however, the regime has mainly used police—particularly the special riot forces—to maintain control. In May army units were deployed but were not involved in direct confrontations. [redacted]

25X1 During the 31 August disorders, the authorities again relied primarily on the police forces. In a few cities, however, the authorities evidently concluded that military units were needed. In Gdansk and Krakow, soldiers were employed directly—but only for a short time—to help keep crowds from regrouping. In Lubin the authorities brought in a number of army troops to take over from riot police the day after the shootings, evidently to defuse the volatile situation. The soldiers, however, reportedly became involved in the clashes, and fired tear gas and made arrests during subsequent demonstrations. [redacted]

25X1 Elsewhere on 31 August, the regime—as in the past—made a strong show of force by deploying military units extensively and putting some of them on increased alert. Most were used in security patrols and evidently were intended primarily as a deterrent. The authorities, nevertheless, clearly were prepared for any contingency—the US Embassy reports at least some army units in Warsaw had been issued live ammunition. [redacted]

25X1 Outlook

The regime will continue to meet demonstrations head on with whatever force necessary to maintain control, but will seek to keep the violence to a minimum. Government officials will take special care to ensure they are not taken by surprise, and will mobilize overwhelming security forces to deal with disorders. [redacted]

[redacted]

25X1

Secret

F

DDI #7859-82
29 September 1982

MEMORANDUM FOR THE RECORD

FROM : Stanley M. Moskowitz
National Intelligence Officer for USSR-EE

SUBJECT: SIG Meeting, 28 September 1982

1. Those present at the meeting were Secretary Regan, Secretary Baldrige, Undersecretary Buckley, Administrator McPherson, Mr. Nau, Mr. Leland, Dr. Rowen, Secretary Block, Mr. Gregg, Secretary Weinberger, Mr. McDonald, Mr. Bailey, Deputy Director Harper, Undersecretary Olmer, and Undersecretary Ikle.

2. Chairman Regan started by a brief exposition of the Polish debt situation. He stated that the private banks were ahead of Western governments in getting some repayment. Secretary Baldrige asked why the banks were getting ahead of us and were getting some payments on interest when the Western governments were getting nothing. It was pointed out that part of our sanction policy was that we would not reschedule the Polish debt until there had been some liberalization inside Poland which Secretary Regan said had not happened and was not likely to happen. Secretary Regan also said that at least we were not in the position of putting up any new money to get a return on the interest due us as he said the private banks had. Mark Leland from Treasury said that next year, since the Poles had not made any payments on their 81 debt, of either declaring them in default for 81 or rescheduling. Leland also said that it was likely that other Western creditors would push for rescheduling, and would do so despite whatever position we held to. Secretary Regan concluded the discussion by saying that we would have to meet with the other Western creditors and see what ideas they had.

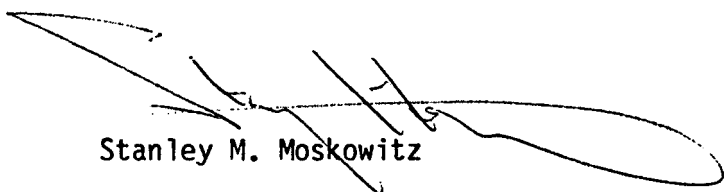
3. The major part of the meeting was given over to a discussion of an NSC proposal to set up a Presidential Commission that would help raise and funnel private monies into private agriculture in Poland. It was clear from the way Secretary Regan posed the question that he was skeptical about the merits of the proposal. He was joined by Secretaries Baldrige and Weinberger. The latter was particularly concerned about ensuring that any funds that went to Poland got into private rather than government hands. There was general agreement that the President's interest in this undertaking stemmed strictly from the humanitarian aspect of getting surplus commodities

25X15X1

SECRET

to the Polish people. The Church was the best means to accomplish this end, and indeed this had already been done last winter. Secretary Block who had signed a letter to Director Stockman last week strongly supported the private sector initiative, agreed with Regan and Baldrige that this proposal ought to be discussed with the Allies, ought to be better thought out, and needed more study. Secretary Regan remanded the proposal back to the IG for more study. He also asked Treasury to come up with a brief for the President's use with Cardinal Glemp on the amounts of humanitarian assistance the US Government had provided to Poland. He said that the US had provided \$10 million dollars in private funds and \$42 million dollars in public funds for 1982 and that a total of \$48 million dollars in public funds have been earmarked for humanitarian assistance via Catholic relief and Project Hope.

4. There was a brief discussion of a paper on providing multi-lateral assistance to India. This stemmed from the surprisingly good visit of Mrs. Gandhi. The tenor of this discussion was that we did not want to get back into a grant aid program to India and we should use a commission that was already established to explore ways in which we could increase trade. Secretary Regan explained that the main problem was that the Indians had a great need for hard currency but it was very hard to see where that money might come from. There was an agreement that we should discourage the use of the Asian Development Bank.


Stanley M. Moskowitz

25X1
+ Ikle asked CIA to produce a paper outlining Polish politics and positions in anticipation of the Glemp visit. Stan Moskowitz asked for it by mid-week next week

SECRET

JTF
Executive Registry
82-1216/1

F

THE DIRECTOR OF CENTRAL INTELLIGENCE

WASHINGTON, D.C. 20505

National Intelligence Council

DDI #7797-82
27 September 1982

MEMORANDUM FOR THE RECORD

FROM : Assistant National Intelligence Officer for USSR-EE

SUBJECT: IG-IEP Meeting on Polish Issues

1. [redacted] (EURA) and I attended. The meeting was chaired by Treasury (Marc Leland) and was a follow-on to the 20 September IG chaired by State and devoted to the proposed private aid initiative. Leland explained that discussion of this initiative had been switched to this forum in order that it could be considered in the broader context of US policy toward Poland.

2. Leland reported that almost all participants at the last meeting of government-creditors reported that they had not been fully paid on the rescheduled 1981 Polish debt. They will meet again in October to establish with more precision what the Polish arrears are. It is evident that Poland is giving priority to repaying private banks.

3. The status of the Polish initiative was effectively changed at this meeting. At the 20 September meeting the NSC evidently hoped to be able to make minor adjustments and have the initiative approved so that the President could announce it on 13 October -- two days before his meeting with Archbishop Glomp.

4. This schedule may still be met but Treasury will now write a broader options paper, including variations on the proposed initiative as well as pros and cons, for consideration at a SIG-IEP on Tuesday, 28 September, and then at an NSC on Thursday, 30 September. An indication of Agency feelings on the issue came when the OSD rep [redacted] called for a straw vote. Of the agencies voting, USD was strongly opposed, NSC and USDA strongly in favor, and State, Commerce, and the Vice

25X1

25X1

[redacted]

[redacted]

25X1X1

SECRET

President's Office generally in favor. Treasury did not vote but has given every indication that it is opposed.



25X1

Colonel, USAF

Attachment:
Agenda for IG-IEP

The Pipeline: White Elephant or Trojan Horse?

By WILFRIED PREW

Proponents of the Soviet gas deal—which include European gas transmission companies, equipment suppliers and banks—have had to use little factual information to swing European public opinion in their favor.

We West Europeans have been told that the pipeline is a commercially sound venture, that the risks (of supply interruptions or cutbacks) are manageable or negligible and—if you are still doubtful—that there are no alternatives. We have brushed aside American pleas to take a closer look at the gas deal and rejected American counterproposals. And, we are screaming bloody murder at Ronald Reagan for his unwavering attempt to block the project.

True, the style and tone in which the American objections were presented left much room for improvement. Some U.S. counterproposals, though well-intended, were ill-conceived and poorly presented: Shipping liquefied natural gas from Alaska to Europe in submarine tankers strikes shipbuilders here (who are not totally inexperienced in submarine technology) as pure science fiction. And demanding that the Norwegians, instead of helping the Russians explore for oil and gas in the Barents Sea, should embark on a crash gas production program on the Norwegian shelf, very much rubs them the wrong way; their pride in their own resources goes so far that they fear exploitation amounts to sacrilege.

The European attitude toward the Soviet pipeline has to be viewed in the context of U.S. foreign policy over the recent past. West Europeans, still not having recovered from the roller-coaster ride of foreign policy under President Carter, are now stunned by the determination and predictability of a president who appears like a reincarnation of Gary Cooper in "High Noon."

The claims and counterclaims over the pipeline have been all too frequently recited. What is needed is an evaluation of the assertions in favor of the pipeline: superior economics, negligible risks to consumers and the absence of alternatives.

Volume and Prices: The gas deliveries under the new Soviet gas contracts are to run for 25 years, from 1984 to 2008. The Soviets had hoped to sell as much as 40 billion cubic meters a year (about 1.4 trillion cubic feet) when the "plateau phase" would be reached (projected for 1988). The major buyers were to be West Germany (10.5 billion cubic meters plus 0.7 billion cubic meters for Berlin), France (8 billion cm) and Italy (8.5 billion cm), with the balance to smaller European countries. (The total European deliveries were to be accounted for not in a single contract, but in a series of national contracts.)

Since last year, the total volume has been scaled back for lack of demand, lack of hoped-for Soviet purchases of equipment and second thoughts on the project's political implications. In the plateau phase, the deliveries are not likely now to exceed two-thirds of the originally planned volume, or about 26 billion cm a year.

U.S. Has Achieved Partial Goal

The volume cutback from 40 billion cubic meters to 26 billion cm will make it easier for the Soviets to deliver on their contract; the reduced volume can be supplied with one pipe string and at lower than planned pressure, reducing the need for U.S. compressor technology. But the Soviets will have to forgo substantial hard cur-

rency earnings, since the larger volume could have been supplied at low marginal cost. In the plateau phase, these earnings will be more like \$5 billion, rather than \$10 billion. Thus, while the embargo has lost much of its bite, the U.S. has gone a major way toward its goal of reducing Soviet hard currency earnings.

The contract prices quoted so far vary due to the contracts' pricing structure and fluctuations in exchange rates. Benchmark prices have been set in the contract for German deliveries, which was the first contract signed and which covers the largest of the national volumes.

The contract entails a base price and a floor price, the latter to guarantee the Soviets a minimum return on their investment. Both base and minimum prices have been specified in German marks, at .34 marks and .39 marks per cubic meter, respectively. At the exchange rate of the date of signature, the base and floor prices

will not be absorbed by interruptible contracts. (In 1979, such contracts represented only 11% of German sales.) Thus it will be necessary to expand emergency storage and construct an extended grid.

As for German emergency storage, it will be able to absorb delivery interruptions for only a few days. Currently such storage amounts to only 3% of annual gas consumption; with planned expansion this share will rise to 6%. This is a paltry figure when compared with the U.S., where storage capacity exceeds 25% of annual consumption.

Despite assertions to the contrary, Europe does not have a common grid with a cross-flow capability sufficient to absorb supply interruptions. The current long-distance transmission system is bi-directional, conditioned by the two major sources of gas: North-South for gas from the Dutch and Norwegian North Sea, and East-West for Soviet gas. Should the East-

price corresponding to the Soviet price and subtracting the costs (including a 15% real return on investment) for regasification, transportation, liquefaction and gas production, the netback value would, in the case of northern Norway, amount to \$2.60 per million BTUs (1982 dollars) in the first year of production.

For a single five billion cubic meter LNG project, that amounts to an annual return of \$700 million, which Norway could collect in the form of royalties and other taxes. Five projects of this size (a total of 25 billion cm) would yield \$3.5 billion, a figure which can probably stand up to eventual Soviet earnings from the pipeline.

For the South Atlantic case, with much higher transportation costs and gas production in an environment as inhospitable as the North Sea, the netback value would initially be \$1.20 per million BTUs (1982 dollars). To countries like Argentina and Chile with little, if any, alternative uses for offshore gas, this is still interesting.

Europe Can Have Alternative

A bundle of five such projects would be needed to come up with a total volume corresponding to the new Soviet contracts. That, however, is not a drawback; it has major advantages.

First, diversification of supply sources reduces the risk of supply interruption. Second, the projects could be phased in gradually, allowing a smooth adjustment to new supplies. Third, a true intra-European pipeline grid would be born: Gas from the Gulf countries would be landed in Italy and shipped north; gas from West Africa and South America would be landed in France and shipped north, east and south; and gas from northern Norway would be landed in north Germany and shipped south and west.

Needless to say, the new gas grid would be far less vulnerable and more flexible than the current system. Furthermore, geographic diversification obviates the need to greatly step up exploration in a single country.

In the case of Norway, for example, two or three projects of this size would remain well within the conservative production policy, in addition to generating employment effects in a new technology field, a high priority of the Norwegian government. This proposal also accommodates Norway's desire to shift new energy activity to its northern regions.

These are not phantom projects. The necessary gas reserves and the technology are available. The realization time for these projects would be about eight years, with a five-year minimum. Thus, they cannot replace the new Soviet gas from the start.

These, however, are short-run considerations. We should, like the Soviets, adjust our sights to the long run instead: In a couple of years, gas for the 1990s and beyond will have to be contracted for. With an enlarged pipeline system in place, the Soviet Union will be vying for a further increase in its market share. The Soviets hope that our vision remains narrow and blurred. If we West Europeans take a deep breath and actively pursue the alternatives, we stand a good chance that in the 1990s the Russian pipeline will become a white elephant rather than a Trojan horse.

Mr. Prew is senior energy economist at the Kiel Institute in West Germany.

We Europeans should, like the Soviets, adjust our sights to the long run: In a few years, gas for the 1990s and beyond will have to be contracted for.

(at German border) correspond roughly to \$4.70 and \$5.70 per million BTUs, respectively. (These figures also depend on the actual calorific value that has not been specified yet.) The base price (base: July 1, 1981), is to be escalated by an index containing as weights the prices for fuel oil: crude (20%), heavy (40%) and light (40%). These weights reflect the expected future gas uses.

The minimum price will only apply if the escalated base price will be less than the minimum price at the time deliveries have reached the plateau phase, around 1988. Should energy prices rise at 2% to 3% a year in real terms, there is little danger that the floor price will exceed the escalated base price.

At a base price of \$4.70 per million BTUs, Soviet gas is competitive on the basis of its fuel equivalent. But other aspects have to be considered.

First, Soviet gas deliveries so far have been counter-cyclical, with deliveries highest in the summer. In the past the Soviets have frequently cut back deliveries during the winter, citing technical reasons. The European buyers have little flexibility with a take-or-pay clause of 80% of contract volumes.

Second, the Soviet gas price is not low enough to cover additional costs, such as extending the current European gas grid system, an essential safeguard against supply interruptions. Since Soviet gas entails a political risk, (unlike domestic, Dutch or Norwegian gas) the cost of a backup grid should be borne entirely by the Soviet gas price.

Risks: The proponents of the gas deal discount these risks by arguing that total Soviet deliveries (from existing "old" contracts with the Soviets plus the new contracts) will not exceed 30% of the total gas consumption and will amount to no more than 6% of total primary energy use. At such penetration levels, cutbacks could—so the argument goes—easily be absorbed by interruptible contracts to industry and utilities with dual-firing capabilities.

This argument is misleading. Consider the German situation. In Bavaria, where the Soviet gas enters, gas from existing Soviet contracts already amounts to 95% of total gas use. Supply interruptions can cer-

tainly not be absorbed by interruptible contracts. (In 1979, such contracts represented only 11% of German sales.) Thus it will be necessary to expand emergency storage and construct an extended grid.

West pipeline dry up, would it be possible to compensate with increased deliveries from the North Sea? Currently, yes, but not in the future: By the mid-1980s the North-South lines will be full of additional, already contracted North Sea supplies.

Berlin is a special case. All gas there is city gas. But under the new contract, a line running from near the end-point of the Soviet string in Czechoslovakia north through East Germany is planned. This South-North line will require compressor stations in East Germany. Politically inspired delivery cutbacks to West Berlin can easily be blamed on technical failures. An alternative to this pipeline would have been to supply Berlin through a West-East pipeline from North Germany, with the gas coming from West Germany.

This line would be shorter than the selected one and wouldn't require a compressor station in East Germany. Supply interruptions could only be caused by an outright attack on the line. Isn't it instructive of Soviet intentions that they (and the East Germans) have denied us that route?

Alternatives: It is trivial to state that at this time it will not be possible to come up with an alternative source of gas, develop the fields and bring the gas to the European market by 1984, the doubtful start-up date for new Soviet deliveries. But this isn't the point. The question is whether, when and at what price gas from other sources can be made available to reduce our increased dependence on Soviet gas.

At the price level of Soviet gas, it will be economical to supply gas from a wide range of countries.

At one extreme are the North Sea and the new fields off northern Norway, with gas to be transported to central Europe either by pipeline or as liquefied natural gas (LNG). At the other extreme are the South Atlantic (offshore southern Argentina or Chile), the Canadian Arctic and the Gulf area (Qatar). In the middle range lies Western Africa (Cameroon, Nigeria).

To illustrate, consider the economics of exploiting offshore gas fields at either of the two extremes, northern Norway or the South Atlantic. In both cases, the offshore gas could be piped ashore, liquefied, shipped to Western Europe and regasified at the import terminal. Starting from a cif

INTERNATIONAL

**ing Nations
razilian Says**

to U.S. import quotas on sugar
ces plunge on the world mar-

d World exports of manufac-
and investment in the means
them are also at risk. Said
Figuelredo, "Years of patient in-
... creation of export infrastruc-
-rich was to permit consumers
countries to acquire products
with ... have been frustrated
-table protectionist barriers."
didn't say it, Brazil is annoyed
ed at U.S. efforts to impose
s on Brazilian steel, shoes and
example.

inance Stymied

ome almost to the end of its
rope. Third World nations are
1 in efforts to finance further
at and industrialization. Brazil
back on development projects
ng its domestic economy as
fiscal belt-tightening. Around
omplained the president, "The
of high interest rates makes
g-term investments unprofit-
reatens ... projects which are
e for (recovery)."

the solution, the Brazilian said.
urged developed countries to
rade, expand the flow of fin-
g down interest rates and "ac-
 restructuring of their econo-
vitable."

words, to save the world eco-
tem, developed countries must
borders to imports from the
d and give up trying to protect
domestic industries from foreign

resident Figuelredo sketched the
terdependence from the South-
ent: The developed North must
e industries of the developing
financing them and opening its
to them. Otherwise they cannot
Northern banks. The system in
are all involved will suffer
no longer be able to finance in-
trade, and the world will slide
he suggested.

s Sweat It Out

ancial community more than the
community will appreciate how
at this appeal comes from Presi-
dreido. For Brazil is a finely bal-
e in the current market. Various
n loans for Brazil are in the pro-
ng put together, but the process
more slowly than the Brazilians
1. They are sweating it out.

absence of bad news in the mar-
n Brazil itself or on the already
in scene, Brazil should get the
needs to make its payments, one
s. Another sees a rescheduling
ring. If current conditions con-

d gets by, the market will heave
relief. If not, we could be in for
of international credit and trade
n that President Figuelredo, the
st adviser and others fear.

**et in Reaction
ny's Future**

However, at a news conference in
Prime Minister Thatcher reiter-
We stand by the
... which

**Italy and Algeria
Agree on Terms
For Natural Gas**

**Trans-Mediterranean Line
To Open in November
With Price Pegged to Oil**

Special to THE WALL STREET JOURNAL
ROME—Italy and Algeria initialed a pricing agreement on natural gas shipments through the trans-Mediterranean pipeline, ending a deadlock that had delayed the opening of the pipeline by nearly one year.

The line, which connects Italy and Algeria, was scheduled to begin operating at the end of 1981, but shipments were delayed when Italy balked at Algeria's pricing demands.

The accord calls for the Italian government-owned gas company, Snam S.p.A. to

For other major international news, please see the stories about:

-Resignation of Volkswagen of America's president, page 4.

-Sutt filed by Allis-Chalmers to liquidate a joint venture with Fiat, page 7.

-Rise in U.S. steel imports for August, page 2.

pay Algeria \$4.01 per thousand cubic feet of gas. A further payment, which Italian Foreign Minister Nicola Capria said would remain around 10% of the base price, would be made directly by the Italian government. Thus the current price reached in the agreement is about \$4.41 per thousand cubic feet of gas.

The gas price will be indexed to a "basket" of petroleum products in order to keep it in line with market demand, the Italian Foreign Trade Ministry said. Supply is guaranteed at 441.38 billion cubic feet annually for 25 years, and the agreement is subject to review every three years.

The trans-Mediterranean natural gas pipeline took seven years to build and cost \$4.4 billion. Various companies within Ente Nazionale Idrocarburi, the Italian state energy conglomerate, built 65% of the project and the remainder was built by Algeria.

When negotiations started more than a year ago, the Italians expected to receive lower-cost gas through the pipeline, but Algeria revised its demands, basing its gas pricing target on oil prices set by the Organization of Petroleum Exporting Countries.

At one point during the talks last summer, Algeria was demanding more than \$5 per thousand cubic feet of gas, with the price indexed to the average value of light crude oils.

The new agreement also calls for normalization of trade between the two countries, specifically that Algeria will accept more export contracts for Italian goods and services. During the price negotiations Algeria, in effect, froze all commercial contracts with Italy in an effort to increase its leverage at the bargaining table.

Gas delivery is expected to begin in mid-November. Most of the fuel is destined for use in depressed southern Italy. In addition, Italy plans to make new gas contracts with the Soviet Union and is said to be seeking to renew supplies of liquefied natural gas from Libya.

Two Concorde Flights

Cheraldas Air France

**Rolls-Royce Ltd. Names
Successor to Chairman**

By a WALL STREET JOURNAL Staff Reporter
LONDON — Rolls-Royce Ltd., Britain's state-owned maker of jet engines, named William B.M. Duncan, 59 years old, to succeed the current chairman, Lord McFadzean of Kelvinside, who is 66.

Mr. Duncan, currently deputy chairman of Imperial Chemical Industries PLC, will become a nonexecutive director of Rolls-Royce on Nov. 1 and is expected to succeed Lord McFadzean as chairman and chief executive when he retires in April 1983.

**German Opposition
Seeks to Oust Schmidt
Despite Hesse Setback**

Special to THE WALL STREET JOURNAL
BONN, West Germany—West German opposition leader Helmut Kohl of the Christian Democrats decided to ignore an electoral setback over the weekend in the state of Hesse and pursue plans to unseat Social Democratic Chancellor Helmut Schmidt in a parliamentary vote this week.

A Christian Democratic spokesman, Wolter von Thiesenhausen, said that Mr. Kohl won backing from both the party's presidium and ruling board to call a no-confidence vote Friday to oust Mr. Schmidt.

Chancellor Schmidt's party showed unexpected strength in elections for the state Parliament in Hesse by capturing 42.8% of the vote, far above the 34% projected in opinion polls. The Christian Democrats, who had been expected to win a majority, fell short with 45.6%.

The Christian Democrats' partners in the plan to unseat Mr. Schmidt, the Bavaria-based Christian Social Union and the Free Democrats, didn't have any immediate comment on Mr. Kohl's decision to pursue his ouster strategy.

PREMIER

**THE "NEW MATH"
HOW A \$3,000
EARN AS MUCH**

With a Leverage Account you can lock up as much as worth of gold or silver for a lay of \$3,000.

Using this "new math," \$ work of \$4.

There are good reasons gold now. Despite appearance of the rate of inflation during a few months, the basic forces are still intact. And in tensions, which tend to intensify, are worsening.

Today, gold is a bargain about 50% of its 1980 high. Using the "new math," an attractive investment as experts believe silver is a

CALL TOLL FREE (8)
In California, call: (80)

PREMEX INC.
7670 Opportunity Road
P.O. Box 11982
San Diego, CA 92111

Gentlemen: Please send me your complete information on the factors influencing the precious metals market prepared by a leading economist.



Morton Thiokol, Inc.

has been formed by the merger of

Morton-Norwich Prod

and

Thiokol Corporation

We acted as financial advisor to Morton-Norwich and Thiokol Corporation.