

XII-1

ENERGY CONSERVATION IN COAL CONVERSION

Basis for Fuel and Utility Costs

R. Kramek

Carnegie-Mellon University
Pittsburgh, PA 15213

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DISCUSSION OF TABLE 1

The reports in this study use a common basis for fuel and utility costs presented in Table 1. The costs for electricity, natural gas, distillate fuel oil, residual fuel oil, LPG, and coal have been excerpted from the FEA energy price projections¹, and are for FEA region V, which encompasses the design location of the Oil/Gas Complex designed by Ralph M. Parsons Co. The costs for cooling water and steam are averaged figures quoted in reference 2. The distillate fuels in Table 1 comprise light and middle fuel oil derivatives such as kerosene, and diesel fuel, and include No's 1,2,3,4, fuel oil. The residual fuels are No's 5,6, Bunker C and all other petroleum fuels which have a fifty per cent boiling point over 700°F. All costs are in 1977 dollars.

TABLE 1

ENERGY COSTS IN 1977 DOLLARS

<u>Fuel</u>	<u>1978</u>	<u>1981</u>	<u>1984</u>	<u>1987</u>	<u>1990</u>
Electricity \$/kwhr	.0245	.0271	.03	.0327	.0353
Natural Gas \$/MMBtu	1.45	1.77	2.19	2.60	3.01
Distillate Fuel Oil, \$/MMBtu	2.94	3.12	3.27	3.42	3.57
Residual Fuel Oil, \$/MMBtu	2.73	2.94	2.96	3.07	3.23
LPG, \$/MMBtu	2.96	3.36	3.55	3.70	3.84
Coal, \$/MMBtu	1.30	1.54	1.57	1.61	1.64
Steam, \$/1000 lb					
High Pressure Superheated	3.60	--	--	--	--
Medium Pressure Saturated	3.10	--	--	--	--
Low Pressure Saturated	2.50	--	--	--	--
Cooling Water, ¢/1000 gal.	4.0	--	--	--	--

REFERENCES

1. "Energy Users Report Reference File", Section 41, Published by the Bureau of National Affairs, Inc., Wash., D.C. 1978.
2. Considine, D. M., Editor, Energy Technology Handbook, McGraw Hill Book Co., New York, 1977.