

Ronald Reagan Presidential Library  
Digital Library Collections

---

This is a PDF of a folder from our textual collections.

---

**Collection:** Martin, William: Files  
**Folder Title:** US-Korea Energy Group  
02/22/1984 (2 of 2)  
**Box:** RAC Box 7

---

To see more digitized collections visit:

<https://www.reaganlibrary.gov/archives/digitized-textual-material>

To see all Ronald Reagan Presidential Library inventories visit:

<https://www.reaganlibrary.gov/archives/white-house-inventories>

Contact a reference archivist at: [reagan.library@nara.gov](mailto:reagan.library@nara.gov)

Citation Guidelines: <https://reaganlibrary.gov/archives/research-support/citation-guide>

National Archives Catalogue: <https://catalog.archives.gov/>

## 5.0 COAL SUPPLY

### 5.1 DOMESTIC PRODUCTION

The Korean government has assigned a very high priority to the development of anthracite, the only energy source present in Korea in significant amounts. Total geological resources are estimated to be 921 million tons, and economically recoverable proven reserves, 386 million tons.<sup>1</sup> At current production rates of 19-20 million tons a year, this represents a 20 year supply of proven reserves.

There are eleven coal basins in Korea. The deposits are of carboniferous-permian and jurassic age. These deposits are structurally complex and difficult to recover. Almost all seams are steeply dipping, badly faulted and folded. In addition, many seams are as thin as 30 inches. In addition, Korea's coal is characterized by high ash and relatively low thermal values of about 17.7 million B.T.U. per ton.<sup>1</sup> It has a sulfur content of about 0.5 percent.<sup>2</sup>

Virtually all of Korea's coal comes from underground mines, and, as the World Bank (1979) has pointed out, "many of the coal deposits are badly faulted," expensive to recover, and involve "the additional health and safety hazards of deep underground workings."

A program initiated in 1969 took output from 12 million metric tons in 1970 to 17.5 million metric tons in 1975, and to 18.25 million metric tons in 1980. This production, now on a plateau from which little further rise is expected, is wholly of anthracite; it is burned almost entirely in households, though a small amount is used in thermal stations by the power industry. The domestic supply of anthracite has been supplemented by increased imports, some of them taken by the utilities for blending, and these are planned to grow further during the 1980s.

---

<sup>1</sup>Richard Tobin, Project Coordinator, Use of Coal in the Asia-Pacific Region: Achieving Energy and Environmental Goals (Honolulu, Hawaii: East-West Environment and Policy Institute, East-West Center, 1981.)

<sup>2</sup> U.S. anthracite has a heating value of about 26 million B.T.U. per short ton.

<sup>3</sup> Tobin, op. cit.

There are a large number of coal mining companies in Korea. The largest producer is government-owned, mining 25 percent of total production. Six large, private coal companies accounted for another 21 percent of production in 1979, with the balance mined by a large number of small, private firms.

Mining productivity is low (1.2 short tons per man-shift)<sup>1</sup> because of the difficult geologic conditions and limited mechanization. Although increased productivity will be difficult to accomplish, The Korean Ministry of Energy and Resources (MER) plans to increase the mechanization ratio of coal mining to 25 percent by 1984. It is currently at approximately a 5-percent level, with virtually all production accomplished by manual labor.

To attain this mechanization ratio, the MER plans to sharply expand financial and technological assistance to the local coal mines. The government is currently assisting with long-term low-interest loans by covering 60 percent of the total cost for mechanization of the private mines. However, because of declining reserves and difficult geologic conditions even massive investments are not expected to result in domestic coal production increasing materially above the current 18.0-18.5 million metric ton annual rate.<sup>2</sup>

MER currently estimates that in the 1981-86 period, local coal production will increase at about 2.5 percent a year, less than the 2.8 percent increase in demand. Thus, the government is projecting imports of anthracite will increase at an annual rate of seven percent.

Published information on production costs indicate a range of \$17 per short ton for shallow mines up to more than \$60 per short ton for small deep mines. Nearly all the coal is transported by rail. Average rail costs for the government owned coal mines in 1979 was about \$4.50 per short ton.

---

<sup>1</sup>Joy Dunkerley, Future Energy Consumption in India, Brazil, Republic of Korea and Mexico, (Resources for the Future: March 1982).

<sup>2</sup> World Energy Conference, London, 1977.

The warm winters in 1981-83 caused anthracite demand to plummet. Table 4-1 gives the historical time series and Korean government estimates for anthracite production.

Table 4-1

Trends of anthracite production and imports

<u>Year</u>	<u>Production</u>	<u>Imports</u>	<u>Total</u>
	(000 tons)	(000 tons)	(000 tons)
1970	12,394	-	12,394
1971	12,785	-	12,785
1972	12,403	-	12,403
1973	13,571	-	13,571
1974	15,263	-	15,263
1975	17,593	-	17,593
1976	16,427	-	16,427
1977	17,268	-	17,268
1978	18,054	648	18,700
1979	18,208	2,691	20,255
1980	18,624	3,500	20,955
1981	19,865	3,500	23,365
1982		521	
1983		720	
1984		1,142	
<u>Projected</u>			
1986*	21,500	3,500	25,000
1991	21,000	3,500	24,500

\* Government of Korea's estimates

## 4.2 COAL IMPORTS

The Republic of Korea is already the second largest coal importer in the Pacific region after Japan. Korea first began to import coking coal in 1973 for its newly established steel industry. By 1981, metallurgical coal imports were running at nearly 6 million metric tons per year. Imports of bituminous steam coal by non-utility industrial consumers, including the steel industry which uses some non-coking coal, began only in 1978. By 1981, they had risen to 1.5 million metric tons. and were expected to be 2.0-2.5 million metric tons in 1983. Anthracite imports vary, depending on domestic production and weather.

As discussed in the energy demand section, Korea's need for imported coal will depend on its economic growth and its commitment to coal as opposed to other fuels. The most optimistic forecasts of the Korean coal market are based on the following assumptions:

- o Real increases in crude oil prices and instability of oil supply sources remain as incentives for increased coal consumption;
- o Average annual economic growth of 8-10 percent in real GNP for the next decade;
- o Average annual increases of 10-11 percent in electricity consumption;
- o Real price of electricity rises 3-4 percent;
- o No LNG imports
- o No major nuclear accident or spillover from other nations of public antipathy to nuclear development;
- o No environmental obstacles to increased coal consumption;
- o Four additional new coal-fired units which are currently in the construction stage come on stream in 1990;
- o World demand for steel does not decline excessively;
- o Second Integrated Steel Mill in Kwaygyang Bay on Korea's south coast becomes operational as planned in 1988;
- o Government-subsidized conversion of 15 percent of industrial energy source to coal in the cement industry by 1990; and
- o Korea's credit rating remains good.

The U.S. Coal Export Study, made in 1980 by the U.S. Department of Energy, estimated the following coal imports to Korea:

Table 4-2  
Coal Imports  
 (millions of short tons)

	<u>Total Coal</u>	<u>Steam Coal</u>
1979	5.9	--
1985	9.2	8
1990	16.1	14
2000	50.6	36

The assumptions underlying these projections were not given in the report but the large increase in steam coal imports between 1990 and 2000 assumed that a number of plants converting coal to liquid fuels would be in operation.

Initial estimates of Korean coal demand for the four end-users (KEPCO, POSCO, Diahan, and the major cement producers) were based on the 1981-1986 Five-Year Plan:

Table 4-3  
Imported coal requirements for Korea  
 MMmt

	<u>Actual</u>	<u>Forecast</u>	
	1981	1986	1990
<u>Bituminous</u>			
Coking Coal			
Steel	6.6	7.1	12.0
Steam Coal			
Cement	1.8	NA	6.0
Utility	<u>-0-</u>	<u>6.8</u>	<u>11.2</u>
Total Steam Coal	1.8	6.8	17.2
Anthracite	<u>3.1</u>	<u>3.5</u>	<u>4.0</u>
TOTAL COAL IMPORTS	11.9	17.4 <sup>1</sup>	33.2

-----  
<sup>1</sup>Excluding cement industry's coal consumption which will depend on Korea's cement exports and the progress of government plan's to convert 15 percent of Korea's total industrial energy source to coal.

#### 4.2.1 Anthracite

Anthracite imports started in 1978, reaching a 3 million ton level in the 1981-82 period. The United States is the largest single supplier of anthracite to Korea, providing 1.7 million metric tons in 1981. Other anthracite imports come from China, Canada, South Africa, Peru, and Viet Nam. Recent Ministry of Energy and Resources forecasts point to increases in anthracite imports at an annual rate of 7 percent in the 1981-86 period.

Table 4-4

#### Korean Anthracite Imports and U.S. f.o.b. Prices

	Daihan	US\$fob	OSROK	US\$fob	Total	US\$avg
1978	201	52.61	201	52.61	402	52.61
1979	391	53.09	24	68.22	415	53.96
1980	391	67.97	391	67.97	782	67.97
1981	957	68.84	381	67.78	1,338	68.54
1982	315	61.04	206	67.78	521	63.63
1983	360	58.33			360	58.33
1984	571	58.33			571	58.33
TOTAL	2,795		1,002			

Dai Han has already purchased the 571,000 metric tons shown for 1984. The 1982-83 figures are abnormally low because of warm winters during both years.

The United States now supplies 30 percent of Korea's anthracite imports, and Daihan Coal Corporation officials see no reason why this figure could not rise to 50 percent, if U.S. suppliers are willing to become more price competitive. Daihan's long-term forecast for purchase of anthracite coal from the United States shows a rapid increase to 1.0-1.5 million mt. per year between 1984-85 and 1.5-2.0 million mt. annually during 1989-1994 period.

Policies to diversify anthracite imports are extremely important since a single producer could capture the market if all imports were based on the lowest cost coal delivered to Korea. Daihan encourages private Korean companies, such as Samsung, Hyundai, and others, to invest in U.S. coal mines. Daihan would then enter into agreements with the private owners to buy the output of the mines over an extended period. Daihan wants to arrange long-term contracts where possible to avoid having to buy in the spot market.

#### 4.2.2 Steam Coal

Steam coal imports started to become important in 1981, reaching a 3 million ton per year import rate by late 1982. Only a small quantity of this steam coal came from the United States. Korea expects to diversify the countries from which it will import its bituminous steam coal. The power industry sees Australia, South Africa, and Canada as its principal suppliers, with some U.S. coal for diversification and depending on price.

The cement industry is presently buying coal on a spot basis from all major Pacific suppliers--Australia, Canada, USA, South Africa and, in small amounts, China. One company has shown indications of considering South Africa as a long-term supplier.

The United States is in a good position to supply a portion of Korea's needs. Presently, the U.S. market share of Korea's steam coal imports is 36 percent. China and Colombia are potential major suppliers of the 1990s, if their production and transportation infrastructures can be expanded sufficiently.

Furthermore, Korea may seek equity portions in producing companies and long-term contracts to assure quality and quantity of supply. Unlike POSCO, the state-owned steel company, KECO has not so far taken equity in an overseas joint venture, but like many import-dependent power companies is clearly keeping such a move in view. KECO has contracted to take coal from the Drayton mine in Australia, in which Hyundai is a co-venturer. Other Korean companies have initiated joint mining ventures with the United States, Canada and Australia. Korea has provided some of the equity capital in each case.

#### 4.2.3 Metallurgical Coal

In 1981, POSCO imported 5.8 million metric tons of bituminous coking coal into Korea. Of this 5.8 million metric tons, about 57 percent (3.3 MMmt) came from Australia, 28 percent (1.6 MMmt) from Canada and 16 percent (0.9 MMmt) from the United States. In 1982, coking coal imports reached about seven millions tons, of which the U.S. share was about 1.5 million tons. Based on POSCO's record through 1983, it appears that Australia, Canada, and the United States will remain the major suppliers of coking coal to Korea.



## 5.0 GOVERNMENT/COMMERCIAL TRADE PRACTICES

### 5.1 GOVERNMENT IMPORT POLICIES

#### 5.1.1 Registration of "General Trading Companies"

While there appear to be no explicit controls on coal importation, all international trading by Koreans, whether as importers or exporters, is subject to a species of official regulation. For example, certain large trading houses are registered as "general trading companies", the criterion being that the house concerned should handle a certain minimum proportion of the country's exports, said to be 2.5-3.0 percent. The advantage of being recognized as a general trading company is principally in gaining access to government guarantees for bank loans. This part of the control system would seem to be directed at encouraging exports and assisting the larger and stronger traders--only nine companies are said to hold general trading status.

#### 5.1.2 "Licensed Offering Companies"

Operating alongside this export-orientated regulatory arrangement is a system of "licensed offering companies". All imports into Korea require the supplier to obtain an offer from a licensed offering company which is normally one or other of the trading companies. This requirement is said to have a twofold object: one, to ensure standards of commercial competence in international trading by domestic companies, by channelling imports through companies judged competent to deal with them; and two, to ensure that all goods entering Korea pass through Korean trade hands. It is possible that the reinforcement of exchange control is a third objective.

These controls appear to be designed to promote the interests and strengthen indigenous trading enterprises. While export promotion and probably import control motives are present, there is no evidence of any intervention, for example in contract volumes or other terms, in coal trade.

Nevertheless, the three principal purchasers of imported coal, POSCO, KEPCO, and the Daehan Corporation, are state enterprises. A situation in which the country's three largest purchaser's of imported coal are state-owned will clearly give the government considerable control over development and purchasing policies in respect of coal imports.

### 5.1.3 Diversification Policy

For the present, the government of Korea intends to diversify sources of coal supply as well as obtain the best price on a strict BTU/quality basis. Previously, Korea has had a variety of problems with its purchases of coal. Contracts had sometimes been signed with firms lacking coal. To minimize past irregularities in importing anthracite, for example, the government now requires that all anthracite be imported through the Daihan Coal Corporation (DHCC), a government corporation.

### 5.1.4 Stockpiling

The Korean government also encourages increasing stockpiles and long-term supply contracts to reduce the risk of supply shortages and "playing the spot market." Because of the capital-intensive nature of the infrastructure and equipment required for the effective use of a stockpile, and the high maintenance costs, the Korean government has taken no concrete actions as of yet to implement stockpiling.

### 5.1.5 Overseas Investment Promotion

In addition, the government promotes Korean investment in foreign coal mines with concessional loans. There are no duties on coal imports, and import licenses receive automatic approval.

## 5.2 COMMERCIAL PURCHASING PRACTICES

In making coal purchases, large corporations reflect the government's policy by considering supply diversification and security in their buying plans. Smaller firms, however are only concerned with price. Korea's major trading firms hope to expand coal sales by developing and helping to finance new industrial coal boiler technologies.

Daihan Coal Corporation has assumed sole responsibility for purchasing U.S. anthracite and OSROK has largely been out of the purchasing game. OSROK's long-term U.S. supply contracts ended in 1982.

### 5.2.1 Price

Good quality coal, i.e., low sulphur, low ash, and medium to high BTUS, sold in 1981 on an arrival basis in Korea (c.i.f.) for about \$60-\$70 per metric ton. The average delivered price of imported bituminous steam coal for Korea in 1981 was \$2.91/MMBTU, compared with an average imported crude oil price of \$6.55/MMBTU. Imported crude oil prices increased at an annual rate of 38 percent between 1977 and 1981.

Imported coal prices in current U.S. dollars per million BTU have remained relatively constant for the 1977-1981 period. Coking coal prices increased at an annual rate of only 5.1 percent from 1977-1981. The United States has been the highest-priced source of imported anthracite and coking coal to Korea over the 1977-1981 period.

### 5.2.2 Diversification of Sources

The Korean government has restricted the use of oil in new power plants, and plants to convert to coal at existing oil burning facilities. Although coal can create more difficult environmental impacts than oil, it is cheaper than oil and its long-term availability is assured because of the vastness of the world coal reserve base.

The Korean government has used a diversification policy for both anthracite and bituminous coal, since a single producer could capture the market if all imports were based on the lowest cost coal delivered to Korea. The Korean government, therefore, encourages purchases based on factors other than cost to ensure diversity of coal supply. Fortunately, Korea has a wide choice of potential coal suppliers and can easily assure a balance between diversity and security of supply and cost.

Another diversification option is the investments in coal producing facilities abroad. Joint ventures have been undertaken in the United States, Australia, Canada and Indonesia in new mining facilities, with Korea's share of the equity capital ranging from 5 to 100 percent.

In 1982, a consortium of five Korean companies, P.T. Kideco Jaya Agung, signed 30-year contract to mine coal from East Kalimantan, Indonesia. Hanil Cement, Sam Chuk Consolidated Coal, Pan Ocean Bulk, Yong San Transportation, and Tai Woong, will dedicate 13.5 percent of production to the Korean government, and market the rest after the Government of Indonesia has exercised its option.

Hanil Cement, together with Malaysia's Tasek Cement and Siam Cement of Thailand, joined Indonesia's state-owned P.N. Tambang Butabara to mine coal in Borneo, starting in October 1983. Hanil has 13.5 percent equity, with the rest owned by Butabara.

In late 1983, the Korea Mining Promotion Corporation (KMPC), a state-owned company, announced that it had found huge bituminous coal deposits in the Pasir coal field, Kalimantan state, Indonesia. The coal reserves are estimated at 683 million metric tons with 6,250 kilocal/kg, and coal veins with a thickness of from two to 29 meters. The potential value of the coal deposits is estimated at 11.3 billion dollars on a current market price basis. Of the total, 240 million tons are considered to be recoverable with Korea's present technology.

KIRDC, a consortium of four Korean firms and the Indonesian state-run company, P.N. Tamband Batubara, started the coal exploration in April 1983, and located the deposits in six months, pouring about 3.2 million dollars into the project. The consortium will also invest some 70 million dollars in the mine during 1984-85. Mining will begin in 1986. The mine's annual production will be two million tons, of which 86.5 percent or 1.7 million tons, will be shipped to Korea, while the remaining 13.5 percent will be paid to Indonesia as royalties. The Korean side will bear all mine development costs, in return for 30-year mining rights. The coal will be used in Korea as fuel for electric power and raw material for cement plants.

The government of Korea continues to look to the United States as an excellent source of coal. The Koreans have made a number of coal mine investments in the U.S.A., and these projects are in various stages of development. Several are firm, while others are at the feasibility study stage, and are subject to change until the deal is actually consummated.

<u>Korean Investor</u>	<u>USA Affiliate</u>
Pohang Iron and Steel Samsung	100% (\$69 million) investment in Tanoma, Pa. bituminous mine Gilberton Coal Mining Co., Central, Pa.*
Samsung, Hyundai, Taesung Energy, Samchok Coal	Chugach Native Inc., Bering River, Alaska**
Golden Bell Trading Co. (Korea Explosives Group)	American Coal Co., Las Animas County, Colorado
Suneel Shipping	Usibelli Coal, Alaska
Jungdong	Smartvest Mine Corp., Arkansas

- \* Tanoma Coal began to ship met coal in December 1982. Mine is joint venture of Pohang and Barnes & Tucker, subsidiary of Alco Standard, with capacity of 650,000 short tons annually, all dedicated to Pohang.
  
- \*\* Bering Development, incorporated in Alaska, is a 50-50 joint venture, involving reserves of some 82 million tons of 14,000 Btu/lb., 0.8% to 1% sulfur coal. The Korean partners financed the initial stages, and the production costs are to be shared 50-50. Production will start in 1986, with excess production destined for the Pacific Rim.

## 5.3 COAL SPECIFICATIONS

### 5.3.1 Power Generation

Korea Electric Power Corporation (KEPCO)

San 2, Chungdam-Dong, Kangnam-ku

Seoul 134, Korea

Tel: (02) 562-9723

TLX: KELECCO K24287

Fuel Department :

Mr. Kim, Myunghwan, General Manager

Mr. Lee, Soo-Jin, Deputy General Manager

Mr. Shin, Jong-Gu, Assistant Manager

Mr. Lee, Heung-Soo, Project Geologist

Power Planning Department:

Mr. Ji, Pyung-San, Manager

Mr. Yoon, Nak-Joong, Assistant Manager

Mr. Kim, Woo Young, Assistant Manager

KEPCO prefers to deal directly with potential foreign suppliers and has established coal buying offices in Vancouver, British Columbia, Canada and Australia for this purpose. The KEPCO Office in Vancouver has responsibility for all KEPCO steam imports from North America:

Suite 310-601, West Cordova Street

VCR, B.C. V6B 1G1

Tel: (604) 682-9595/9596

Mr. Choo, Jung-Yub

Suite 6307, MIC Center

19-29, Martin Place, Sydney,

N.S.W., 2000 Australia

Tel: 411-5163, 389-7049

Between 1982 and 1986, KECO expects to import 64.7 million metric tons of steam coal for utility plants presently under construction, in the 11,500 BTU/lb range, with less than 1.0 percent total sulfur. Of the 64.7 million metric tons, 40.3 million metric tons have been contracted for by Canadian (30%) and Australian (70%) firms.

Early in 1982, KECO requested bids to supply its Honam #1 and #2 and Yosu #1 and #2 coal-fired units, to be supplanted by nuclear plants coming on stream in the 1990's. KECO would need 400,000 metric tons in 1984, rising to an estimated 2.2 million metric tons of sub-bituminous coal annually for the life of the plants. KECO evaluated April bids, from which New South Wales, China, and South Africa were excluded. KECO narrowed the number of potential suppliers to a short list of 18 firms including 8 from the United States.

KECO concluded its first contract for U.S. steam coal with Alaska's Suneel Alaska Corporation for 800,000 metric tons per year over a 15-year period. Australian competitors were skeptical about the contract, feeling that KECO used it to pressure three Australian bidders into concessionary pricing and terms. The three firms, Broken Hill Pty., CRA, Ltd., and CSR Ltd., faced Korean demands for the use of depressed price levels as the base for long-term prices. Excluded from the bidding were the South Africans, who has been depressing the spot prices in the Asian markets. U.S. suppliers were in a good position due to the devluation of the Australian dollar and high Canadian costs.

Coal Specifications for the Honam #1 and #2  
and Yosu #1 and #2 Thermal Power Plants

<u>PROXIMATE ANALYSIS (percent by weight):</u>	<u>Average</u>	<u>Maximum</u>
Moisture	27	28
Ash	8.9	10
Volatile matter	37	46
Sulfur	0.2	0.5
Calorific value (Kcal/kg)	min. 4,300	4,553
Calorific value (Btu/lb)	min. 7,740	8,195
Hardgrove Grindability Index	min. 29	32
Initial Deformation Temperature	1,100	
Sodium (Na <sub>2</sub> O) in ash	0.5	1.0

In late 1982, KECO procured 450,000 metric tons of coal annually needed for the Gojeong units:

Coal Specifications for Gojeong Thermal Power Plant

<u>PROXIMATE ANALYSIS (percent by weight):</u>	<u>Average</u>	<u>Maximum</u>	
Total moisture (as received)	10	15	
Moisture (air dry basis)	5	10	
Ash (air dry basis)	15	17	
Volatile matter	28	22-36	
Sulfur (dry ash free)	0.9	1.2	
Sulfur (air dry basis)	0.7	1.0	
Calorific value	Kcal/Kg	min. 6,000	6,400
(Gross, air dry basis)	Btu/lb	min. 10,800	11,520
Calorific value	Kcal/Kg	6,080	
(Gross as received basis)	Btu/lb	10,944	
Size	40mm	50mm	

Coal Specifications for Gojeong Thermal Power Plant  
(continued)

<u>ULTIMATE ANALYSIS (percent by weight):</u>	<u>Average</u>	<u>Maximum</u>
Fixed carbon (air dry basis)	52	50-60
Carbon (dry ash free)	min. 75	82.0
Nitrogen (dry ash free)	1.7	2.0
Hydrogen (dry ash free)	5.1	5.5
Oxygen (dry ash free)	10.3	20
	<u>Typical</u>	<u>Limit of</u>
	<u>Analysis</u>	<u>Range</u>
SiO <sub>2</sub>	57.4	36 - 93
Al <sub>2</sub> O <sub>3</sub>	29.2	12 - 40.74
Fe <sub>2</sub> O <sub>3</sub>	4.4	0.6 - 16.0
Na <sub>2</sub> O	0.3	0.04 - 1.5
K <sub>2</sub> O	0.7	0.10 - 2.5
TiO <sub>2</sub>	1.3	0.25 - 2.4
CaO	2.7	0.06 - 17.3
MgO	0.9	0.05 - 3.2
Others	3.1	
Initial Deformation Temperature (Reducing Atmosphere)	min. 1,250° C	

The possibility of using sub-bituminous coals from the Powder River Basin will occur prior to 1987 when the first of four presently planned power stations comes on-stream.



### 5.3.2 Cement Industry

Korean cement companies had traditionally been using coal in the 10,300-11,000 BTU/lb range, relying on Korea's trading companies for their supply of coal. One of the largest of these firms is the Ssangyong Trading Company, a sister company of Ssangyong Cement Co. Ssangyong Trading has the exclusive rights to import coal for Ssangyong Cement and also supplies to other cement companies as well.

#### Ssangyong Corporation

C.P.O. Box 409  
24-1, Jeo-dong, 2-K, Jung-ku  
Seoul 100, Korea  
Tel: 266-5116  
TLX: TWINDRA K24270, K28442, K24630  
Cable: TWINDRA Seoul  
Mr. Moon, Hyong Ho, Deputy Manager, Resources Import Section,  
Resources Import Department  
Mr. Kim, Ki-Ho, Director

#### Coal Specifications for Ssangyong Cement Company

<u>PROXIMATE ANALYSIS (percent by weight):</u>	<u>Average</u>	<u>Maximum</u>
Inherent moisture		2.0%
Total moisture (as received)		9.0%
Ash		18.0%
Volatile matter	25%	33.0%
Sulfur		1.5%
Calorific value	6,500 Kcal/Kg	
Calorific value (1:1.8)	11,700 Btu/Lb	
Calorific value (238.846:1)	27.2 Mj/Kg	
Hardgrove Grindability Index	36%	
Size (as received)	0-25mm (80%)	
Fixed Carbon	40%	
-----		
ASH FUSION	1,250° C	1,350° C

In late 1981, Ssangyong had added 100,000 mt/a to original 1981 250,000 mt/a contract with Crows Nest Resources. Option was 100,000 mt/a extra for 10 years. Shipments started March 1982 from Roberts Bank. Specs as received are 11,340 Btu/lb., 0.6% sulfur, 8% moisture, and 20% ash. Rest of shipments are washed coal at 11,800 Btu/lb., 0.5% sulfur, and 16% ash.

In 1982, David Minerals of Vancouver signed with Ssangyong to deliver 300,000 metric tons annually of steam coal over ten years, with an option to double the volume from the Willow Creek mine near Prince George, B.C.

Cement Industry (continued):

Hyundai Cement Co., Ltd.

Mr. Lee, Choon Hyuk, Director

Mr. Kim, K. H. , Assistant Manager

Koryo Cement Manufacturing Co., Ltd.

Mr. Lee, Jae-Kwon, Purchasing Manager

Tong Yang Cement Manufacturing Co., Ltd.

Mr. Hoh, Young-In, Executive Vice President

Mr. Roh, Yung in, Managing Director

Mr. Shin, Dong-Jin, Manager, Procurement Department

Mr. Kim, Sung-Hoon, Assistant Manager, Procurement Department

### 5.3.3 Steel Industry

Pohang Steel Co. (POSCO)

C.P.O. Box 3269

Kal Shin-kwan 160

Chung-ku, Sokong-dong, Seoul 100

Tel: 771-72, Ext. 240

TLX: K4474 (POSCO)

Mr. Han, Ydung Soo, General Manager, Raw Materials Department

Mr. Koh, C. H.

Mr. Lee

Mr. Lee, Kil-Bong

Mr. Yoo, Young Wook, Section Chief

POSCO has been very active in securing sources of supply by developing overseas mines. It is the 100% owner of the Tanoma bituminous mine in Pennsylvania and received the first shipment from this mine in Korea in the end of 1982. It also became a 20% joint venture partner with the R. W. Miller Co. in the \$245 million Mt. Thorley mine in Hunter Valley, Singleton, New South Wales. When this mine becomes fully operational in 1983 it is expected to supply 500,000 metric tons of washed coal annually to POSCO, 350,000 metric tons of coal annually to KEPCO and an additional 150,000 metric tons annually for industrial use in Korea. POSCO is also reportedly examining a joint venture in the Greenhills mine in Canada.

Typical specifications for coking coal purchased by Pohang Steel are:

#### Coal Specifications for Pohang Steel

<u>PROXIMATE ANALYSIS (percent by weight):</u>	<u>Average</u>	<u>Maximum</u>
Total moisture	7%	
Ash	7-8%	
Volatile matter	33-34%	
Sulfur	0.5%	
Calorific value (Kcal/kg)	7,200	
Calorific value (Btu/lb)	12,960	
Size		19mm
-----		
Rate of expansion	5 (Soft/Low Vol. Coking Coal)	9 (Hard/High Vol. Coking Coal)

#### 5.3.4 Anthracite

To minimize past irregularities in importing anthracite, the government requires that all anthracite be imported through the Daihan Coal Corporation (DHCC), a government corporation, which also operates about 30 percent of the domestic mining capacity. The Corporation does not itself undertake the actual business of importing. Its practice is to invite tenders annually from trading houses, and as does KECO for the 500,000 metric tons which it imports annually for blending with domestic production.

#### Daihan Coal Corporation

#1-888, Yoido-Dong, Yeongdungpo-ku  
Seoul 150, Korea  
Tel: 782-8544  
TLX: COALCO K23621  
Mr. Cha, Young Seung, General Manager, Department of Coal Import  
Mr. Kim, M. K.

#### Daihan Coal Corporation (U. S. Branch Office)

Suite 300, Plaza Office Center  
Route 73 and Fellowship Road  
Mt. Laurel, New Jersey 08054  
Tel: (609) 234-4021  
TLX: 845364 DHCC USA  
Mr. Kim, J. S.

#### Anthracite Specifications for the Daihan Coal Corporation

<u>PROXIMATE ANALYSIS (percent by weight):</u>	<u>Average</u>	<u>Maximum</u>
Total moisture		10%
Volatile matter (air dry basis)		8%
Sulfur		1%
Calorific value-air dry basis: (Kcal/kg)	5,500- 6,500	
Calorific value-air dry basis: (Btu/lb)	9,900-11,700	
Hardgrove Grindability Index	min. 60	
Size		20mm
ASH FUSION	min. 1,500° C	

DHCC initially contracted to import 3.6 million metric tons of anthracite in 1982. However, a combination of warmer than expected weather and successful conservation measures have resulted in slumping domestic demand. DHCC now estimates that it will require only one half of this amount in 1982 and has arranged to delay shipment of the remainder of this coal until 1983.

U.S. suppliers had contracted to supply DHCC with 1.2 million tons of anthracite in 1982, but 70 percent of this amount was not shipped until 1983. In late 1982, there were 10 million tons of anthracite stockpiled in Korea, of which at least 2.5 million tons was imported. Stocks increased until September 1982, when the heating season began. Although DHCC's imports fell to 571,000 metric tons in 1984, it still estimates future requirements at approximately 3-4 million metric tons annually.

Unlike 1981, 1982 contracts were concluded on f.o.b.t. basis, not c.i.f., and U.S. fines sold to South Korea will be required to have quality checks at the U.S. port. (South Korea accepts fines of maximum 1% sulfur.)

### 5.3.5 Trading Companies

The following firms act as import agents on behalf of end users primarily in the cement and steel industries. As a rule, they seek to represent suppliers desiring continuo local representation to the major end users of coal in Korea.

Bando Sangsa Co., Ltd.  
Lucky Bldg. 5th Floor  
Mr. Kim, Jong Kwan, Section Chief

Daewoo Corporation  
C.P.O. Box 2810  
Seoul 100, Korea  
Tel: 771-91, Ext. 255A  
TLX: DAEWOO K23341/5, K24295  
Cable: DAEWOO Seoul  
Mr. Kim, Tack-Hi, Director, Coal Division  
Mr. Lee, J. H., Project Deputy Manager & Legal Officer, Mineral Resources Department  
Mr. Yoon, Soo, Section Chief, Coal  
Mr. Koo, Ja-Il, Section Chief  
Mr. Kim, Jong-Kwan, Section Chief  
Mr. Kim, Jong-Young  
Mr. Kim, C. K., Project Manager  
Mr. Kim, C. Y.

Daewon Sa Co., Ltd.  
#50, Suh-dong, Chung-ku  
Seoul 100, Korea  
Tel: 777-5021/9  
Mr. Choi, Nam Sik, Manager, Material Business Department

Golden-Bell Trading Co., Ltd. (Korea Explosives Group)  
Mr. Yoon, Young-Sang, Manager  
Mr. Yang, Chang Il, Manager, Resources Department  
Mr. Huh, Yoon-Hoe, Section Chief, Resources Department

Hyosung Corporation  
17-7, 4-Ka, Namdaemoon-ro (Dongsung Building)  
Chung-Ku, Seoul 100, Korea  
Tel: 771-11 EXT. 712  
Mr. Shin, Young, Manager, Energies and Resources Department

Trading Companies (continued):

Hyundai Corporation

#485-1, Shinsa-dong, Kangnam-ku

Seoul 134, Korea

Tel: 562-4173

Mr. Choo, Kang-soo, Senior Manager, Project Development Department

---

Hyundai Trading Co.

178 Sejong-Ro, Chongro-ku

Mr. Chang, Nam-Soo, President

Mr. Kwon, Agustin B. S., Executive Director

Dr. Koh, Wong-In, Director

Mr. Cho, Dong Ill, Assistant Manager

Mr. Choi, Jai Suk, Manager

Jeyang Co., Ltd.

Mr. Kim, Hang Cho

Jung Woo Development Co.

Mr. Kang, I. K., Manager

Mr. Kang, Chul-Hyun, Assistant Manager

Mr. Chang, Yong-Ik, Director, Import- & Export

Mr. Cho, E. K., Assistant Manager

Kolon, Inc.

#45, Mukyo-dong, Chung-ku

Seoul 100, Korea

Tel: 771-57, Ext. 2202/4

Mr. Oh, Kun-hee, Manager, Materials and Resources Department

Mr. Lee, Soo Yul, Manager

Mr. Kwon, O. Jin

Mr. Oh, Soo-Kun

Kukje Corporation

Mr. Kim, S. J. , General Manager

Mr. Kim, K. I. , Assistant Manager

Kyonghwa Trading Co. (Kyong Hwa Mulsan)

Mr. Lee, T. Y. , President

Mr. Bang, Kyong Won, Advisor

Mr. Lee, W. S.

Trading Companies (continued):

Pan Ocean Bulk Carriers Ltd.  
Hanyang Investment Building  
9-10, 2-KA, Ulchi-ro, Chung-Ku  
Seoul 100, Korea  
Tel: 776-6262  
Mr. Hahn, Sang Yeon, President  
Mr. Chung, Hyung Min, Assistant Manager  
Mr. Lee, Hee-Min, Section Chief

Philipp Brothers Far East Inc. (Conder Trading Ltd. agent)  
Mr. John S. Faul, Vice-President  
Mr. Lee, Hee Nam

Samhang Corporation  
C.P.O. Box 4902  
Mr. Hong, Shin-Jong

Sammn Corporation  
Mr. Lee, H. T. Manager

Samsung Corporation (Sam Sung Mulsan)  
#250, 2-KA, Taepyung-ro, Chung-ku  
Sam Sung Main Bldg. 2106 Fl.  
C. P. O. Box 1144  
Seoul 100, Korea  
Tel: 771-33 Ext. 2251  
TLX: STARS K23657  
Mr. Oh, Byung Choi, Director, Resource Development Department  
Mr. Kim, Chung-Woong, Manager  
Mr. Kim, Joo-Ho, Assistant Manager  
Mr. Park, Moon-Shik, General Manager, Coal Department  
Mr. Park, Pio Y., Consultant

Suneel Shipping Co., Ltd.  
C.P.O. Box 4532  
Seoul 100, Korea  
Tel: (28) 7261-5  
TLX: K28339  
Cable: Suneel Seoul  
Mr. Kim, Tae II, President  
Mr. Lee, Moon-Hong, Vice President  
Mr. Lee, K. W., Director  
Mr. Kuen, S. J.



Trading Companies (continued):

Woodward & Dickerson Far East Ltd.

Mr. Jack Allison Dodds, Managing Director

Mr. Kim, S. B., Manager, Industrial Engineering Department

Young & Hoon Corporation

Mr. Hwang, Young-Sop, President

Mr. Kim, Chang-Yol, Manager

### 5.3.6 Coal Mining & Investment Companies

#### Bering Development Corporation

Mr. Kim, Chung-Woong, Treasurer, Project Manager  
Mr. Park, Pio Yoon-Jae, Field Project Manager

#### Daesung Mining Development Co., Ltd.

(Daesung Consolidated Coal Mining Co., Ltd.)

Mr. Kim, Young-June, Director  
Mr. Park, Myung -Keun, Senior Geologist & Manager, Overseas  
Business Department  
Mr. Ro, Kyung-Ho, Manager  
Mr. Lee, Chung-Joo, Manager  
Mr. Park, S.Y., Mining Engineer & Manager

#### Ham Tae Mining Co.

Mr. Han, D. I.

#### Jim Heung Developmejt Co., Ltd.

Mr. Boniface S. Kwon, Managing Director

#### Korea Alaska Development Corporation

Mr. Park, Pio Y., Senior Manager

#### Korea Energy Management Corporation (KEMCO)

Mr. Kwon, Oh-Soo, Vice President  
Mr. Son, Marn-Who, Manager  
Mr. Shion, Soo-Sup, Chief  
Mr. Kang, Shin-Kyu, Section Chief

#### Korea Mining Promotion Corporation

Mr. Lee, Ki Sung, Director  
Mr. Kim, Sung Soo, Chief Geologist & Director  
Mr. Kim, Kyu Hyun, Mining Engineer  
Mr. Lee, J. S.

#### Korea Petroleum Development Corporation

Mr. Jeong, Kichang, General Manager

#### Samchock Consolidated Coal Mining Corporation

Mr. Kim S. C.

#### Young Poong Mining Co.

Mr. Bak, Sok-Ku, President

Boiler Manufacturers

Dae Lim Boiler Manufacturer  
Mr. Chung, Nak-Sul, Manager

Dae Yul Boiler Manufacturer  
Mr. Shin, Choon-Sik, President  
Mr. Chi, Young-II, Director

Dae Chang Sung Boiler  
Mr. Yang, Kyung-Suk, dorector

Daesung Industrial Co., Ltd.  
Mr. Oh, M. H.

Industrial Users

Dong Jin Industrial Company, Ltd.  
Mr. Ahn, Dae-Ryun, President

Na Kyog & Co., Inm (and Hae Sung Industrial Co., Ltd.)  
Mr. Yoo, Kie Young, Manager

Samchully Industrial Co., Ltd.  
Mr. Lee, Kyo-Seoun, Managing Director

A Selected Bibliography

- Argonne National Laboratory. Republic of Korea/United States Cooperative Energy Assessment, Main Report Vol. I. Argonne, IL: Argonne National Laboratory, September, 1981.
- Asian Development Bank. Asian Energy Problems. Singapore, Kuala Lumpur, & Hong Kong: Federal Publications, 1982.
- Australia Department of Trade and Resources. Coal Demand Study (Draft). Canberra, Australia: June 1981
- Dunkerley, Joy et al. Discussion paper: "Future Energy Consumption in India, Brazil, Republic of Korea and Mexico." Resources for the Future, March 1982.
- Edwards, Anthony. "Oil Imports of Developing Countries-- Forecast to 1995", The Economist Intelligence Unit, July 1982.
- Gaskin, Prof. Maxwell. Organisation and Structure of the Pacific Steam Coal Trade. (Report by Economic Assessment Service, International Energy Agency). London: EAS, October, 1983.
- Greene, P. Robert and Gallagher, J. Michael, eds. Future Coal Prospects: Country and Regional Assessments. Cambridge, Massachusetts: Ballinger Publishing Company, 1980.
- Jack Faucett Associates. Effect of U.S. Coal Exports on Domestic Energy Growth and on U.S. National Security. (Report to the Office of Fossil Energy, U.S. Department of Energy, Washington, D.C.). Chevy Chase, MD: January, 1984.
- Kato, I. Environmental Policy and Law in Asia and the West Pacific Region. Tokyo: Japan Center for Human Environmental Problems, 1981.
- Kim, K.W. "Industrial Re-structuring in an Open Economy: The Case of Korea." (Paper presented at the "Conference on Industrial Restructuring", sponsored by UNIDO and Government of Portugal. Lisbon, Portugal: Korea International Economic Institute, October 1980.

- Korea Development Institute. Long Term Prospect for Economic and Social Development 1977-91. Seoul, Korea: 1978.
- Korean Energy Research Institute. "Energy Demand Projection and Energy Mix Scenario of Korea." Seoul, Korea: Mimco, April 1980.
- Levine, E.D. Republic of Korea Environmental Assessment Baseline Data. Argonne, IL: Argonne National Laboratory, 1980.
- Morales-Siddayao, Corazon. Asia's Energy Security: The Role of Demand and Supply Restructuring. Honolulu, Hawaii: Resource Systems Institute, East-West Center, September, 1982.
- PACE Company Consultants and Engineers, Inc. Competition in World Coal Export Markets: Issues and Propects for the 1980's and Beyond. Denver, Colorado: 1982
- Republic of Korea Economic Planning Board. Summary Draft of the Fifth Five-Year Economic and Social Development Plan 1982-86. Seoul, Korea: August 1981, September 1981.
- Tobin, Richard. The Increased Use of Coal in the Asia-Pacific Region: Achieving Energy and Environmental Goals. Honolulu, Hawaii: East-West Environment and Policy Institute, East-West Center, 1981
- World Energy Industry. The Energy Decade, 1970-1980. Cambridge, Mass.: Ballinger Publishing Company, 1982.

WILSON J. BROWNING, JR.

127 BANK STREET  
NORFOLK, VIRGINIA 23510

May 13, 1983

BIOGRAPHY OF WILSON J. BROWNING, JR.

MR. BROWNING WAS BORN IN NORFOLK, VIRGINIA IN 1942. HE GRADUATED FROM NORFOLK ACADEMY, JOHNS HOPKINS UNIVERSITY WITH A BA IN ECONOMICS, AND UNIVERSITY OF VIRGINIA WITH AN MBA. HE ENTERED THE NAVY FOR THREE YEARS, RECEIVING AN OFFICIAL LETTER OF COMMENDATION FOR HIS WORK WITHIN THE NAVAL LOGISTICS PROGRAM. IN 1969, HE STARTED WORKING FOR W. J. BROWNING CO., INC., AND BECAME CHIEF EXECUTIVE AND PRESIDENT IN 1970. FROM 1970 TO PRESENT, IN ADDITION TO HIS CORPORATE RESPONSIBILITIES, HE HAS BEEN ON THE BOARDS OF THE HAMPTON ROADS MARITIME ASSOCIATION, THE NORFOLK CHAMBER OF COMMERCE, THE NORFOLK PORT AND INDUSTRIAL AUTHORITY, VIRGINIA NATIONAL BANK, AND THE VIRGINIA OPERA ASSOCIATION. HE RESIDES IN NORFOLK, AND IS MARRIED TO THE FORMER JANE PATTON OF NEW YORK CITY.



An **IC Industries** Company

**Illinois Central  
Gulf Railroad**  
Two Illinois Center  
233 North Michigan Avenue  
Chicago, IL 60601 - 5799  
(312) 565 1600

January 17, 1984

Mr. Erast Borissoff  
Conference Co-Chairman  
Coal Export Staff  
United States Department  
of Commerce  
International Trade Administration  
Washington, D. C. 20230

Dear Erast:

Thank you for the material you sent me regarding the Export Trading Company Act of 1982. I've reviewed them and am in the process of drafting up my speech now. I hope to have it to you by the 25th. In the meantime, the following is a brief biographical sketch of myself:

Mr. Reisinger is director of coal pricing for Illinois Central Gulf Railroad. In this capacity, he is responsible for proposing new coal rates, adjusting existing rates and negotiating short-and-long-term coal contracts involving both domestic and export shipments. Mr. Reisinger has been with the Illinois Central Gulf Railroad since 1972 and has held various positions in the marketing department. These positions include salesman, regional intermodal coordinator, market development manager and, most recently, assistant director of marketing services. Mr. Reisinger holds a B.S.B.A. degree in marketing from Xavier University, Cincinnati, Ohio.

Please give me a call if you see a problem with the 25th.

Best regards,

A handwritten signature in cursive script that reads 'Tom'.

T. A. Reisinger  
Director Coal Pricing

BIOGRAPHICAL INFORMATION ON

ELEANOR ROBERTS LEWIS

Eleanor Roberts Lewis is Assistant General Counsel for Export Trading Companies at the Commerce Department. In that position she is the senior staff attorney responsible for the Commerce Department's implementation of the Export Trading Company Act of 1982. Ms. Lewis came into the job after three years as Assistant General Counsel for Finance at the U.S. Department of Housing and Urban Development. Before that she was associated with the Washington, D.C. law firm of Brownstein Zeidman and Schomer. Ms. Lewis has a B.A. from Wellesley College, an M.A. from Harvard University, and <sup>a</sup>J.D. from Georgetown University.



WILLIAM H. MORRIS, JR.  
VICE PRESIDENT - INTERNATIONAL MARKETING  
P. & C. BITUMINOUS COAL COMPANY

William H. Morris, Jr., joined P. & C. Bituminous Coal Company in April 1983 following two years as Assistant Secretary for Trade Development at the U.S. Department of Commerce. P. & C. is a leading coal producer, broker and exporter headquartered in Brentwood, Tennessee.

At the Department of Commerce Mr. Morris was responsible for the International Trade Administration's export promotion programs, export policies dealing with specific industrial sectors, and the collection, analysis and distribution of trade information. He also headed the U.S. delegation to the Bureau of International Expositions, the Paris-based international coordinating organization for world's fairs, and served as vice president of that body.

Mr. Morris played a major role in securing passage of the Export Trading Company Act of 1982 and chaired the Commerce Task Force responsible for the implementation and promotion of that important new trade legislation.

He also was largely responsible for the Reagan Administration's establishing the first national coal export policy in July of 1981 and was appointed chairman of the Administration Coal Interagency Working Group, the interdepartmental body created to carry out the policy.

In that role, Mr. Morris made a major effort to promote U.S. coal as the most secure and reliable alternative energy source available to the world. He led two major coal export trade missions, one to Europe and one to the Far East.

Prior to serving in the Administration, Mr. Morris played a major role in the national Reagan-Bush Campaign and was president of William Morris and Associates of Nashville, Tennessee, consultants on business management, government relations and international marketing.

Earlier, as Deputy Commissioner of Economic and Community Development for the State of Tennessee, he helped to open world markets for state products and to bring foreign investment into Tennessee, participating in the negotiations to bring a \$700 million Japanese truck assembly plant to the state.

Mr. Morris began his business career in 1950 in the industrial distribution and wholesale hardware field in Jackson, Tennessee, rising to president and chief executive officer of his firm.

He is a native of Tennessee and attended the University of Tennessee. He is married and has two children.

THOMAS V. FALKIE

Present Position:

President, Berwind Natural Resources Company  
Centre Square West, 1500 Market Street  
Philadelphia, PA 19102  
215-563-2800

Personal:

Home Address: 347 Echo Valley Lane, Newtown Square, PA 19073  
Telephone: 215-356-2639  
Born September 5, 1934  
Married, 5 children

Education:

1956, B.S.; 1958, M.S.; 1961, Ph.D., Mining Engineering, Pennsylvania State University

Employment History:

1977 - Present - President, Berwind Natural Resources Company

1974-77 - Director, Bureau of Mines, United States Department of the Interior.

1969-74 - Head, Mineral Engineering Dept.; Chairman, Inter-disciplinary program in Mineral Engineering Management; and Professor of Mining Engineering, Penn State University.

1961-69 - Operations Research Engineer; Chief of Mineral Operations Planning; Assistant Manager of Special Exploration and Development Projects; Minerals & Planning and Production Control Manager; and Production Superintendent-International Minerals & Chemical Corp., Skokie, Ill. and Bartow, Florida.

1956-61 - U.S. Steel Foundation Fellow; International Minerals & Chemical Corp. Fellow; and Research Assistant - Mining Engineering Dept., Penn State University.

Listings:

American Men and Women of Science; Who's Who in Engineering; Who's Who in World Oil and Gas; Who's Who in Technology Today.

Honoraries:

Tau Beta Pi; Sigma Gamma Epsilon; Phi Kappa Phi

Publications:

Numerous publications and speeches on mining engineering, mineral engineering management, mining engineering economics, management science applications in mining, environmental control in mining. mineral engineering education, coal mining engineering R&D, national coal policy, national mineral policy, mineral resource management, including chapters in Surface Mining, Case Studies of Surface Mining.

Thomas V. Falkie

Selected Professional Activities:

Bituminous Coal Research Board of Directors 1982-Present  
 National Coal Association Board of Directors 1980-Present  
 Chairman, Philadelphia Section AIME 1980/81  
 Board of Directors, Keystone Coal Association 1980-Present  
 Distinguished Member Society of Mining Engineers (SME) of the  
 American Institute of Mining, Metallurgical and Petroleum Engineers (AIME)  
 Vice President AIME 1977-79  
 Director AIME 1976-79 (M & E Division Representative)  
 Director SME 1971-75 and 1977-79 (M & E Division Representative)  
 Henry Krumb Lecturer 1977-78 (Distinguished Lecturer of SME/AIME)  
 Chairman, Mining & Exploration Division of SME 1974-75  
 Mining & Metallurgical Society of America  
 American Institute of Industrial Engineers 1962-1976  
 Research Coordination Panel, Gas Research Institute 1977-78  
 Consultant to United Nations in Mining Environmental Problems,  
 Mining Economics and Mining Management 1971-73  
 Neutral Chairman (National Arbitrator) of the Joint Industry  
 Health & Safety Committee of the United Mine Workers and  
 Bituminous Coal Operators Association 1973  
 Chairman, Coal Task Force, Project Independence Study,  
 U.S. Government 1974  
 Chairman, Interagency Task Force on Materials R&D Inventory,  
 Committee on Materials (COMAT), Federal Council on Science  
 and Technology 1975/76  
 President, Joseph A. Holmes Safety Association 1974-77  
 U.S. Delegate to OECD Advisory Conference on Tunneling 1970  
 Adjunct Professor of Industrial Engineering - University of  
 Florida/University of South Florida 1966

AIME/SME Activities:

NOTE: Chronological list of AIME/SME Activities is attached.

September, 1982

## BIOGRAPHICAL INFORMATION

Name Ernst A. Upmeyer, III

Address: 1333 Indian Rocks Road  
Belleair, Florida 33516 USA

Born: March 5, 1937 - New Orleans, Louisiana

Marital Status: Married: Wife - Gene  
Daughters: Kerstin, 14  
Karin, 11

Education: Local Schools - Clearwater, Florida  
AB, Duke University - Durham, North Carolina, 1959  
MBA, University of South Florida - Tampa, Florida, 1967

Activities: Lecturer on Management Development and Sales Training  
for the American Management Association both in the  
United States and abroad.

Member, Board of Directors and Executive Committee  
Mississippi Valley Coal Exporters Council (MVCEC).

Speaker at numerous national meetings on coal marketing  
and transportation, including testimony before the U.S. Senate  
and House of Representatives Subcommittees.

Sports and  
Hobbies: Painting, Sailing, Tennis, Jogging

Employment  
History: Electric Fuels Corporation  
**Vice President Electric Fuels Corporation.** Fuel and  
transportation subsidiary of Florida Progress Corporation.  
Responsible for corporate, subsidiary, and joint venture  
operations, planning, and special projects.

Florida Power Corporation  
**Director of Consumer Services.** Responsible for coordinating  
customer service and energy conservation programs with area  
vice president and division managers; reported to Vice President  
of Customer Operations.

**Division Marketing Manager.** Responsible for 35-member market-  
ing group in Central Florida, reported to Area Vice President.

**Corporate Systems Analyst.** Temporary assignment in System  
Research and Development responsible for support work on  
corporate model (computer simulation), reported to Director  
of Corporate Planning.

Ernst A. Upmeyer, III  
Biographical Information Continued  
Page 2

Employment  
History:

Florida Power Corporation

**Manpower Development Manager.** Responsible for all corporate training and development; managed five professionals in areas of manager development, sales training, production training, technical training and JOBS program, and librarian; reported to Director of Personnel.

**Manager, Training Specialist.** Newly created position; developed, wrote, and conducted three week-long management development program "Professional Management Seminar;" developed, wrote, and conducted one week-long program "Management for Foremen," plus several other short programs; reported to Manpower Development Manager.

**Various Marketing Positions.**

United States Navy

**Explosive Ordinance Disposal and Diving Officer.** Attached to EOD Unit #2, Charleston, South Carolina.