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USAID Eastern Europe Regional Energy Efficiency Project

Regulatory Reform And Energy Sector Restructuring Contract

TRANSLATED EXCERPTS FROM THE
RYBNIK POWER PLANT
PRE-PRIVATIZATION REPORTS
Poland

June 1997

Prepared for

United States Agency for International Development

Project Office - ENI/EUR

Project No 180-0030

Under Contract

**Regulatory Reform And Energy Sector Restructuring In Central And
Eastern Europe And The Baltics**

Contract No - DHR-0030-C-00-5016-00

22934-008-0005

Bechtel International Consulting Group



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Bechtel

8400 Westpark Drive, Suite 501
McLean, VA 22102-3522
(703) 448-3900

June 11, 1997

Mr Gordon Weynand
U.S. Agency for International Development
Contracting Officer's Technical Representative
320 21st Street, NW
Room 4440 NS
Washington, DC 20523

Subject: Regional Energy Efficiency Project - Project No 180-0030
Regulatory Reform and Energy Sector Restructuring in Central and Eastern
Europe and the Baltics Contract
Contract No. DHR-C-00-95-00016
Excerpts from the Rybnik Privatization Preparation Reports

Dear Gordon:

Enclosed for your information and review, are translated excerpts from the Rybnik Privatization Preparation Reports completed under the Bechtel Polish Energy Sector Restructuring Project by Arthur Andersen - Warsaw. These excerpts were identified as a priority for translation by Mr. Rashid Benmassoud of the World Bank at recent meetings in Poland

Please also be advised that these translated papers were not furnished by Arthur Andersen, but were done by another translator in the interests of cost savings and expediency. Should you have any questions, please do not hesitate to contact me in Warsaw. I can be reached during working hours at (48-22) 621-09 17 or via e-mail at cturner@bechtel.com

Yours very truly,



Christopher D Turner
Project Manager - Poland

Enclosures

cc Maryla Jakubowicz, USAID - Warsaw
Rashid Benmassoud, World Bank
Howard Menaker, Bechtel



Bechtel International, Inc.

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Poland

TRANSLATED EXCERPTS FROM THE RYBNIK POWER PLANT PRE- PRIVATIZATION REPORTS

JUNE 1997

Prepared for
United States Agency for International Development
Bureau for Europe and the NIS
Office of Energy and Infrastructure

Under Contract
Contract No. DHR-C-00-95-00016
Regional Energy Efficiency Project
Project No 180-0030

Following our talks with Rashid Benmassoud we are enclosing English translations of these parts of the reports which have been marked as translation first priority.

Here is a specification of the files.

- | | |
|---|--------------|
| 1. Initial Marketing Analysis (14 pages) | rybnik3.doc |
| 2. Initial Organizational Analysis (13 pages) | rybnik5.doc |
| 3. a part of the Legal Analysis (17 pages).
Contracts within the Framework of Statutory Activities | ryb_agre.doc |
| 4 Initial Financial Analysis (48 pages) | rybnik7.doc |
| 5 Illustrative Initial Valuation | ryb_val.doc |
| 6 Illustrative Initial Valuation (tables) | rybeng.xls |

3. Initial Marketing Analysis

3.1. Electricity Generation Market

3.1.1 Structure of the Energy Sector

The Polish energy sector is comprised by the generation, transmission and distribution sub-sectors. It is expected that a fourth sector dealing in electricity supply services for final consumers will be created in the near future as a result of changes in the energy law and as a consequence of the policy for structural change as effected by the Ministry of Industry and Trade. Table 3.1 illustrates basic statistical data for the sector.

Table 3.1 Electricity Balance

			1993	1994	1995	30.06.19 96
Inflows			139.42	139.91	143.33	76.147
			4	4	7	
Total	Output,	GWh	133 82	135 35	138.98	73.060
Including			4	1	1	
Public	Utility	GWh	125.29	126 70	130.27	68 491
Electricity	Generation		9	2	0	
Plants						
Independent		GWh	no data	214	367	451
Electricity	Generation					
Plants						
Industrial	Electricity	GWh	8.525	8.435	8 344	4.118
Generation	Plants					
Import		GWh	5 600	4.563	4 356	3.087
Outflows			139.42	139.91	143.33	76.147
			4	4	7	
Domestic	Usage	GWh	131 41	132.67	136.18	71.689
			3	2	0	
Losses and	Balance	GWh	17 446	17 496	18 327	9 564
Differences						
Export		GWh	8 011	7 242	7 157	4.458

Source Energy Computer Center

Table 3.2 Sales in the Energy Sector

		1993	1994	1995	30.06.19 96
Distribution	tys.	6.702 8	8.999.04	11.431.179	6.794.76
Sector	PLN	52	6		5
Generation	tys.	4.560.7	6.752.76	8.308.213	4.783.49
Sector	PLN	53	2		7
Transmission	tys.	4.869.4	7 118 76	8 736.728	6.099.78
	PLN	18	1		6
Annual	Mean				
Rate of Inflation	%	41,1%	33,6%	25,3%	

Source Energy Computer Center

The generation sub-sector is made up by public utility electricity generation plants. These electricity generation plants are public utility economic units, that sell electricity to the PSE grid. In addition to them and from outside the electric energy sector, industrial electricity generation plants and co-generators of heat and electricity also generate electricity. Independent generators, which occupy a marginal role in output sell electricity according to individually agreed upon contracts. Industrial electricity generation plants are component parts of industrial establishments; they primarily generate electricity for their internal needs. Their share in output is not very large.

The transmission of electricity from generators to distribution companies is the area in which the Polish Power Grid S.A. (PSE S.A.) The transmission grid, which is owned by PSE, is composed of high voltage lines with a voltage of 750kV, 400kV and 220kV and system stations. The Polish transmission grid is linked to the electric energy systems of Western Europe's UCPTE, Eastern and Central Europe's CENTREL and the IPS system used by the countries of the former Soviet Union, which enables the import and export of electricity.

The distribution sub-sector deals with the distribution and delivery of electricity to final consumers. 33 distribution companies offer these services throughout the nation. The distribution companies are linked to the PSE grid, which is the main source of electricity supply. The distribution and transmission of electricity are a natural monopoly caused by the necessity of maintaining a capital-intensive transmission and distribution grid.

3.1.2 Electric Generation Plants

The installed capacity of Poland's energy sector at the end of 1995 was 33.150 MW. The entire power sold to PSE reached 22 582 MW last year, in other words, approximately 68% of installed capacity, which illustrates the reserves in the Polish electric energy system. Generators may be divided into several groups. The main pillars of the generation

system are constituted by 17 large system electricity generation plants, which have a total installed capacity of 21 838 MW, including hard coal-powered facilities of 12.780 MW and brown coal-powered facilities of 9.058 MW.

Table 3.3 Electricity Supplied to the Grid [GWh]

	1993	1994	1995
Brown Coal System EG Plants			47 192
Hard Coal System EG Plants			51 110
Collector and Block Co-Generation Heat and Electricity Plants			5 383
Co-Generation Heat and Electricity Plants			12 082
Hydro-Electric Power Plants			3.751
Total	110.662	112.352	119.518
%			
Brown Coal System EG Plants			39.5%
Hard Coal System EG Plants			42.8%
Collector and Block Co-Generation Heat and Electricity Plants			4.5%
Co-Generation Heat and Electricity Plants			10.1%
Hydro-Electric Power Plants			3.1%
Total			100,0%

Source Energy Computer Center

Table 3.4 A Ranking List of Electricity Generation Plants in Poland

	1993	1994	1995
Criterion. Installed Capacity [MW]			
Be ³ chatów	4 320	4.320	4.320
PAK	2.783	2.728	2.783
El. Kozienice	2.600	2 600	2.600
El. Turów	2 000	2 000	2.000
Zesp. El. Dolna Odra	1 768	1.768	1.768
El. Rybnik	1.600	1.600	1.600
Criterion: Electricity to Grid [GWh]			
Be ³ chatów	25.288	24.885	25.454
PAK	13 301	12.670	12 939

El Turów	10.251	10 113	8 788
El Rybnik	7.734	7 861	8 939
El Kozienice	6.746	6 442	7 159
Zep El. Dolna Odra	6.381	6 609	6 922

Source Energy Computer Center

On account of the sources of raw materials available in Poland the dominant fuel used in electric generation plants in Poland are hard and brown coal. The largest brown coal-fired electricity generation plant in Europe operates in Poland, viz. Bechatów; it is also the largest electricity generation plant in Poland.

The cost of generating electricity at Bechatów is much lower than at the Rybnik facility Table 3.5. depicts the basic data concerning output costs.

Table 3.5 Structure of Costs for Generating Electricity

	1993	1994	1995
Unit Variable Costs per 1 MWh of Net Electricity [PLN/MWh]			
Brown coal-fired EG Plants	19,38	27,18	33,56
Hard coal-fired EG Plants	23,84	37,76	46,03
Total	21,92	33,34	40,23
Fixed Unit Cost per 1 MW of Dispatchable Capacity [PLN/MW/m-c]			
Brown coal-fired EG Plants	5.213	7.379	10.575
Hard coal-fired EG Plants	6.832	9867	9.825
Total	6.036	8.620	10.186
Unit Cost of Electricity [PLN/MWh]			
Brown coal-fired EG Plants	28,06	39,78	51,56
Hard coal-fired EG Plants	40,16	61,37	72,05
Total	34,50	51,45	64,31

Source Energy Computer Center

The State Treasury is the owner of all the companies in the electric energy sector. The State Treasury is represented by the Minister of Industry and Trade (MIT) in all companies in the sector with the exception of *Łég* in Cracow and *Opole S A* in Opole, in which the State Treasury is represented by the Minister of Privatization.

Independent and industrial electricity generation plants have a varied ownership structure

3 1 3 Rules for Setting Prices

Energy and electricity capacity prices in Poland are official prices set by the Minister of Industry and Trade. The theoretical bases for calculating these prices are set forth in the „Principles of Wholesale Trade in Electricity in the National Electric Energy System in 1996”.

The principles for 1996 are based on the following commercial solutions:

- 1 all EG plants have four-year medium-term contracts or long-term contracts executed with PSE. In 1996 these contracts include 70% to 95% of projected electricity output, where the amount of contracted energy depends upon the cost of generating energy. This aims to promote the least expensive generators,
- 2 the rest of the needed output is purchased in spot transactions,
- 3 long-term contracts are executed with generators performing larger investment projects.

The energy price is calculated in such a way so as to cover the variable costs of electricity output. The price of capacity should cover the fixed costs of EG plants. These principles do not apply to long-term contracts for which prices are set on the basis of individual negotiations, while the price of capacity covers planned investment projects in addition to fixed costs.

The generators providing system services for the electric energy system receive additional receivables depending upon the level of regulation in blocks and the installed systems of regulation. Moreover, starting in 1995 the generators receive additional revenues on refunding costs of above norm inventories and on export bonuses. The revenues on refunding costs of above norm inventories constitute the equivalent value of the cost for maintaining strategic inventories i.e. above the normative amount for a given electric generation plant. Export bonuses depend on the amount of energy sent abroad through PSE. Revenues by virtue of the above is divided using a given proportion between generators and PSE.

Table 3.6 Sales Prices on Electricity

	1993	1994	1995
Average Price of Electricity Sold to the Entire Sector [PLN/MWh]	25,70	38,05	45,16
Average Price of Electricity Sold for Hard Coal-fired Electric Generation Plants	28,70	44,72	52,05
Average Price of Electricity Sold for Brown Coal-fired Electric Generation Plants	21,90	29,12	34,40

Average Fee for Capacity to the Whole Sector [PLN/MW/m-c]	7.279	9.981	11.523
Average Fee for Capacity for Hard Coal-fired Electric Generation Plants	7 990	9.872	10.016
Average Fee for Capacity for Brown Coal-fired Electric Generation Plants	6 462	11,192	16.412

Table 3.6 c.d.

Average Single-Tariff Price for Whole Sector [PLN/MWh]	41,30	60,04	71,23
Average Single-Tariff Price for Hard Coal-fired EG Plants	48,40	69,34	78,57
Average Single-Tariff Price for Brown Coal-fired EG Plants	32,70	48,27	62,34

3.2 Rybnik Electric Generation Plant

3.2.1 The Sale of Electricity

Basic data describing Rybnik EGP's standing in comparison with the whole sector are set out in Table 3.7.

Table 3.7. The Rybnik EGP in Comparison with the Whole Sector in 1995

	1993	1994	1995
Installed Capacity [MW]	1.600	1.600	1.600
Electricity to Grid [GWh]	7.734	7.861	8.939
% Energy Sector			
Installed Capacity	5,4%	5,3%	5,3%
Electricity to Grid [GWh]	6,8%	6,8%	6,7%
Spot in Ranking List of EG Plants by			
Installed Capacity	6	6	6
Net Electricity Output	4	4	4

Source: Energy Computer Center

The amount of capacity and energy sold by the Rybnik facility place it among the top electricity generation plants in Poland. In terms of electricity sales EGP Rybnik is the largest hard coal-powered facility and the fourth largest overall in Poland. In terms of capacity sold it is the third largest hard coal-powered facility and the sixth largest overall in Poland. The modernization program conducted last year in the fourth block increased EGP Rybnik's attainable capacity to 1 625 MW.

Table 3.8 Structure of Sales at EGP Rybnik from 1993 to the First Half of 1996

	1993	1994	1995	1st Half 1996
Electricity	65,04%	72,52%	70,48%	68,85%

Capacity and System Services	33,49%	25,88%	25,97%	29,99%
Thermal Energy	0,09%	0,08%	0,09%	0,09%
Other Sales	1,38%	1,52%	3,46%	1,07%

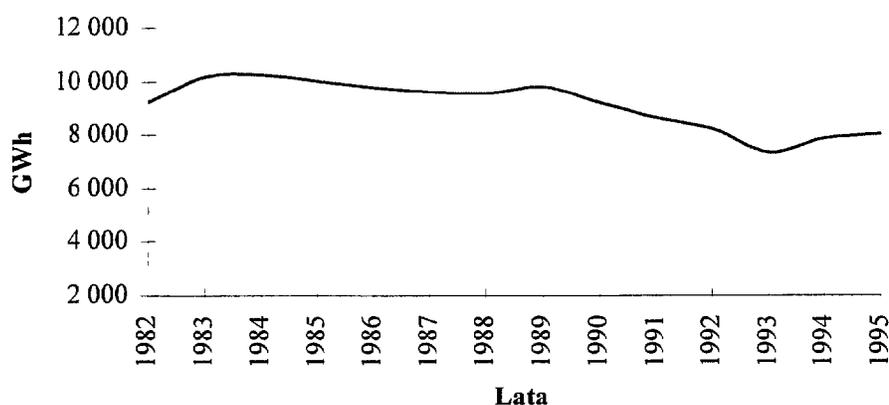
The primary product sold by EGP is electricity. The percentage share of electricity sales in the company's total sales in the first half of 1996 was 98.84%

This electricity generation plant generates a minute amount of heat, of which about half is used for its own needs

Other sales are rental fees on its real-estate, hotel and transportation services, sales of scrap, waste paper, cinder, burned waste.

The trend in electricity sales in Poland is strongly correlated to the rate of growth in the domestic product. The decline in the domestic product over 1989-1991 was also linked to a decline in the domestic consumption of electricity. It was only in 1992 that there was a gradual increase in energy sales in industry. Diagram 3.1 portrays the sale of electricity by EGP over 1982-1995. After the first half of 1996 sales reached 4 249 GWh, in other words 5,5% more than at this same time in 1995. Sales for all of 1996 are supposed to be 8.770 GWh according to the budgeting department at EGP.

Diagram 3.1 Electricity Sales at EGP from 1982 to 1995 in GWh



Electricity sales are seasonal. Seasonality may be distinguished in yearly and daily periods. Peak annual sales are attained from October to March. From May to August in the Summer months the sales of energy are the lowest. Annual seasonality is derived from the natural upturn in energy consumption in the Winter as caused by weather and temperature factors and the time changes that take place in October and March. Table 3.9 illustrates which months have the highest and lowest actual load in the EGP in terms of active capacity from 1993 to the first half of 1996.

Table 3.9 Actual Load on EGP in Active Capacity from 1993 to the First Half of 1996

	1993		1994		1995		1st Half of 1996	
Minimum Load	VII	VI	833,9		VIII	VI	869,0	
			847,4				867,1	
Maximum Load	II	X	1 500,8	1.369,8	XII	I	1 362,0	
							1 406,8	

Diagram 3.2 depicts monthly realization of capacity in 1995

Diagram 3.2 Average Monthly Capacity Realized by EGP in 1995

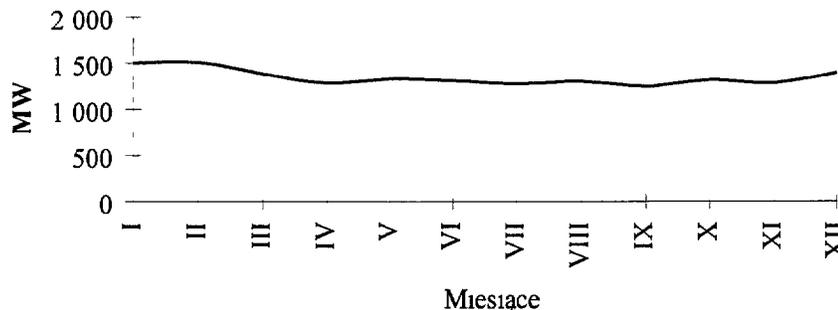
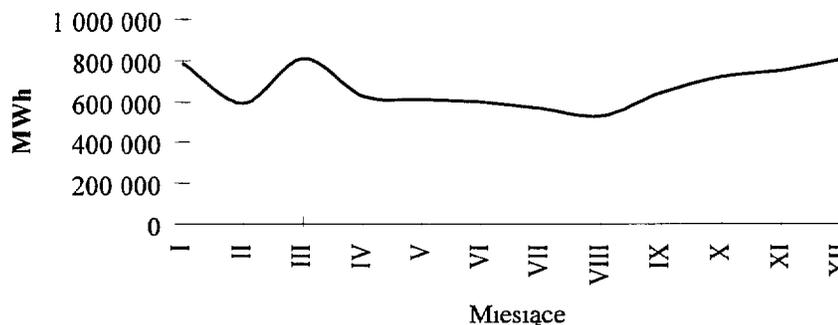


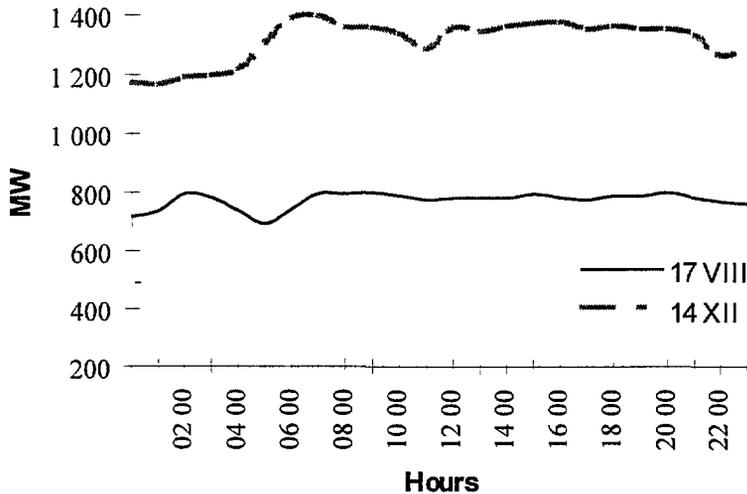
Diagram 3.3 shows the monthly sales of electricity in this same period.

Diagram 3.3 Monthly Sales of Electricity at EGP in 1995



In terms of daily seasonality it is possible to distinguish morning and evening peaks. The evening peak is derived from the higher level of consumption in households. The demand for energy for the rest of the day is lower. An illustration of daily fluctuations in capacity demand is provided in Diagram 3.4 which depicts demand fluctuations over a 24-hour day.

Diagram 3.4 Daily Seasonality in Capacity Demand on a Given Day in Months in which the Maximum and Minimum Load for Active Capacity Was Noted in 1995



3.2.2 Thermal Energy and Electricity Customers

In the current legal system EGP does not have the ability to sell the electricity generated to final customers. Distribution companies, which have a local monopoly on these services, provide electricity to final customers.

The sole customer for the electricity generated by EGP is PSE. The terms and conditions of supply, for executing agreements, calculating prices and fees, rules of keeping records and quantitative and financial settlements in 1996 between PSE and generators were set out in a document entitled "The Principles for the Wholesale Trade in Electricity in the National Electric Energy System in 1996".

EGP sells electricity to the Polish Power Grid on the basis of long-term agreements on blocks 1 and 4 and a medium term agreement on the remaining blocks. This electric generation plant also signed an agreement with PSE for system services, which includes primary and secondary regulation and passive capacity regulation. At present EGP has the ability to sell system services in the area of primary and secondary regulation and passive capacity regulation. The regulation range in blocks is 140-225 for block 4 and 155-205 for the others. The planned modernization program calls for increasing the the degree of regulation in the other blocks.

The duration of these contracts is portrayed in Table 3.10.

Table 3.10 Contracts to Sell EGP's Energy

Type of Agreement	Duration	Subject Agreement	of
Medium-term Agreement	1995 08.30- 1998.12.31	Capacity Electricity	and
Long-term Agreement on Block 4	1996 01 01- 1999.12.31	Capacity Electricity	and
Long-term Agreement on Block 1	1998.01.01- 2001.12.31	Capacity Electricity	and
Agreement on System Services	1996 0101- 1996.12 31	Primary, secondary passive capacity regulation	and

The primary consumer of the thermal energy generated by EGP is PEC Jastrzêbie. Moreover, EGP sells energy to thirty or forty small individual customers. There are plans to increase EGP's generation capacity in terms of thermal energy and its sale to the city of Rybnik. The ultimate level of sales on thermal energy is supposed to be approximately 470 TJ. At present, output is 200 TJ, of which one half is used for internal purposes. The execution of this investment project does however require the city's cooperation or of another investor to finance it. This project is currently under negotiations and searches are being conducted for a party interested in participating in this investment project.

3.2.3 Costs to Generate Electricity

On account of its geographical location the Rybnik EGP has become one of the least expensive electricity generators in Poland (immediately following the electricity generation plants fired with brown coal). This places EGP in favorable circumstances in the context of the planned introduction of a free energy market. EGP's low costs are derived from its immediate proximity to the basic raw material and the direct railways from mines to the electricity generation plants that belong to the Rail Transport and Stone Management Establishment and the Kotlarnia Sand Mine, which provide less expensive transportation as opposed to average domestic prices.

Table 3.11 Structure of Costs to Generate Electricity at EGP (z³)

	1993	1994	1995
Variable Cost per 1 MWh of Net Electricity	22,81	37,61	41,76
Total Cost per 1 MWh of Net Electricity	34,45	55,04	64,03

Source: Energy Computer Center

Table 3.12 depicts the sales prices achieved by EGP over recent years. Prices are correlated to output costs, that is why inexpensive generators receive the lowest sales prices

Table 3.12 Sale Prices on EGP's Electricity ER [PLN]

	1993	1994	1995	1 st Half of 1996
Electricity Price	26,90	43,08	48,34	50,45
Fee for Capacity	6.633,8	7.536,3	8.928,4	no data
Single-tariff Price	40,76	58,45	66,15	72,43

3.2.4 Primary Suppliers of Materials and Raw Materials

The fundamental raw material consumed in the generation of electricity at the Rybnik facility is hard coal. The deliveries of this raw material therefore have strategic meaning for the electricity generation plant to function. The company signed multiple-year contracts to supply coal with its partners, which deliver more than 90% of coal to electricity generation plants. They include the Gliwicka Coal Company, the Jastrzêbska Coal Company and the Rybnicka Coal Company. These agreements were executed up until the end of 1999. The percentage share of individual suppliers in EGP's hard coal purchasing activities is depicted in Table 3.13.

Table 3.13 EGP's Coal Suppliers

	1993	1994	1995	1st Half of 1996
<i>Deliveries [tons]</i>				
Rybnicka Coal Company	1.254.380	1.721.617	1.466.959	615.020
Jasrzêbska Coal Company	1.063.824	1.026.064	998.623	553.484
Gliwicka Coal Company	1.252.868	1.176.195	1.125.531	576.388
Others	106.458	144.142	315.477	177.219

Total	3.677.530	4.068.018	3.906.590	1.922.111
	===	===	===	===
	===	===	===	===

Percentage Share in Deliveries [%]

Rybnicka Coal Company	34,1	42,3	37,6	32,0
Jasrzêbska Coal Company	28,9	25,2	25,5	28,8

Gliwicka Coal Company	34,1	28,9	28,8	30,0
Others	2,9	3,6	8,1	9,2
	-----	-----	-----	-----
Total	100,0	100,0	100,0	100,0
	==	==	==	==
	=	=	=	=

These agreements ensure the EGP deliveries of certain amounts of coal at a given price and give EGP the option to purchase additional coal at a price set forth in the agreement. The price set for „normative” coal (coal with average parameters on coal burned in the energy sector two years ago) is supposed to be indexed quarterly depending on changes in the American Dollar exchange rate. The price of one ton of normative coal without transportation is currently 32 USD and is the same price for all generators. The price formula makes the coal price dependent upon its heat value and its ash and sulfur content. There is a year’s notice requirement in the agreements with the coal companies. On account of political determinants the likelihood of changing prices on coal for one or a few generators is limited. Potential changes in prices may only affect the entire sector.

3 3 Changes on the Electricity Generation Market

The prices obtained on the sale of energy and electricity capacity are set by the Ministry of Industry and Trade. MIT, which acts in behalf of the owner of all the companies in the energy sector conducts an income redistribution policy within the sector with a limited pool of resources limited by the prices charged to final consumers for energy. These prices are regulated by the Ministry of Finance. This set of circumstances means that the financial standing of the generators depends on the two policies conducted independently of one another by the Ministries of Finance and Industry and Trade.

This set of circumstances is not expected to change for two years from when the new energy law is ratified, and the date of ratification is still not known. After this period the price policy will be carried out by the Energy Regulation Office (URE). At the present moment it is not clear how URE will conduct price policy when taking into consideration the fact that URE will have to realize its fundamental goals which include protecting the interests of the final consumers and the interests of the generators as well as ensuring the security of operation in the national electric energy system.

The Ministry of Finance (MF) plans for prices to final consumers in 1996, 1997 and 1998 to grow along with inflation or below that level, which when accompanied by increases in the VAT tax rate of 5% in 1997 and 5% in 1998 means that price growth on sales for companies from the energy sector will be below the rate of inflation. MF's policy along with maintaining the import parity on coal prices for electricity generators may cause the entire sector's profitability to deteriorate significantly

According to MIT the minimum requirement concerning the shaping of electricity prices is to ensure that they grow by several percentage points above inflation under current circumstances as they deviate significantly from economic levels. At the end of 1995 the average price for one kWh of energy (without VAT) was approximately 5.5 US cents, while the average cost of one kWh to cover the economic costs should be 7-7.5 US cents. According to MIT's premises electricity price growth from 1997 to 2001 should exceed the rate of inflation by 5 to 7%.

In light of the current law electricity is treated as a peculiar good that requires extensive control by the state. For this reason generators are required to supply electricity of the appropriate parameters in terms of frequency and voltage to the energy consumer.

If MIT implements changes in the electric energy sector's structure effectively, then the circumstances of this market segment will undergo alteration. The primary source of change rests in altering how electricity is perceived as a peculiar good into a product that should be subject to free competition. The implementation of third party access to the PSE grid and the distribution grids handled by the distribution companies will constitute the realization of this philosophy. This will create the ability to sell electricity directly to final consumers and distribution companies, thereby the ability to function in market conditions

It may be expected that the primary barrier to introducing electricity supply services will rest upon obtaining a franchise. Besides obtaining a franchise there should not be any serious barriers hindering the development of free competition.

Electricity generation plants will have the right to sell energy to customers, power plants and other intermediaries directly. The government expects that the wholesale market will continue to function as it does today for approximately five years until the time when the electricity prices paid by final consumers are raised to an economic level. The market will be divided into a wholesale system market (sale of energy at 220 kV and higher) and local markets (sale of lower voltage energy). The wholesale system market will be comprised by a stock-type market and a contractual market.

The stock-type market will be mandatory for the generators as well as the buyers and sellers of energy using the transmission grid with voltage at 220 kV and above. The energy price on the stock-type market will be set on the bids made by generators using the lowest purchase price. Initially, 15-25% of electricity will be sold via the stock-type market. The planned deadline for initiating its activities is the beginning of 1997.

The contract market is based on short, medium and long-term contracts to buy electricity (contracts will have a minimum period of six months). Short and medium-term contracts may be traded over the long term. The prices in medium term contracts will be shaped on the basis of standard costs, while later on the basis of comparisons with the stock-type market.

The fees for electricity transmission in the grids with voltages of 400 kV and 220 kV, controlling the system and conducting wholesale trade will be shaped on the basis of long-term marginal costs or standard costs and will be regulated using a pricing formula.

Local market transactions will take place while employing the principles of the contractual market. Local stock-type markets may be created if conditions are favorable. The purchase of electricity by distribution companies from their own independent sources will be regulated by the Energy Regulation Office.

3.4 Marketing Strategy

EGP's future plans presume that the current structure of sales will be maintained whereby the dominant role will be played by the sale of electricity. Additional activities will primarily be developed through subsidiaries and only to the extent that it will allow resources to be used in an optimum fashion.

In the framework of additional activities EGP intends to get involved in two undertakings:

Refurbishment services for electricity generators. To this end machines to work on the body sections of turbines and machines to balance turbines and pumps were purchased.

These activities are to be conducted by EGP's internal divisions, which will later be spun off as a subsidiary in the long run.

Energy Consulting. A concept to utilize the intellectual capacity of EGP's employees in energy advisory services has been formulated. According to EGP there is currently a wide market for services in terms of rationalizing energy utilization in manufacturing processes. EGP employees have extensive knowledge in this area and as there are no companies currently on the market capable of rendering professional advisory services in the energy field the company has a great opportunity to obtain a significant market position.

Moreover, the plant has plans to increase its thermal energy generation significantly and to sell it to the city of Rybnik. The ultimate level of thermal energy sales is supposed to be 470 TJ. At present, output is 200 TJ, of which one half is used for internal needs. The realization of this investment project would necessitate the cooperation of the city or another investor who would co-finance it. The project is currently under negotiation and searches are being conducted to find parties interested in co-financing the project.

In terms of electricity sales EGP sees its greatest opportunity in the establishment of a local market. Since EGP has low generation costs and a big number of large industrial customers in its close proximity, its market position seems to be stronger than other potential competitors.

3.5 Marketing Actions

EGP does not have an organizationally separate marketing staff, since it only has one customer for all of the energy it generates, viz. PSE, while all of the principles concerning the amount of sales and prices are imposed from above by MIT. Marketing efforts are nonetheless discharged by the Division of the Operations and Economic Director and the Investment and Development Director.

The Division of the Operations and Economic Director primarily deals with market research and analyzing electricity demand.

The Division of the Investment and Development Director is responsible for media contacts, creating the company's image, organizing EGP's participation in ecological trade fairs, e.g. its proprietary method for removing sulfur from exhaust was exhibited at the POL-EKO Trade Fair in Poznan. A movie about the EGP was produced in cooperation with a regional television station. In order to create the image of an ecological Rybnik EGP, a foundation called EKOTERM SILESIA was established.

The company is aware of the necessity to create a separate marketing unit to assume the entirety of marketing efforts, especially in the context of the establishment of a stock market in the near future and the possible ratification of a new Energy Law; until then, however, the present structure is considered to be sufficient.

5. Initial Organizational Analysis

5.1 Organizational Structure

The primary principles of management, EGP's organizational structure, the scope of duties, employee authorizations and responsibilities and the basic scope of objectives in organizational units are specified by EGP's Organizational Rules and Regulations

EGP's organizational structure on 30 June 1996 (before it was transformed into an S A. corporation) is depicted in Chart 5.1.

Chart 5.2 depicts EGP's organizational structure after its transformation into an S.A. corporation. This structure was introduced by virtue of a Management Board Resolution on 8 October 1996. The following divisions may be distinguished in this structure the Chief Director Division, the Division of the Deputy Director of Management Organization, the Financial Director Division, the Engineering Director Division, the Division of the Operation and Economics Director and the Division of the Investment and Development Director.

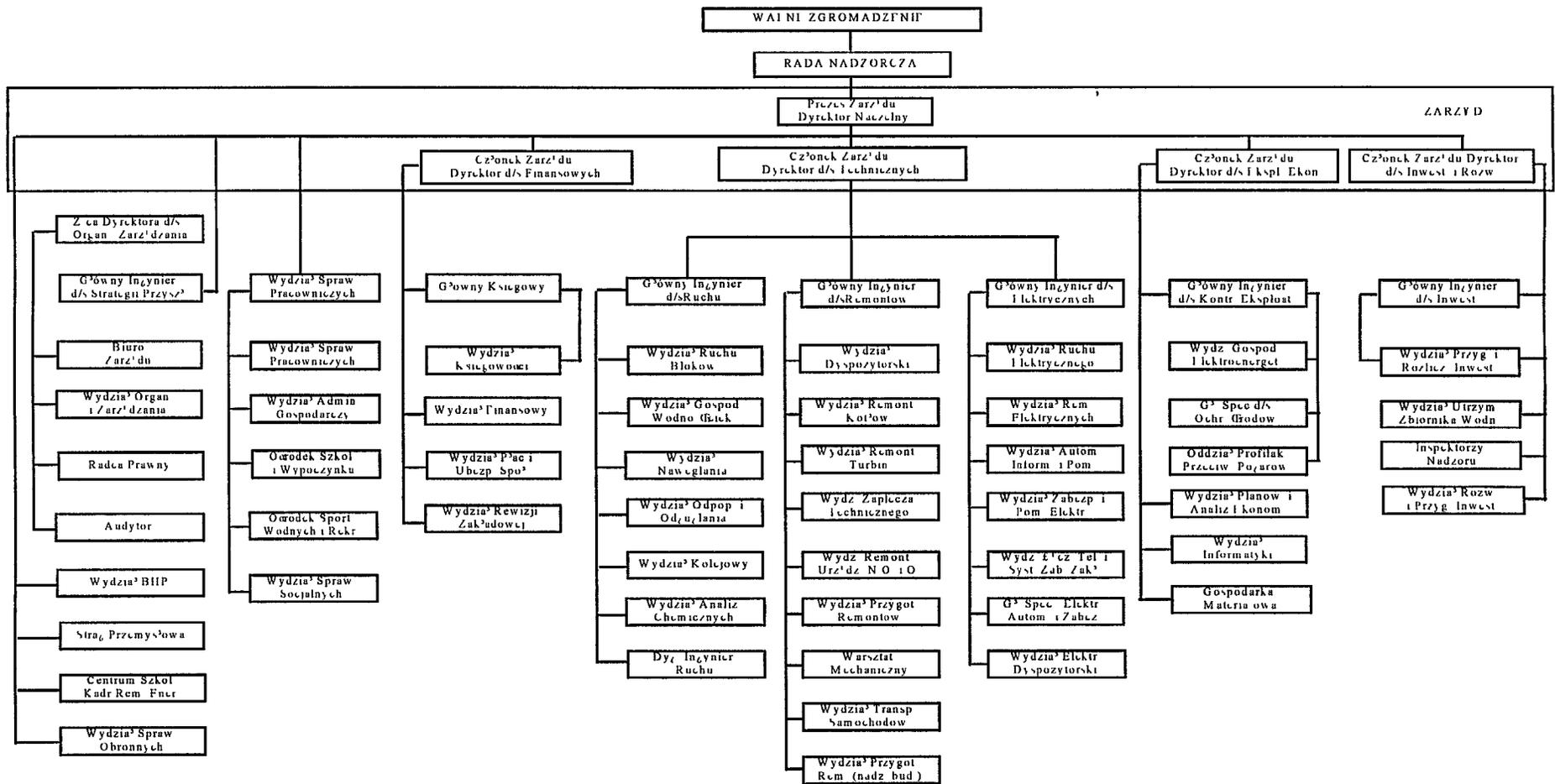
EGP's organizational structure is a multiple-level horizontal structure. The decisive majority of employees is engaged in the engineering division, which has the following sub-structure: the Chief Maintenance Engineer, the Chief Refurbishment Engineer and the Chief Electrical Engineer.

5.2 Systems of Shift Labor

The following systems of shift labor may be distinguished at EGP.

- a the single-shift system in which most EGP employees work (864 employees),
- b the three-shift system in which employees from the rail department and a portion of the employees working in the coal feed and ash removal departments work (a total of 169),
- c. a four-brigade system in which employees of the Block Maintenance Department are employed, a portion of the employees at auxiliary departments: coal feed and ash removal department and the plant maintenance services - brigades of on-duty metal workers and on-duty electricians This system of work exists since the EGP must maintain continuity throughout the day.

Chart 5.2 "Rybnik" S.A.'s Organizational Structure as Implemented by a Management Board Resolution dated 8 October 1996



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5.3 Systems of Remuneration, Bonuses, Promotions and Work Motivation

5.3.1 Remuneration System

The principles for paying employees are set forth in the "Company Collective Labor Agreement for Rybnik EGP Employees" as signed on 12 October 1993. EGP employees may be paid using one of the following forms.

- a. time-based,
- b. time and bonus-based,
- c. lump sum.

The basic form used in the company is the time and bonus-based remuneration system.

Employees are entitled to the following components in their salaries and benefits as paid out in the realm of funds for wages:

- a. basic wages,
- b. functional additives,
- c. coordinating additives,
- d. brigade additives,
- e. bonuses and awards,
- f. additional remuneration for work. overtime, work at night, on the second shift, in conditions harmful to health, on days off work, Sundays and holidays, for working in the engineering emergency group (on call at home), etc ,
- g. additive for seniority,
- h anniversary awards,
- i. cash payments when retiring or becoming disabled.

5.3 2 Bonus and Promotion System

The basis for awarding a bonus is the assessment of work performance by employees and teams of employees as conducted by their immediate supervisors.

The non-pay related forms of remuneration include a written distinction with entry made into the employee's personnel file

Candidates are selected for promotion by using positive selection methods. The most pre-disposed candidates are offered promotions.

EGP employs good order penalties in compliance with the Labor Code, as well as reminders, reprimands or financial penalties (e.g. withholding a bonus from the rules and regulations or a seniority additive).

5.3.3 Motivational Factors at Work

The most important motivational factors for working at EGP are as follows:

- a. salary level much higher than national average,
- b. well-developed social care,
- c. Company Social Benefit Fund (ZFOŠ), whereby EGP provides its employees with the following types of assistance
 - partial payment of private vacations for employees and their families - known as "tourist vacations",
 - partial payments for vacations for children and youth (these partial payments are extended twice per year),
 - partial coverage of tickets and entrance fees to go to cultural and sporting events,
 - partial payments for employees and their family members to participate in organized cultural and education activities in the Energy Employee's Club,
 - extending loans for the employees to satisfy their housing needs

All of the assistance provided to employees is derived from the company's rules and regulations while these funds are managed by a commission selected from Company Commissions from the trade unions operating at EGP

- d. a discounted tariff for electricity for household needs,

EGP employees are entitled to lower fees on electricity for household needs not to exceed 250 kWh per month. The fee for the consumption of this amount of electricity is 20% of the normal tariff binding upon households.

- e. care for retirees and the disabled,

EGP provides material and financial assistance to retirees and the disabled with the lowest incomes from its ZFCES Fund.

- f. a well-developed infrastructure of social facilities,

EGP has the following social facilities:

- a water sports recreational facility in Chwa³êcice,
- a training and recreational facility in Stodo³y,
- an indoor swimming pool,
- the energy employee's club,
- a company dining hall,
- a clinic.

EGP is also the owner of vacation housing in Mrze³yno and Nowe Warpno.

- g. training and professional skills improvement,

The Center for Professional Training for the Energy Refurbishment Staff at EGP conducts a wide range of training for EGP employees.

The following training sessions were conducted in 1995:

- on health and safety (for 1,979 people),
- specialized (for 316 people).

48 people furthered their education in schools for working people. 21 people were trained at foreign language courses.

EGP has its own vocational school and it also runs the Energy Technical High School.

5.4 Analysis of Employment

As of 30 June 1996 EGP had 1,583 employees Of which 1,541 were full-time employees and 42 were part-time employees

Table 5 1 depicts the number of people employed at EGP on 31 December 1993, 1994, 1995 and on 30 June 1996

**Table 5.1 Number of EGP Employees
on 31 December 1993, 1994, 1995 and on 30 June 1996**

End of Period	1993	1994	1995	1st Half 1996
Number of full-time positions at the beginning of the period	1.591	1.573	1.598	1.580
Newly-created positions	67	42	14	3
Eliminated positions, including	85	17	32	19
Elimination of jobs as a result of shifting employees to EGP's subsidiaries	81	2	3	-
Number of full-time positions at the end of the period	1.573	1.598	1.580	1.566
Mean annual employment (positions)	1.554	1.580	1.593	1.573
Number of employees at the end of the period	1.592	1.616	1.595	1.583
Mean annual number of employees	1.555	1.580	1.594	1.573
Number of part-timers at end of the period	44	44	39	42
Number of people hired on contractual agreement throughout this period	101	105	115	69

During 1993-1996 the number of employees declined slightly. From the beginning of 1993 to the end of June 1996 126 new jobs were created while 153 were eliminated. Of the 153 eliminated, 86 were eliminated as a result of employees moving to auxiliary companies.

Table 5.2 portrays the age range of EGP employees.

Table 5.2 The Age Range of EGP Employees as of 30 June 1996

Age Group:	Number of Employees:	Share in Entity:
up to 20	1	0,1%
from 21 to 30	363	22,9%
from 31 to 40	457	28,9%
from 41 to 50	547	34,5%
from 51 to 60	202	12,8%
above 60	13	0,8%
	-----	-----
TOTAL	1.583	100,0%
	=====	=====

Young people are more prevalent in the employment structure. More than 50% of the employees is younger than 40.

The seniority structure of employees by seniority at EGP is shown in Tables 5.3.A and 5.3.B

**Table 5.3.A EGP's Seniority Structure as of 30 June 1996
(by Seniority at EGP)**

Seniority at EGP:	Number of Employees:	Percentage of Entire Group:
up to 5 years	133	8,4%
from 6 to 10 years	340	21,5%
from 11 to 15 years	367	23,2%
from 16 to 20 years	350	22,1%
from 21 to 25 years	362	22,9%
from 26 to 30 years	31	1,9%
from 31 to 35 years	0	0,0%
above 35 years	0	0,0%
	-----	-----
Total	1.583	100,0%
	=====	=====

**Table 5.3.B Employee Seniority at EGP as of 30 June 1996
(by total work seniority)**

Total Work Seniority:	Number of Employees:	Percentage Share:
up to 5 years	85	5,4%
from 6 to 10 years	188	11,9%
from 11 to 15 years	241	15,2%
from 16 to 20 years	212	13,4%
from 21 to 25 years	294	18,6%
from 26 to 30 years	260	16,4%
from 31 to 35 years	187	11,8%
above 35 years	116	7,3%
	-----	-----
Total	1.583	100,0%
	= = = =	= = = =

EGP employees have a lengthy work seniority. More than 91% has more than 5 years of seniority, while more than 82% has been working at EGP for more than 10 years

Table 5.4 displays the structure of EGP employees as of 30 June 1996 by education.

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Table 5.4 EGP Employee Structure as of 30 June 1996 by Education

Education:	Number of Employees:	Percentage Share:
University Education	129	8,1%
High School Education	586	37,0%
Vocational Education	571	36,1%
Primary School Education	297	18,8%
Total	1.583	100,0%
	=====	=====

Most EGP employees (more than 73%) have a high school or vocational education. Slightly more than 8% have a university education. A relatively large percentage of people have only a primary school education (nearly 19%)

Table 5 5 depicts the employment structure of full-time EGP employees by gross monthly salaries.

Table 5.5 Employment Structure of Full-time EGP Employees by Gross Montly Salary on 30 June 1996

Gross Salary (PLN)	Number of Employees:	Percentage Share:
up to 500	-	0,0%
from 501 to 1.000	256	16,7%
from 1.001 to 1.500	751	48,7%
from 1.501 to 2.000	341	22,1%
from 2.001 to 2.500	99	6,4%
more than 2.500	94	6,1%
Total	1.541	100,0%
	=====	=====

The average salary at EGP is decisively above the national average salary. More than 80% of EGP employees have a gross monthly salary in excess of 1,000 PLN

5.5 Employment Planning

Employment plans for upcoming years call for employment stagnation and gradual downsizing.

The local labor market has a 5 5% surplus on the labor force as opposed to existing economic needs. Numerous schools (vocational and high schools) fully guarantee

potential needs. There are not any problems with finding employees with a university degree. The EGP does have a lack of high level specialists (e.g. in the field of economic law, finance and accounting).

The demand for new employees is assuaged from its own schools - EGP has a basic vocational school and also runs the energy technical high school. Moreover, EGP funds a given number of scholarships, especially for those people who are studying for an university degree.

5.6 Trade Unions

There are two trade unions in operation at EGP:

- a. The Independent and Self-governing Trade Union of Rybnik EGP Employees (with 396 members on 30 June 1996),
- b. The Solidarity Independent and Self-governing Trade Union (with 368 members on 30 June 1996).

Trade unions take part in company management by way of the following.

- a. commissions with multiple representation: social commission and housing commission,

There are two people representing the trade unions in each of these commissions. The commissions resolve current problems dealing with the package of social and existence matters.

- b. representation of trade union organizations in negotiating and setting up the principles for the Company's Collective Labor Agreement to function,
- c. social work inspectors (at the company and division levels),
- d. topic-specific task forces (operating on an as-needed basis), e.g. to draw up the company's rules and regulations for social benefits,
- e. trusted individuals,

Trusted individuals are representatives of trade union organizations to represent employee matters and to comment on the integrity with which financial resources for remuneration purposes are utilized.

5.7 EGP's Internal Reporting

The fundamental information system for managerial purposes is the budgeting system. The administrator of this system is the Department of Planning and Economic Analyses. The annual budget is prepared here. Based on annual plans and their performance the

Department draws up monthly reports, that are delivered to all the entities with a budget and to all the division chiefs in a detailed version. A compiled report with a calculation of the anticipated financial result is presented to the Budget Council and EGP's Management Board

5 8 Internal Controlling System

Supervision and control over employees as they discharge their functions are the responsibilities of all of the managers in EGP's organizational units

The following organizational units conduct institutional control at EGP:

- a Company Auditor,
- b Legal Advisor,
- c Work and Health Safety Department,
- d Department of Protection Matters,
- e Chief Environmental Protection Expert,
- f. Branch for Fire Prevention.

5 9 Internal Restructuring and EGP's External Organizational Infrastructure

The change in the economic system that took place in Poland in 1989 put the EGP in a situation in which it had to meet the requirements of a market economy. The Rybnik EGP, which up until December 1988 operated in the Southern Energy District, held significant surpluses of auxiliary means of production, employment and warehouse inventories. This was the case as it had to ensure itself a high level of self-sufficiency. The overdeveloped auxiliary functions created a threat of irrational costs and a decline in EGP's competitiveness. This became a stimulus to restructure EGP internally.

5.9.1 The Aims of Restructuring

The main purposes that were outlined in the restructuring process were as follows

- a. maintaining EGP's cost competitiveness,
- b. improving refurbishment service quality,
- c. rationalizing the utilization and productivity of assets,
- d. rationalizing the utilization of labor resources,
- e. downsizing without conflict,
- f. creating market competitive jobs outside EGP's organizational structure.

The performance of these goals was to be based on the establishment of a series of auxiliary companies that would be capable of assuming those activities from EGP that are not directly related to the generation of electricity.

5.9.2 The Course of Restructuring

5.9 2 1 The Process of Restructuring

The first attempts to spin off certain functions from EGP outside its organizational structure led to the establishment of two companies in 1989:

- a. Przedsiębiorstwa Produkcyjno-Handlowego "Utex" Sp. z o.o., which utilizes burned waste,
- b. Przedsiębiorstwa Usługowo-Handlowego "Marel" Sp. z o.o., handling the employee dining hall and meal distribution points located on EGP grounds.

During the second half of 1989 up until the end of 1990 training sessions were conducted with the company's managerial staff. Then a strategic analysis of the company was conducted. During this analysis the functions were specified that must be performed within EGP's organizational structure and which ones may safely be spun off. Those activities that have a chance of success on the external market were also indicated. The operations of these companies and organizations founded as a consequence of restructuring were based on the qualifications of former employees and assets leased from EGP. As development took place in terms of increasing equipment, these organizations purchased the assets that they previously leased. These companies received guarantees of work on preferential conditions from the period when established while the employees were given a guarantee that they could return to EGP but without the assurance that they could return to the same work post.

One of the turning points in EGP's restructuring process was the establishment of Erbud, a construction and refurbishment company, which was founded on the basis of the former construction department. This was the only instance in which the employees of an entire department opened up an external company. Other companies were established with employees from various departments.

EGP employees became partners in these auxiliary companies. They did not have sufficient equity. They were very capable of performing refurbishment in their industries but they could not conduct large scale investment projects. In turn the necessity to conduct large scale modernization investment projects linked to ecology (removing sulfur) and replacement projects appeared. That is why the concept of establishing a multiple-industry company with a strong capital base capable of assuaging these needs was developed. As a result of the organizational efforts made the Energo-Inwest company was founded.

In the mean time many other companies founded by former EGP employees sprouted up in the EGP surroundings. These companies perform certain small-scale auxiliary activities. EGP does not hold any shares in them.

5.9.3 EGP's External Organizational Infrastructure

EGP's current organizational infrastructure in the form of auxiliary companies operating in EGP's surroundings may be divided as follows.

a. Strategic Companies.

We include the Utex Sp. z o.o. and Energo-Inwest Sp. z o o in this category. They conduct very important activities for EGP (Utex utilizes burned waste while Energo-Inwest deals with the performance of investment projects). These companies have a high level of founding equity while their group of partners is varied. The partners at Utex include employees, business entities (e.g. the Rybnik EGP and the Łaziska EGP) and the employees of these business entities. The partners of Energo-Inwest are also its employees, business entities (Rybnik EGP, employee companies, the Ekoterm Silesia Foundation) and EGP employees.

b. Employee Companies.

These companies have the least strategic significance for the EGP, they have relatively low founding equity; in general the partners are the employees of these companies (former EGP employees who founded these companies) and EGP.

The schedule for spinning off auxiliary companies, EGP's equity interests in these companies as of 30 June 1996 and a description of their activities may be found in Table I in Supplement I.

In terms of the services rendered in favor of EGP auxiliary companies are treated equally to entities independent of EGP. The auxiliary companies have a large advantage insofar as they are familiar with the EGP, they are geographically approximate and the quality of the services they offer is good.

5.9.4 Controlling Auxiliary Companies

EGP subscribed equity interest in all of the companies spun off exclusively in the form of cash. Auxiliary companies have extensive latitude in operating. Control over these companies' operations is conducted through their Supervisory Boards (with three to five members as a rule), in which EGP representatives are members.

EGP holds a minority interest (less than 50%) in most of these strategic and employee companies but it fulfills the role of a strategic partner. The companies which EGP wholly owns are Erpro Sp. z o.o., an Energy Sector Design and Consulting Office and Ertel Sp. z o.o.

Contracts within the Framework of Statutory Activities

The parties drawing up this document consider those contracts to be important in terms of the company's statutory activities whose subject is the delivery of electricity to the Polish Power Grid S.A. in Warsaw, hereinafter referred to as PSE S.A. and the contract for the sale of system services for regulating primary and secondary active electricity capacity and for regulating voltage and passive capacity. The primary consumer of all electricity generated by the company is PSE S.A. in Warsaw. Moreover, the company has signed 47 typical agreements for the supply of electricity and thermal energy with individual consumers, who for the most part are tenants in space owned by the EGP.

In connection with the operations in the generation of electricity the Company has signed purchasing agreements on energy fuel with coal companies for the supply of energy coal and an agreement for the supply of heating oil. The parties drawing up this document considered the agreements pertaining to the supply of hydrated lime and lime stone to be important, too since these raw materials are indispensable in the process of removing sulfur from the exhaust given off during the generation of energy and the transportation services since the company hauls significant amounts of purchased raw materials and generation waste (ash and cinder).

I. Agreements to Supply Electricity

Energy supply takes place on the basis of the following agreements:

1. *A medium-term agreement for the supply of electricity and capacity dated 30 August 1995 with PSE S.A., altered by annex number 1 dated 23 April 1996 and annex number 2 (without an affixed date)*

This agreement governs the deliveries of electric capacity to PSE S.A. and the conditions for receipt and payment on deliveries of capacity and energy for the duration of this agreement, i.e. from 30 August 1995 to 31 December 1998.

The amount of the deliveries of capacity and electricity are specified in Supplement Numbers 2A and 2B. Supplement 2A specifies the amounts of deliveries in individual months and quarters for the subsequent year of the agreement's validity while supplement 2B specifies the amount of minimal orders for subsequent years of the agreement's validity.

The parties hereto are obliged to agree upon the amount of the annual order for the upcoming year by December 15 of each year, providing these figures on a monthly and quarterly basis. If such amounts are not agreed upon the minimum amounts specified in supplement number 2B are binding.

The parties have permitted a range of modification in the execution of orders at 10% against the quarterly order. These specified deviations may not affect the annual amounts ordered. In conformance to the agreement signed the company is required to maintain and operate the blocks and the component elements of the transmission system with the utmost diligence;

furthermore, it must inform PSE S.A on a daily basis of its dispatch capacity and possible changes in dispatch capacity PSE S.A. is authorized to control the company's equipment. Interruptions in the supply of capacity and energy caused by the necessity of performing current repairs may be realized after making the necessary arrangements with the capacity dispatcher Independent of the above, the agreement does anticipate planned idle periods as agreed upon by the parties for the subsequent year of the agreement's validity

Electricity and capacity are supplied and received in supply points as specified in supplement number 8 to the agreement and it is at these points that the amount of energy supplied is metered. The parties guarantee one another mutual access to the metering equipment and exchange data on the readings made

The basis for setting the price for energy supplied and received are the official prices in effect. Payment is made monthly using the following principles:

- 1) the company issues a VAT invoice by the 19th day of each month equal to 65% of the value of the agreed upon and planned supply of capacity and electricity for a given month,
- 2) PSE S A pays the amount on the invoice from section 1 in the following manner
 - 30% by the 28th day of the month
 - 35% by the 8th day of the next month

The ultimate settlement for a given month is performed by issuing a VAT invoice on the 3rd day of the month after the settlement month at the actual amounts of deliveries. This invoice is due 14 days after it is received.

If there is a delay in paying invoices the parties agreed to interest of 110% the lombard rate. Payment may also take the form of assigning PSE S A.'s share in distribution fees, but this requires that the company grant approval in each and every case.

If daily dispatch schedules are not performed the amount due for delivery will be lowered by the product of 60% of the capacity's price and the average monthly unperformed daily dispatch schedules

If monthly dispatch schedules are not performed the amount due for delivery will be lowered by the product of 40% of the capacity's price and the average monthly unperformed daily dispatch schedules

This agreement anticipates quarterly and annual contractual penalties for the failure to execute this agreement or its improper execution.

PSE S A is obliged to pay in favor of the company

- 1) a quarterly fine for the energy not received at 30% of the value of the energy not received with deviations exceeding 5% of the quarterly order,

2) an annual fine for energy not received if caused by PSE S.A. at the amounts agreed upon in the agreement at 30% of the value of the energy not received.

The company is obliged to pay a contractual penalty of 30% of the energy not supplied against the quarterly or annual capacity ordered (with deviations in excess of 5%)

The annual penalties shall be reduced by the amount of quarterly penalties assessed. Quarterly penalties shall be assessed by the 15th day of the month following the conclusion of the quarter or the year and are due within 14 days. The parties have anticipated the ability to file for damages using general principles concerning that portion of damages which exceeds the penalties agreed upon. The parties anticipate the ability for their mutual amounts due on penalties to cancel each other out

The parties have foreseen that on changes in the parties themselves or in the subject matter during the realization of this agreement, it is possible to alter the agreement or to determine how its provisions are to be interpreted. A five person commission appointed by the parties (two from each party and one independent chair to be appointed jointly) conducts renegotiations or interpretation. The commission is obliged to take a stance within 21 days. If technical matters are not ruled on by the parties or the commission, an expert appointed by NOT (Association of Engineers) is authorized to consider the matter. The expert's ruling is not binding upon the parties. The economic court with jurisdiction will ultimately rule on the contractual dispute

This agreement may be terminated with one year's notice with effect at the end of the month provided that this termination is done in writing. Moreover, each party may terminate the agreement in whole or in part with 30 day's notice if

- 1) one of the parties ceases to operate or receive energy for more than 30 consecutive days without the other party's approval (except for interruptions caused by force majeure),
- 2) consistent or longer and longer neglect of obligations to repair and operate properly leading to a threat to human life and property,
- 3) assignment of agreement rights to a third party without approval from the other party,
- 4) opening debt forgiveness, bankruptcy or dissolution proceedings by the other party,
- 5) grave violation by one party of the provisions of this agreement which is not removed within 60 days of notice having been given,
- 6) written statement of one party's permanent inability to pay the amounts due.

In supplement number 5 to this agreement the parties included an additional understanding which stipulates that until the following are concluded, viz:

- the stock market agreement
- the agreement for the company to render system services to PSE S A. for a fee
- the agreement on using the transmission system

that account settlements will use the official prices set by the Minister of Industry and Trade according to the terms and conditions set forth in the „Principles of Wholesale Trade in

Electricity in KSE in 1995" or the new regulations that will replace the aforementioned document. Furthermore, this agreement will cease to be valid if the parties conclude long-term agreements for the purchase of energy to the extent governed by these agreements. At present, the parties hereto have signed two long-term agreements which were described in sections II and III of this chapter; consequently, the agreement described above is no longer valid as pertains to the regulation of these agreements. This agreement does not give rise to any formal or legal reservations; we hold this agreement to be binding and to have been executed properly.

2. Agreement to Supply Capacity and Electricity from Block Four with PSE S A in Warsaw dated 15 September 1995 (Long-term)

The subject of this agreement is the delivery and reception of capacity and electricity as generated by block four after replacement and modernization. In conformance with the agreement executed the company agreed to finish the modernization of block four by 15 December 1995 and to deliver to PSE S.A. the Declared Net Zone Dispatch Capacity during its validity, i.e. the capacity entered in the annual plan balance. This agreement was signed for the period from 1 January 1996 to 31 December 1999. PSE S.A. agreed to receive and purchase the capacity and electricity except during a system break down, i.e. when the electric energy system poses a threat to human health or property or when it is not possible to maintain safe and uninterrupted deliveries of electricity to consumers or when force majeure is in operation.

In connection with the modernization of block four the block's technical parameters will undergo alteration:

- 1) the attainable capacity will be augmented from 186.8 MW to 211.0 MW,
- 2) the dispatch capacity ratio will be increased from 80.1% to 92%

After operation begins the company is obliged to maintain the block in conformance with the requirements of capacity dispatch (the National Capacity Dispatch, hereinafter referred to as KDM or the dispatching center indicated by PSE S A for managing the operation of the electric energy system) assuming that PSE S A will burden the block in conformance with the principles laid out in supplements 1, 2 and 3 to the agreement.

The company agreed to fulfill the parameters of the technical safeguard systems as specified by PSE S.A. and to discharge the orders given by the capacity dispatch during emergencies, especially in regards to the following actions:

- a) disconnecting block four or reducing the amount of energy generated,
- b) supplying the amount of energy that block four is capable of generating

The company will not supply capacity, sell electricity or render system services from block four for any other party besides PSE S A or a party that PSE S A indicates or other consumers as mutually agreed upon by the parties. Moreover, the execution of agreements that might affect the amount or character of block four's output must be approved by PSE S.A.

In addition to the duties above the company is obliged to enable PSE S A's access to the following documents:

- 1) agreements for the delivery and transport of fuel for block four and plans for the delivery of fuel no later than 31 December of the previous year,
- 2) permits, licenses, approvals and authorizations linked to and required by the authorities in terms of designing, modernizing and operating block four,
- 3) quarterly reports describing the progress of modernization work no later than the 30th day after the quarter ends,
- 4) results of tests and measurements taken in block four,
- 5) a copy of the contract to operate on behalf of another party - no later than 30 days before the planned date for executing the contract,
- 6) reports describing the scope of replacement and modernization in block four,
- 7) changes in the bylaws, changes in the fiscal year or changes in the personnel composition of the managing and supervisory authorities,
- 8) information about financial statements and where they are published,
- 9) information about the initiation of debt forgiveness, bankruptcy or dissolution proceedings in regards to the company within two days after receiving the court's stance in this regards

The company is obliged to obtain at its own cost permits and franchises linked to the execution of this agreement and furthermore to ensure the supply of fuel to obtain capacity For the duration of this agreement PSE S A representatives have access to Block four provided that a time has been agreed upon.

PSE S A is obliged to maintain the equipment for transmission and distribution on the delivery location side that belongs to PSE S.A. or the consumer that it indicates.

For two months after the block is under operation and after every general overhaul, formerly the state-owned enterprise and now the company is obliged to conduct operational tests and take measurements of technical parameters at its own cost. The details of these activities are set forth in supplements number one and four. A PSE S A representative has the right to participate in these activities.

The planned idle periods are conducted on the basis of an idle period schedule as agreed upon with the capacity dispatcher. From the time when block number four comes into operation the number of planned idle days should not exceed 35 per year, whereas in exceptional circumstances this period may be extended or shortened with PSE S.A.'s approval. Shifts of dates must be agreed upon with PSE S A.

The amount of deliveries realized in the framework of this agreement is measured jointly by the parties hereto using a metering system. Supplement number 5 governs how measurement is performed The measurement equipment are subject to mandatory verification by the parties no less frequently than once per six months

PSE S A. will remit the moneys due against the capacity and electricity supplied based on the financial projections set forth in supplement 6 to this agreement These amounts due are comprised by the prices for capacity and electricity as well as the prices of other components included in the financial projections set forth in supplement number 6 The procedure for

calculating and realizing payments, including their approval by the authorities empowered to do so and the terms and conditions for raising prices are set forth in supplement number 6.

Payment for capacity and electricity will be made as follows:

- a) 30% of the value of the planned supply by the 28th day of the next settlement month,
- b) 35% of the value of the planned supply by the 8th day of the next month,
- c) the remaining portion of the payment will be paid in the next month within 14 days after the VAT invoice is received based on the actual data on the delivery of capacity and electricity as realized in a given settlement month.

Fees for system services and using the transmission system are taken care of in other agreements.

The company is obliged to remit the following contractual penalties for failure to meet the declared parameters after the block's modernization

- 1) if the actual capacity achieved is lower than the one declared (as set forth in article 4.2 of the agreement) - 75% of the unit price on capacity for every MW of missing capacity,
- 2) for lowering the capacity dispatch ratio on block four over a year below the value specified in article 4.3. - a penalty of 120,000 USD for every full percentage point calculated above 5 percentage points. The manner of counting the capacity dispatch ratio is specified in supplement number 6.

The parties have reserved the right to file for damages on the amount exceeding the contractual penalties mentioned in the agreement. Moreover, the failure to complete the block's modernization on schedule gives rise to the company's obligation to pay PSE S.A. damages equal to the documented increase in costs of generation, but no more than the PLN equivalent of 300,000 USD per month and the total amount of damages by virtue of the aforementioned may not exceed the PLN equivalent of 1,000,000 USD

The payment for net dispatching capacity and net electricity is made as follows:

- 1) the company issues a VAT invoice on the 19th day of every month for 65% of the planned delivery agreed upon by the parties for a given settlement month. The basis for the final financial settlements is constituted by the invoice issued by the 3rd day of the next month which uses actual delivery data.
- 2) if there is a claim for damages the authorized PSE S A sends to the company an accounting note which is due in 14 days if it is not questioned. If the amount of the damages is questioned the Arbitration Court at the National Chamber of Commerce will resolve the dispute.

The parties agreed that the interest charges on overdue items will be 110% of the refinancing loan rate.

For the duration of this agreement the parties have agreed to insure the assets engaged in fulfilling this agreement fully and that they will designate potential compensation to remove damages towards covering the losses incurred and towards reinstating the technical capabilities of the equipment engaged in this agreement.

The parties have excluded responsibility for the failure to execute this agreement or the improper execution thereof if caused by force majeure. The parties are obliged to inform one another about force majeure within three days of its occurrence. For the duration of force majeure the company will receive payment from PSE S A. on the net dispatch capacity and net electricity actually delivered.

In cases when force majeure affects PSE S A. it will be obliged to pay the company for the net dispatch capacity actually received. The maximum period of force majeure was set at 24 months. A longer period of time gives rise to the necessity of renegotiating the agreement.

If the company fails to meet its obligations PSE S.A. will give notice indicating how it will deviate from the duties in the agreement and the justification therefore. If PSE S.A. gives notice about the failure to discharge liabilities and the company's failure to remove the effects of the unfulfilled duties by the deadlines set out in article 14.3 PSE S A. may

- dissolve the agreement by giving written notice
- demand compensation in conformance to the provisions of law

If the company gives notice and it concerns PSE S A.'s infringements which were not removed by the deadlines set forth in article 14.4, the company has the right to make use of similar legal measures

If the law changes or a decision made by the authorities causes significant difficulty in discharging the agreement the parties have agreed to renegotiate the agreement.

The assignment of rights or duties derived from this agreement may be conducted with approval from the other party as given within 30 days. The lack of a written objection within 30 days shall be considered to be approval.

PSE S A. agreed not to make any objections if the company assigns rights to third parties financing or guaranteeing the take over, modernization and operation of block four in conformance with this agreement.

The parties to this agreement have instituted the Arbitration Court at the National Chamber of Commerce (KIG) in Warsaw to rule on disputes concerning this contract

The contents of this agreement have been accepted by the Minister of Industry and Trade who recognized the prices calculated on the basis of this agreement as official prices.

According to the parties drawing up this document this agreement was properly executed and does not give rise to any formal reservations. Renegotiation of article 11.3 will be necessary upon alteration of the refinancing loan, i.e. its dissolution.

3. Agreement dated 31 May 1996 with PSE S.A for the delivery of capacity and electricity from block one.

The subject of this agreement is the delivery and receipt of capacity and electricity as generated by block one after replacement and modernization. This agreement was signed for the period up to 31 December 2001 According to this agreement the company has agreed to finish the modernization of block one by 15 December 1997 and to supply PSE S A. for the duration of this agreement with the Net Declared Dispatch Capacity, i.e. the capacity filed in the annual balance This agreement is similar to the one described in section 2 in terms of the solutions and constructions employed with the following exceptions.

In connection with the modernization of block 1 the block's technical parameters shall be modified:

- 1) the attainable capacity shall be augmented from 186.8 MW to 211.0 MW,
- 2) the capacity dispatch ratio shall be increased from 80.3% to 92.3%.

The company is obliged to remit the following contractual penalties for failure to maintain the declared parameters after the block's modernization.

- 1) 1) if the actual capacity achieved is lower than the one declared (as set forth in article 4.2 of the agreement) the company will pay 150,000 USD of the unit capacity price for every MW of missing capacity,
- 2) for lowering the capacity dispatch ratio on block one below the value specified in article 4.3 the company will pay a PLN equivalent penalty of 150,000 USD for every full percentage point calculated above 5 percentage points. The manner of counting the capacity dispatch ratio is specified in supplement number 6,
- 3) the failure to complete the block's modernization on schedule gives rise to the company's obligation to pay PSE S A. damages equal to the documented increase in costs of generation, but no more than the PLN equivalent of 300,000 USD per month and the total amount of penalties by virtue of the aforementioned may not exceed the PLN equivalent of 2,000,000 USD

The parties have reserved the right to file for damages on the amount exceeding the contractual penalties mentioned in the agreement The parties agreed that interest on amounts overdue will be 110% of the lombard loan rate

Pursuant to the agreement the company is obliged to inform PSE S.A about causes for trying to obtain an investment tax break in „income tax due” If a tax break is used the parties will renegotiate in order to set up new financial terms and conditions.

The contents of this agreement have been accepted by the Minister of Industry and Trade who recognized the prices calculated on the basis of this agreement as official prices.

According to the parties drawing up this document this agreement was properly executed and does not give rise to any formal reservations

4. Agreement number V/1/96 to buy and sell system services as executed on 15 May 1996 with PSE S.A.

The subject of this agreement are the technical and financial terms and conditions for the company to provide services to PSE S A in terms of primary and secondary active electricity capacity regulation (ARCM) and voltage and passive capacity regulation (ARNE). The following blocks are incorporated under primary and secondary regulation.

- a) 1,2 and 3 at the 110 kV voltage level,
- b) 5 and 6 at the 220 kV voltage level,
- c) 7 and 8 at the 400 kV voltage level,
- d) 4 at the 220 kV voltage level (starting on 1 May 1996).

This agreement was signed for the period from 1 January 1996 to 31 December 1996

Pursuant to article 4 section 2 of the agreement the company as the service provider has the right to receive a fee for primary and secondary electricity capacity regulation and voltage and passive capacity regulation in the ARNE system for technically capable block arrangements confirmed by a committee giving a certificate of completion from Energopomiar with participation from PSE S A representatives.

The base rates on the fees for system services are set forth in the specific instructions for the Principles of Wholesale Electricity Trade in the National Energy Grid (hereinafter referred to as KSE) in effect in a given year

This agreement removes the duty of remitting fees for inefficient blocks or reserve blocks and for regulation systems that are not operational.

The basis for determining the terms and conditions of this agreement were as follows

- 1) PSE S.A.'s requirements for primary regulation in thermal and hydro electric generation plants dated 22 December 1992 along with annex 1A dated 8 February 1993 updated with current written orders from the Director of the National Capacity Dispatching Station,
- 2) the current principles of wholesale electricity trade in KSE for a given year,
- 3) the current specific instructions for the principles of wholesale electricity trade in KSE for a given year,
- 4) the A2-2 „ARCM” dispatching instructions issued by the National Capacity Dispatch Station and the individual instructions pertaining to ARNE arrangements.

(Three agreements) define the specific technical and operational terms and conditions for rendering system services

This agreement does not govern the manner of payment for services and the settlement periods referring in this regards to the Civil Code and to other acts mentioned previously.

From a formal and legal point of view we hold that this agreement was executed properly.

5. Other agreements for the supply of electricity and thermal energy

All agreements with the company's employee statements are executed according to one standard. The company has signed 47 such agreements. The parties drawing up this document hereby present randomly selected agreements.

- 1) agreement number NO - 24/55/95 for the delivery of thermal energy and electricity to NOWER Sp. z o o. (hereinafter referred to as the consumer) on 1 September 1995 and amended by annex number . . on 1 October 1996.

The subject of this agreement is the supply of thermal energy and electricity by the company to the consumer.

The company has agreed to supply thermal energy in the form of heating water whose parameters are as follows:

- 0.5 Mpa pressure
- temperature according to regulation diagram for the III climatic zone for the following facilities: offices, garages, refurbishment halls, carbonizing workshop

The maximum thermal capacity is 194.2 kW. The price for the thermal energy supplied was set by the parties at 5.18 z³/GJ and may be altered by way of an annex to this agreement.

Settlement for thermal energy and electricity takes place on a monthly cycle and the consumer is obliged to pay the price within 14 days of when the invoice is issued.

If the amount due is not remitted within two months the company has the right to cut off the supply of thermal energy and electricity. Reconnection may not occur until the overdue payments are made along with statutory interest for delay and an additional fee encompassing the costs of disconnecting and reconnecting to the grid.

The company excluded liability for damages caused by interruptions in thermal energy supply

For the facilities receiving energy from the company's internal grid the basis for setting a price is the cost of selling electricity to PSE S A plus the costs of serving the consumer

The basis for calculating the amount of energy used is the meter reading. If the meter is not operational the energy used in a given month will be set as the average amount for the last two months.

This agreement has been concluded for an indefinite period of time.

It may be terminated with six month's notice without giving cause while if there are overdue payments in excess of two months, the company may terminate the agreement by giving 14 day's notice.

In matters not governed by the agreement the provisions set forth in the ordinance issued by the Minister of Material Management on 4 July 1977 pertaining to the terms and conditions for supplying thermal energy (1977 MP, Number 18, Item 104 with Later Amendments) apply.

2) Agreement Number NO-24/39/95 for the supply of thermal energy and electricity signed with Henryk Zawadzki - the tenant in the Orion Cafe in the Energy Employee's Club at the Rybnik EGP (hereinafter referred to as the consumer) on 1 October 1995

The subject of this agreement is the supply of thermal energy and electricity by the company to the consumer.

The company has agreed to supply thermal energy in the form of heating water whose parameters are as follows:

- 0.5 Mpa pressure
- temperature according to regulation diagram for the III climatic zone to the consumer's facilities.

The maximum thermal capacity is 27.3 kW. The price for the thermal energy supplied was set by the parties at 5.18 z³/GJ and may be altered by way of an annex to this agreement. Settlement for thermal energy and electricity takes place on a monthly cycle and the consumer is obliged to pay the price within 14 days of when the invoice is issued.

If the amount due is not remitted within two months the company has the right to cut off the supply of thermal energy and electricity.

Reconnection may not occur until the overdue payments are made along with statutory interest for delay and an additional fee encompassing the costs of disconnecting and reconnecting to the grid.

The company excluded liability for damages caused by interruptions in thermal energy supply

The basis for calculating the amount of energy used is the meter reading. If the meter is not operational the energy used in a given month will be set as the average amount for the last two months. This agreement has been concluded for an indefinite period of time. It may be terminated with six month's notice without giving cause while if there are overdue payments in excess of two months, the company may terminate the agreement by giving 14 day's notice.

Just as in the previous agreement in matters not governed by the agreement the provisions set forth in the ordinance issued by the Minister of Material Management on 4 July 1977 pertaining

to the terms and conditions for supplying thermal energy (1977 MP, Number 18, Item 104 with Later Amendments) apply.

The parties drawing up this document were also shown the following agreements for the supply of electricity and thermal energy.

- agreement number NO-24/53/95 dated 1 October 1995 signed with EKOREM Sp. z o o. in Rybnik,
- agreement number NO-24/6/95 dated 1 March 1996 signed with ERTEL Sp. z o o. in Rybnik,
- agreement number NO-24/8/95 dated 1 March 1996 signed with PawER Sp. z o.o. in Rybnik.

The agreements mentioned above were executed according to the standard discussed above and may be recognized as typical agreements that have been legally executed.

II. Agreements to Purchase the Raw Materials Needed to Generate Electricity

The raw materials needed to generate electricity and which are purchased by the company are as follows. energy coal, heating oil and lime.

1. Agreements to buy energy coal and heating oil

The following agreements were made available to the parties drawing up this document:

- 1) a long-term agreement to buy and sell energy coal number DH/6/95 dated 16 January 1995 and executed with the Gliwicka Coal Company (hereinafter referred to as the seller) and modified by way of annex number 1 dated 10 April 1995, annex number 2 dated 24 July 1995 and annex number 3 dated 8 January 1996. The subject of this agreement is the multiple-year delivery of energy coal for the duration of this agreement, i.e. from 1 January 1995 to 31 December 1999. In the framework of this agreement the Seller guarantees to the company a supply of energy coal as needed and the company agrees to take receipt on the coal in the agreed upon amounts according to the schedules specified in annual contracts, no less than the basic amount of payment for the coal delivered and not for resale without the seller's approval.

The parties agreed to execute annual agreements no later than on November 30 of each year. Each annual agreement should specify:

- the amount of basic deliveries of coal for a given delivery period,
- the additional amounts of deliveries of coal in this period,
- the contractual parameters of the coal, its caloric value, ash content, sulfur content and other parameters demanded by the company,
- base price list,
- border parameters of the coal,
- structure of deliveries, i.e. statement of product range,

- manner for transporting coal to company,
- annual schedule of deliveries,
- how financial settlements are to be made,
- detailed terms and conditions for the delivery and receipt of coal, including
 - the flow of documents,
 - the principles for determining coal quality,
 - the principles for measuring coal deliveries.

The delivery period in conformance with the agreement is the 12 month period starting on January 1 of each year for the duration of the agreement. This period is divided into four periods (quarters).

The parties agreed that the basic values will look as follows during the individual periods for the duration of this agreement:

1995	1,100,000 tons
1996	1,100,000 tons
1997	1,100,000 tons
1998	1,100,000 tons
1999	1,100,000 tons

The additional amount of coal is determined in each annual agreement and is utilized at the buyer's option. The additional amount is binding upon the parties after the company files an order for a quarterly portion of the delivery period with two weeks advance notice while the additional amount may not exceed the basic amount by more than 20%

The coal's quality parameters will be agreed upon in annual agreements. Coal deliveries will be made with rail transport according to franco terms and conditions at the sending station. The cost of loading the coal, preparing and sending the bill of lading is covered by the seller. The company covers the costs to ship the coal. At the company's request the seller is obliged to use effective means to prevent the coal from freezing to the walls of the train cars at the seller's cost.

In the agreement the parties agreed upon the price for ratio coal which price will be the basis for calculating the price of hard coal. The parameters of ratio coal are set separately for each year of the contract's duration. As of 1 January 1995 the price of 1 ton of ratio coal constituted the PLN equivalent of 32 USD at the average exchange rate listed by the National Bank of Poland for December 15, 1994.

The basis for determining the price of the coal supplied to the company is the base price list which is set out once a year on the basis of the ratio coal parameters and the sale formula described in the price list.

Changes in the ratio coal price will take place quarterly as the USD exchange rate changes at the exchange rate listed by NBP on the 15th day of the month preceding the quarter provided that the increase in the USD exchange rate does not surpass the inflation coefficient assumed in the Budgetary Act for a given year.

If there are significant changes in coal prices on foreign markets or changes in important factors which affect the price level, the principles for altering prices may be negotiated at the motion of either of the parties. Payment for the coal supplied takes place after a VAT invoice is issued. The parties permit their mutual services to cancel out in making settlements. The parties specify how financial settlements are made in their annual agreement.

The parties agreed upon the following contractual penalties:

1. for supplying coal whose quality parameters are below the border parameters specified in the annual agreement by counting for every 500 kJ/kg decrease in heat value at 10% of the actual shipment of coal,
2. for every overrun on total sulfur content a double amount as derived from deteriorating the border class of coal,
- 3 for failure to supply or to take receipt of the coal indicated in the supply schedule with a 5% tolerance in quarterly settlements - 10% of the value of the coal that was not supplied or received.

Delays in payment for the coal delivered give rise to the payment of statutory interest.

The parties permit the ability to pursue damages in an amount exceeding the penalties mentioned herein. Either of the parties hereto may terminate this agreement by giving advance notice one period ahead, whereas the first day of the termination notice begins on the first day of the quarter.

The assignment of rights and duties derived from this contract to third parties requires the approval of both parties. Disputes concerning this multiple-year agreement and annual agreements are within the jurisdiction of the arbitration court appointed as specified in paragraph 16 of the agreement.

The provisions of the civil code are applicable in all matters not governed by this agreement

We hold that this agreement has been properly executed and is binding.

- 2) The annual agreement to buy and sell energy coal in 1996 from the Gliwicka Coal Company dated 8 January 1996

This agreement governs the principles for supplying the company with energy coal in 1996 from the mines located in the Gliwicka Coal Company

The total amount of coal to be delivered in 1996 from the Gliwicka Coal Company as agreed upon by the parties

1,200,000 tons of coal at the basic level and 240,000 tons of coal at the basic level and 240,000 tons of additional coal, where the deliveries will be as follows

1st quarter 215,000 tons,

2nd quarter 40,000 tons,
3rd quarter 360,000 tons,
4th quarter: 285,000 tons.

The coal price lists constitute supplements 1, 2 and 3 to the annual agreement. The seller is obliged to issue a VAT invoice for every shipment of coal understood as coal of one type in one class and in one rail shipment. If coal of different types and classes are sent in one shipment then the Seller will issue separate invoices for each class and type of coal. Payment is due 30 days after the invoices are issued.

The basis for specifying the quality of every shipment of coal supplied to the company are the results of laboratory testing conducted by the parties, who will incorporate the quality results of the coal delivered over five day periods. The permissible difference in the quality results of a shipment of coal is defined in paragraph 7 section 2 sub-section d of the agreement. If the quality of the coal is better than shown in the settlement documents, the company must make an additional payment, whereas if it is lower then the seller must give the company a discount. The additional payments and discounts are set on the basis of the price list which constitutes a supplement to the agreement.

The measurement of the amount of coal supplied is done at the seller's location and may be verified by the company. If there are differences in the amount of coal declared in the bills of lading and the invoices the parties will agree to a common settlement of the actual deliveries and that will constitute the basis for financial reconciliation.

We hold that the contract above is legally binding.

3) A long-term agreement to buy and sell energy coal as executed with the Jastrzębska Coal Company S A hereinafter referred to as the Seller on 16 January 1995 and modified by annex number 1 (no date) and annex number 2 dated 24 July 1995 and annex number 3 dated 8 January 1996.

Pursuant to the agreement as executed the seller agrees to do the following

- to deliver coal in a timely fashion in the amounts agreed upon in annual periods and in the schedules,
- to meet the contractual parameters on the quality of the coal delivered

the company agrees to do the following.

- to receive the coal deliveries at level no lower than the basic level defined in the agreement,
- to pay for the coal delivered in a timely fashion,
- to refrain from selling coal to third parties without the seller's approval.

The delivery period is understood to be 12 months starting from January of each year. The period is divided into four parts called quarters

The parties have agreed that for the duration of this agreement, i.e. from 1995 to 1999 the basic amounts of deliveries will be 1,000,000 tons per delivery period (per annum).

The additional amount may not be larger than 20% of the basic amount in annual settlements.

Coal deliveries will be made with rail transport according to franco terms and conditions at the sending station. The cost of loading the coal, preparing and sending the bill of lading is covered by the seller. The company covers the costs to ship the coal. At the company's request the seller is obliged to use means to prevent the coal from freezing at the seller's cost.

As of 1 January 1995 the price of 1 ton of ratio coal constituted the PLN equivalent of 32 USD at the average exchange rate listed by the National Bank of Poland for December 15, 1994

All of the remaining regulations within the multiple-year agreement as pertains to setting the price of coal and responsibility for improperly executing the agreement are similar to the ones described above in the multiple-year contract with the Gliwicka Coal Company

The parties drawing up this document hold that this contract was properly executed and is binding.

4) The annual agreement to buy and sell energy coal in 1996 from the Jastrzêbska Coal Company dated 8 January 1996

This agreement governs the principles for supplying the company with energy coal in 1996 from the mines in the Jastrzêbska Coal Company.

In sum in 1996 the parties agreed that the Jastrzêbska Coal Company will deliver 1,000,000 tons of coal at the basic level and 200,000 tons of coal at the additional level where

1 st quarter	250,000 tons,
2 nd quarter:	225,000 tons,
3 rd quarter:	255,000 tons,
4 th quarter:	270,000 tons.

Seven days before the quarter begins the parties agree upon a schedule for monthly shipments. The coal price list is a supplement to this agreement.

The other terms and conditions of the agreement as pertains invoicing, payment terms and how to settle quantitative differences are similar to the annual agreement with the Gliwicka Coal Company described in section 2

The parties drawing up this document hold that this contract was properly executed and is binding.

5) The multiple-year agreement to buy and sell energy coal from the Rybnicka Coal Company dated 16 January 1995 number PL. 271744437-05-0008/K

This agreement was concluded for the period from 1 January 1995 to 31 December 1999. The subject of this agreement are the multiple-year deliveries of energy coal. The parties agreed to the following basic levels of deliveries over the individual years of the agreement's duration:

1995	1,480,000 tons
1996	1,390,000 tons
1997	1,390,000 tons
1998	1,390,000 tons
1999	1,390,000 tons

The parties agreed that additional amounts of coal may be ordered but not in excess of 20% of the basic amounts.

This is a standard agreement and is similar to the agreement described in section 1 as regards the duties of the parties hereto, the delivery period, the quality parameters of the coal supplied, the terms and conditions for setting prices, annual agreements, liability for failure to discharge or improperly discharging the agreement and termination of the agreement.

6) The annual agreement to buy and sell energy coal from the Rybnicka Coal Company in 1996 dated 8 January 1996

This agreement governs the principles for supplying the company with energy coal in 1996 from the mines in the Rybnicka Coal Company

In sum in 1996 the parties agreed that the Rybnicka Coal Company will deliver 1,300,000 tons of coal at the basic level and 260,000 tons of coal at the additional level where deliveries over the year will be as follows:

1 st quarter:	360,000 tons,
2 nd quarter:	260,000 tons,
3 rd quarter:	310,000 tons,
4 th quarter:	370,000 tons

The coal price list is a supplement to this agreement.

The other terms and conditions of the agreement as pertains invoicing, payment terms and how to settle quantitative differences are similar to the annual agreement with the Gliwicka Coal Company described in section 2.

The parties drawing up this document hold that this contract was properly executed and is binding.

7) Agreement number NO-24/20/95/ECOL executed on 15 March 1995 with ECOL Sp. z o o in Rybnik hereinafter referred to as the contractor later amended by annex number 1 dated 1 March 1996 pertaining to services to cover the Rybnik EGP's total purchases of heating oil

This agreement was signed for the period up to 28 February 1997

The contractor - ECOL - agreed to do the following:

- to deliver heating oil in a timely fashion,
- to deliver heating oil number 3 whose quality corresponds to Polish standard under PN 76/C-96024,
- to coordinate the deliveries in conformance with the submitted delivery plan and to send „notice” of the time and amount of deliveries,
- to supply heating oil as specified in additional orders,
- to supply heating oil in seven-car wagons in „thermos”-style cisterns

The company agrees to take receipt on the oil delivered and to make payment in a timely fashion.

The heating oil delivered must have a certificate of quality issued by its manufacturer and must correspond to the standards in effect and agreed upon technical conditions.

The company will convey to the contractor the annual plan of deliveries by November 15 of each year for the upcoming year. The monthly plan of deliveries may be adjusted 15 days before the next month begins.

The contractor is entitled to lump sump consideration in the amount of 6,695 00 PLN per month for organizing the delivery of oil which is payable 21 days after the invoice is issued.

The amount due for the heating oil is due within 5 days from when the invoice is received while if an assignment to the refinery is attached to the invoice, the company will wire the money to the refinery's account

The amounts due for renting the cistern and shipping are due within 14 days from when the invoice is issued.

A supplement to the agreement specifies the plan for the delivery of mazout in 1996.

This agreement does not give rise to any reservations in terms of its conformance to the law.

Initial Financial Analysis

7.1 Limitations of the Initial Financial Analysis

This initial financial analysis was prepared using the materials provided by the Rybnik Electricity Generation Plant (EGP). AAP accepted the certified accountant's reports for the years as the primary source of information; however, they do not contain all the detailed information needed for financial analysis. EGP employees prepared further information for these years and the first half of 1996 at AAP's request

The scope of the work performed by AAP did not include the verification of the accuracy and credibility of the information received as prepared by the Management Board and employees at EGP. Correspondingly, unless it has been expressly stated otherwise, AAP did not conduct any audit on this work and fully relied on the information provided by the Management Board and employees at EGP.

7.2 EGP's Financial Statements for the 1993-1995 period and the First Half of 1996

7.2.1 The Format of these Financial Statements

The profit and loss statement, the balance sheet and the free cash flow statement for EGP from 1993 to 1995 and for the first half of 1996 have been presented in tables 7.1, 7.2 and 7.3. EGP's financial statements were prepared in conformance with Polish accounting standards. The certified accountants' opinions on the financial statements for the 1993-1995 period do not contain any reservations concerning their accuracy or integrity.

7.2.2 The Comparability of these Financial Statements

There were numerous changes in the accounting and taxation provisions from 1993 to 1995 which led to a lack of continuity in the principles for balance sheet and tax accounting. EGP's 1993-1995 financial statements as depicted in this analysis led to a comparable format in the important aspects except for the results derived from the revaluation of property, plant and equipment.

EGP revalued its property, plant and equipment on January 1, 1993, 1994 and 1995. After the January 1, 1995 revaluation EGP amended the depreciation rate in connection with amendments made to the tax provisions limiting the amount of depreciation charges that are considered to be costs of obtaining revenues in the period from 1995 to 1997. The influence exerted by a lack of continuity in the accounting policy towards property, plant and equipment as derived from the accounting and tax provisions for 1995 and first half 1996 financial data has been identified and described by AAP in this report. AAP did not introduce any adjustments to EGP's financial statements which would incorporate the impact of the changes described above.

Initial Financial and Economic Analysis of the EGP

AAP did not analyze EGP's financial statements with regards to specifying which possible adjustments are indispensable to ensure comparability and did not introduce such adjustments, unless it has been clearly stated otherwise.

7.2.3 Hiperinflation

When analyzing EGP's financial statements attention must be drawn to the fact that EGP is operating under conditions of hiperinflation. AAP did not make any adjustments that would eliminate the impact it exerts.

7.2.4 Presentation of the Financial Statements for 1993-1995 and the First Half of 1996.

Initial Financial and Economic Analysis of the EGP

Table 7.1 EGP's Profit and Loss Statement for the Period from 1993 to 1995 and the First Half of 1996 (000s of PLN) 000s of PLN

For the Period	Note*	1993	1994	1995	1 st Half. 1996
Revenues on the Sales of Capacity and Energy	7.4.1	315.704	459.790	532.276	308.060
Revenues on the Sales of Capacity and Electricity		315.206	459.417	531.797	307.769
Revenues on the Sales of Capacity Thermal Energy		498	373	479	291
Variable Costs of Energy Generation	7.4.2	193.513	312.896	355.029	197.746
Other Revenues	7.4.3	2.360	2.482	2.612	1.412
Operating Costs	7.4.4	82.030	127.304	161.365	93.696
Consumption of Materials and Energy		9 096	11.300	10.823	5.832
External Services		32.026	49.437	52.644	22.246
Taxes and Fees		1.899	2.220	4.053	2.481
Wages and Salaries		12.864	19.897	25.451	14.273
Employee Benefits		7.428	10.369	13.360	10.008
Depreciation		17.349	33.300	45.093	32.557
Others		1.386	2.495	10 398	6.688
Costs of Manufacturing Benefits for Internal Needs		(18)	(1.714)	(457)	(389)
Profit/Loss on Sales		42.521	22.072	18.494	18.030
Other Operating Revenues	7.4 5	7 873	13.723	13.695	414
Other Operating Costs	7.4 5	3 862	3.151	5.225	1.232
Profit / Loss on Business Operations		46.532	32.644	26.964	17.212
Financial Revenues	7 4 6	483	2.004	1.473	777
Financial Costs	7 4 7	2.967	7.354	9.160	7.474
Profit / Loss on Business Activities; Gross Profit / Loss on Business Operations		44.048	27.294	19.277	10.515
Extraordinary Profits	7.4 8	192	307	328	236
Extraordinary Losses	7 4.8	366	74	421	248

Initial Financial and Economic Analysis of the EGP

Gross Profit / Loss	43.874	27.527	19.184	10.503
Manadatory Payment on Financial Results	7.4.9	25.139	16.345	13.739
Corporate Income Tax	19.857	13.202	4.805	3.751
Other Mandatory Reductions	5.282	3.143	8.934	1.013
Net Profit / Loss	18.735	11.182	5.445	5.739

* Selected items in the P&L Statement were discussed in greater detail in the sections listed

Initial Financial and Economic Analysis of the EGP

Table 7.1.A The Structure of EGP's P&L Statement for 1993-1995 and the First Half of 1996

For the Period	1993	1994	1995	1st Half 1996
Revenues on the Sales of Capacity and Energy	100,0%	100,0%	100,0%	100,0%
Revenues on the Sales of Capacity and Electricity	99,8%	99,9%	99,9%	99,9%
Revenues on the Sales of Capacity Thermal Energy	0,2%	0,1%	0,1%	0,1%
Variable Costs of Energy Generation	61,3%	68,0%	66,7%	64,2%
Other Revenues	0,8%	0,5%	0,5%	0,5%
Operating Costs	26,0%	27,7%	30,3%	30,4%
Consumption of Materials and Energy	2,9%	2,5%	2,0%	1,9%
External Services	10,1%	10,8%	9,9%	7,2%
Taxes and Fees	0,6%	0,5%	0,8%	0,8%
Wages and Salaries	4,1%	4,3%	4,8%	4,6%
Employee Benefits	2,4%	2,3%	2,5%	3,2%
Depreciation	5,5%	7,2%	8,5%	10,6%
Others	0,4%	0,5%	1,9%	2,2%
Costs of Manufacturing Benefits for Internal Needs	0,0%	-0,4%	-0,1%	-0,1%
Profit/Loss on Sales	13,5%	4,8%	3,5%	5,9%
Other Operating Revenues	2,5%	3,0%	2,6%	0,1%
Other Operating Costs	1,3%	0,7%	1,0%	0,4%
Profit / Loss on Business Operations	14,7%	7,1%	5,1%	5,6%
Financial Revenues	0,2%	0,4%	0,2%	0,2%
Financial Costs	0,9%	1,6%	1,7%	2,4%
Profit / Loss on Business Activities; Gross Profit / Loss on Business Operations	14,0%	5,9%	3,6%	3,4%
Extraordinary Profits	0,0%	0,1%	0,1%	0,1%
Extraordinary Losses	0,1%	0,0%	0,1%	0,1%

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Gross Profit / Loss	13,9%	6,0%	3,6%	3,4%
Manadatory Payment on Financial Results	8,0%	3,6%	2,6%	1,5%
Corporate Income Tax	6,3%	2,9%	0,9%	1,2%
Other Mandatory Reductions	1,7%	0,7%	1,7%	0,3%
Net Profit / Loss	5,9%	2,4%	1,0%	1,9%

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Table 7.1.B The Rate of Growth in EGP's P&L Statements from 1993 to 1995

For the Period	1994	1995
Revenues on the Sales of Capacity and Energy	145,6%	115,8%
Revenues on the Sales of Capacity and Electricity	145,8%	115,8%
Revenues on the Sales of Capacity Thermal Energy	74,9%	128,4%
Variable Costs of Energy Generation	161,7%	113,5%
Other Revenues	105,2%	105,2%
Operating Costs	155,2%	126,8%
Consumption of Materials and Energy	124,2%	95,8%
External Services	154,4%	106,5%
Taxes and Fees	116,9%	182,6%
Wages and Salaries	154,7%	127,9%
Employee Benefits	139,6%	128,8%
Depreciation	191,9%	135,4%
Others	180,0%	416,8%
Costs of Manufacturing Benefits for Internal Needs	9522,2%	26,7%
Profit/Loss on Sales	53,2%	83,8%
Other Operating Revenues	174,3%	99,8%
Other Operating Costs	81,6%	165,8%
Profit / Loss on Business Operations	70,2%	82,6%
Financial Revenues	415,0%	73,5%
Financial Costs	247,9%	124,5%
Profit / Loss on Business Activities; Gross Profit / Loss on Business Operations	62,0%	70,6%
Extraordinary Profits	159,9%	106,9%
Extraordinary Losses	20,2%	568,9%
Gross Profit / Loss	62,7%	69,7%
Manadatory Payment on Financial Results	65,0%	84,1%

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Corporate Income Tax	66,5%	36,4%
Other Mandatory Reductions	59,5%	284,3%
Net Profit / Loss	59,7%	48,7%

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Table 7.2 EGP's Balance Sheet for 1993-1995 and the First Half of 1996 (000s of PLN)

		31.12.1993	31.12.1994	31.12.1995	30.06.1996
Property, Plant & Equipment	Note* 7 5 1	192.763	240.176	729.301	709.173
Intangibles		60	229	721	773
Fixed Assets		183 253	227.548	716.014	693 055
Financial Assets		6.896	9 525	9.624	11 273
Long-term Receivables		2.554	2 874	2.942	4 072
Current Assets -		55.106	72.427	96.809	90.280
Inventories	7 5 2	18.036	33.196	37 971	31.128
Receivables and Claims, including:	7.5.3	35.850	35.965	53 565	36.806
Receivables against Deliveries and Service		29.782	32.482	46.263	34 044
Other Receivables		6 068	3.483	7 302	2.762
Cash		1 220	3.266	5.273	22.346
Pre-paid Debt	7.5.4	830	1.808	8.945	8.227
Total Assets		248.699	314.411	835.055	807.680
Equity	7.5.10	191.772	205.810	683.566	685.101
Founding Fund		67.547	70.326	74.033	74.033
State-owned Enterprise Fund		98 038	108.843	114.736	114.735
Revaluation Reserve		6.809	9.839	479.740	479.740
Retained Earnings Brought Forward		643	5 620	9 612	10.854
Financial Result for the Period		18 735	11.182	5.445	5.739
Provisions	7.5.8	-	121	2.570	2.570
Bank and Non-bank Loans	7.5.9	15.718	28.090	88.771	66.181
Long-term Non-bank Loans		-	-	12.363	17.183
Long-term Bank Loans		4.870	12 470	43.814	39.000
Short-term Bank Loans		10.848	15 620	32.594	9 998
Short-term Liabilities and Special Purpose Funds		36.105	73.330	52.011	35.201

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Short-term Liabilities		35 125	69.907	47.661	30 119
Liabilities on Deliveries and Services	7.5.5	32 683	45.541	37.505	23 506
Other Short-term Liabilities		2.442	24 366	10.156	6.613
Special Purpose Funds	7.5.7	980	3.423	4.350	5.082
Accruals and Deferred Income	7.5.6	5.104	7.060	8.137	18.627
SUM OF LIABILITIES AND EQUITY		248.699	314.411	835.055	807.680

* Selected items in the P&L statement have been discussed in greater detail in the notes.

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Table 7.2.A EGP's Balance Sheet Structure in 1993-1995 and the First Half of 1996 (000s of PLN)

	31.12.1993	31.12.1994	31.12.1995	30.06.1996
Property, Plant & Equipment	77,5%	76,4%	87,3%	87,8%
Intangibles	0,0%	0,1%	0,1%	0,1%
Fixed Assets	73,7%	72,4%	85,7%	85,8%
Financial Assets	2,8%	3,0%	1,1%	1,4%
Long-term Receivables	1,0%	0,9%	0,4%	0,5%
Current Assets	22,2%	23,0%	11,6%	11,2%
Inventories	7,3%	10,6%	4,6%	3,9%
Receivables and Claims, including	14,4%	11,4%	6,4%	4,5%
Receivables against Deliveries and Service	12,0%	10,3%	5,5%	4,2%
Other Receivables	2,4%	1,1%	0,9%	0,3%
Cash	0,5%	1,0%	0,6%	2,8%
Pre-paid Debt	0,3%	0,6%	1,1%	1,0%
Total Assets	100,0%	100,0%	100,0%	100,0%
Equity	77,1%	65,5%	81,9%	84,8%
Founding Fund	27,2%	22,4%	8,9%	9,2%
State-owned Enterprise Fund	39,4%	34,6%	13,7%	14,2%
Revaluation Reserve	2,7%	3,1%	57,4%	59,4%
Retained Earnings Brought Forward	0,3%	1,8%	1,2%	1,3%
Financial Result for the Period	7,5%	3,6%	0,7%	0,7%
Provisions	-	0,0%	0,3%	0,3%
Bank and Non-bank Loans	6,4%	9,0%	10,6%	8,2%
Long-term Non-bank Loans	-	-	1,5%	2,1%
Long-term Bank Loans	2,0%	4,0%	5,2%	4,8%
Short-term Bank Loans	4,4%	5,0%	3,9%	1,3%
Short-term Liabilities and Special Purpose Funds	14,5%	23,3%	6,2%	4,4%
Short-term Liabilities	14,1%	27,2%	5,7%	3,8%
Liabilities on Deliveries and	13,1%	14,5%	4,5%	2,9%

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Services				
Other Short-term Liabilities	1,0%	7,7%	1,2%	0,9%
Special Purpose Funds	0,4%	1,1%	0,5%	0,6%
Accruals and Deferred Income	2,0%	2,2%	1,0%	2,3%
SUM OF LIABILITIES AND EQUITY	100,0%	100,0%	100,0%	100,0%

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Table 7.2.B Rate of Growth in EGP's Balance Sheets for 1993-1995 and the First Half of 1996 (000s of PLN)

	31.12.94	31.12.95	30.06.96
Property, Plant & Equipment	124,6%	303,7%	97,2%
Intangibles	381,7%	314,8%	107,2%
Fixed Assets	124,2%	314,7%	96,8%
Financial Assets	138,1%	101,0%	117,1%
Long-term Receivables	112,5%	102,4%	138,4%
Current Assets	131,4%	133,7%	93,3%
Inventories	184,1%	114,4%	82,0%
Receivables and Claims, including:	100,3%	148,9%	68,7%
Receivables against Deliverers and Service	109,1%	142,4%	73,6%
Other Receivables	57,4%	209,6%	37,8%
Cash	267,7%	161,5%	423,8%
Pre-paid Debt	217,8%	494,7%	92,0%
Total Assets	126,4%	265,6%	96,7%
Equity	107,3%	332,1%	100,2%
Founding Fund	104,1%	105,3%	100,0%
State-owned Enterprise Fund	111,0%	105,4%	100,0%
Revaluation Reserve	144,5%	4875,9%	100,0%
Retained Earnings Brought Forward	874,0%	171,0%	112,9%
Financial Result for the Period	59,7%	48,7%	105,4%
Provisions		2124,0%	100,0%
Bank and Non-bank Loans	178,7%	316,0%	74,6%
Long-term Non-bank Loans	-	-	139,0%
Long-term Bank Loans	256,1%	351,4%	89,0%
Short-term Bank Loans	144,0%	208,7%	30,7%
Short-term Liabilities and Special Purpose Funds	203,1%	70,9%	67,7%
Short-term Liabilities	199,0%	68,2%	63,2%
Liabilities on Deliveries and Services	139,3%	82,4%	62,7%

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Other Short-term Liabilities	997,8%	41,7%	65,1%
Special Purpose Funds	349,3%	127,1%	116,8%
Accruals and Deferred Income	138,3%	115,3%	228,9%
SUM OF LIABILITIES AND EQUITY	126,4%	265,6%	96,7%

Initial Financial and Economic Analysis of the EGP

Table 7.3 Free Cash Flow Statement for EGP in 1994-1995 and the First Half of 1996
(000s of PLN)

For the Period	1994	1995	I po³. 96
Earnings before Interest and Taxes	32.877	26.871	17.200
Tax on EBIT	(18.485)	(16.814)	(7.442)
Change in Deferred Tax Liability	-	2.371	-
Tax Adjusted EBIT	14.392	12.428	9.758
Depreciation	33 300	45.093	32.557
Gross Cash Flow	47.692	57.521	42.315
Change in Working Capital	(7.048)	(28.599)	(12.010)
Change in Other Assets and Liabilities	28.051	(23.083)	12 935
Operational Cash Flow	68.695	5.839	43.240
Capital Expenditures	(70.874)	(54 479)	(12 428)
Free Cash Flow	(2.179)	(48.640)	30.812
Financing	2.179	48.640	(30.812)
Change in Bank and Non-bank Loans	12.372	60 681	(22.590)
Change in Equity	(6.983)	(7.429)	(4.204)
Divends	-	-	-
After Taxation Financial Costs	(4.412)	(5.496)	(4.484)
After Taxation Financial Revenues	1.202	884	466
Tax on EBIT	(18.485)	(16.814)	(7.442)
Tax Paid	(16.345)	(13.739)	(4.764)
Tax Shield on Financial Costs	(2 942)	(3.664)	(2.989)
Tax on Financial Revenues	802	589	311
Change in Working Capital	(7.048)	(28.599)	(12.010)
Inventories	(15.160)	(4.775)	6.843
Receivables on Deliveries and Services	(2.700)	(13 781)	12.219
Change in Cash Balance	(2.046)	(2 007)	(17.073)
Liabilities on Deliveries and Services	12 858	(8 036)	(13.999)

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Changes in Other Assets and Liabilities	28.051	(23.083)	12.935
Other Short-term Liabilities	24.367	(13.283)	(2.811)
Other Receivables	2.585	(3.819)	4.539
Other Provisions	121	78	-
Accruals and Pre-paid Expenses	(978)	(7.136)	717
Accruals and Deferred Income	1.956	1 077	10.490

Initial Financial and Economic Analysis of the EGP

Table 7.3.A The Structure and Rate of Growth on Free Cash Flow at EGP for 1993-1995 and the First Half of 1996

For the Period	1994	1995	1995	1st Half
	%	%	D	%
Earnings before Interest and Taxes	7,2%	5,0%	81,7%	5,6%
Tax on EBIT	-4,0%	-3,2%	91,0%	-2,4%
Change in Deferred Tax Liability		0,4%		
Tax Adjusted EBIT	3,1%	2,3%	86,4%	3,2%
Depreciation	7,2%	8,5%	135,4%	10,6%
Gross Cash Flow	10,4%	10,8%	120,6%	13,7%
Change in Working Capital	-1,5%	-5,4%	405,8%	-3,9%
Change in Other Assets and Liabilities	6,1%	-4,3%	-82,3%	4,2%
Operational Cash Flow	14,9%	1,1%	8,5%	14,0%
Capital Expenditures	-15,4%	-10,2%	76,9%	-4,0%
Free Cash Flow	-0,5%	-9,1%	2232,2%	10,0%
Financing	0,5%	9,1%	2232,2%	-10,0%
Change in Bank and Non-bank Loans	2,7%	11,4%	490,5%	-7,3%
Change in Equity	-1,5%	-1,4%	106,4%	-1,4%
Dividends				
After Taxation Financial Costs	-1,0%	-1,0%	124,6%	-1,5%
After Taxation Financial Revenues	0,3%	0,2%	73,5%	0,2%
Tax on EBIT	-4,0%	-3,2%	91,0%	-2,4%
Tax Paid	-3,6%	-2,6%	84,1%	-1,5%
Tax Shield on Financial Costs	-0,6%	-0,7%	124,5%	-1,0%
Tax on Financial Revenues	0,2%	0,1%	73,4%	0,1%
Change in Working Capital	-1,5%	-5,4%	405,8%	-3,9%
Inventories	-3,3%	-0,9%	31,5%	2,2%
Receivables on Deliveries and	-0,6%	-2,6%	510,4%	4,0%
Change in Cash Balance	-0,4%	-0,4%	98,1%	-5,5%
Liabilities on Deliveries and Services	2,8%	-1,5%	-62,5%	-4,5%
Changes in Other Assets and	6,1%	-4,3%	-82,3%	4,2%
Other Short-term Liabilities	5,3%	-2,5%	-54,5%	-0,9%
Other Receivables	0,6%	-0,7%	-147,7%	1,5%
Other Provisions	0,0%	0,0%	64,5%	
Accruals and Pre-paid Expenses	-0,2%	-1,3%	729,7%	0,2%
Accruals and Deferred Income	0,4%	0,2%	55,1%	3,4%

7.3 Discussion of EGP's Financial Standing

EGP's financial standing rests primarily on the price of electricity and coal. These prices are official prices set by the Ministry of Industry and Trade.

Over all of the years under research EGP generated a net profit, while its margin increased slightly in the first half of 1996 after noting a clear decline in 1994 and 1995. The increase in net margin is a result of less mandatory reduction on the gross financial result.

The decline in asset management effectiveness in 1995 and the first half of 1996 was caused by the revaluation carried out by EGP on 1 January 1995. Table 4 depicts the primary profitability multiples.

Table 7.4 EGP's Profitability Multiples

	1993	1994	1995	30.06.96
Annual Mean Inflation Rate	41,1%	33,6%	25,3%	
Revenues on the Sale of Capacity and Energy (000s of PLN)	315.704	459.790	532.276	308.060
Rate of Growth		45,6%	15,8%	
Margin on the Sale of Capacity and Energy	38,7%	31,9%	33,3%	35,8%
The EBIT Margin*)	14,7%	7,2%	5,0%	5,6%
EBIT/CE	22,3%	14,1%	3,5%	
CE/(Revenues on the Sale of Capacity and Energy)	66%	51%	145%	
Financial Leverage	7,6%	12,0%	11,5%	8,8%
ROA	7.5%	3.6%	0.7%	
ROE	9.8%	5.4%	0.8%	

*) Definitions of multiples are presented in Supplement II.

In 1993-1995 EGP's revenues grew gradually. In 1994 the rate of revenue growth surpassed the inflation rate. In turn, a real decline in revenues was observed in 1995.

In the period from 1993 to the first half of 1996 the margin on the sale of electricity fluctuated only to a slight degree. The margin was the lowest in 1994 (it reached 31.9%). The EBIT/CE multiple fell significantly in 1993-1995. This decline was

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In 1993-1995 a slight increase in financial leverage was observed as caused by the drawing down of new bank loans in 1994-1995.

The decline in the ROA and ROE multiples in 1993-1995 was primarily caused by an increase in the value of fixed assets and the increase in EGP's equity as a consequence of revaluation

Table 7.5 depicts the fundamental equity structure multiples at EGP. The significant increase in equity in EGP's equity structure was caused by the revaluation of the company's property, plant and equipment, just as in the case of the effectiveness of asset management.

The decline in trade liabilities in EGP's financing structure draws attention to itself. The largest percentage of these trade liabilities are the liabilities to coal companies which are demanding shorter and shorter payment periods on account of their own serious problems with financial liquidity. The liability turnover multiple indicates that the payment period is nearly three times shorter than in 1993

Table 7.5 EGP's Equity Structure Multiples

	1993	1994	1995	
				30.06.9
				6
Liabilities	14.5%	23.0%	5.8%	3.8%
Bank Loans	6.5%	9.3%	10.8%	8.5%
Equity	79.0%	67.7%	83.4%	87.7%

Total	100,0%	100,0%	100,0%	100,0%
	= =	= = =	= = =	= = =
Debt Ratio	6.3%	8.9%	10.6%	8.2%

EGP's liquidity and working capital turnover ratios are depicted in Table 7.6. The receivables turnover multiple, just like the liabilities turnover ratio, clearly declined in this period. The receivables turnover multiple is wholly dependent on settlements with PSE, since receivables from PSE constitute nearly 90% of EGP's total receivables.

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Table 7.6 EGP's Liquidity and Working Capital Turnover Ratios

	1993	1994	1995	30.06.96
Current Ratio	1,57	1,04	2,03	3,00
Quick Ratio	1,06	0,56	1,23	1,96
Receivables Turnover Ratio	34,2	25,7	31,6	20,1
Cash Flow Turnover Ratio	1,4	2,6	3,6	13,2
Liabilities Turnover Ratio	61,7	53,1	38,6	21,7

On 30 06.1996 there was a clear improvement in liquidity caused by the realization of a large payment from PSE in the final days of June 1996. For this reason the multiples on 30 06.1996 do not reflect EGP's actual financial standing.

7 4 Profit and Loss Statement

7 4 1 Core Business Revenues and Costs

The primary source of revenues for EGP are the sales revenues from electricity. The sales of thermal energy are marginal in the electric generation plant's operations. During 1993-1995 and the first half of 1996 thermal energy constituted approximately 0,1% of EGP's total revenues. Two basic elements may be distinguished in the structure of electricity sales revenues: revenues on the sale of capacity and the sale of electricity.

Sales revenues on capacity constitute an element of revenues that is independent of the amount of electricity generated. Revenues on capacity sales include the following: fees for dispatching capacity, fees for system services, refunding costs for inventories in excess of norms and export bonuses. System services constitute revenues for generation plants that render services in favor of the national energy system. The amount of revenues depends upon the level of regulation in the energy blocks at power plants. Revenues for refunding costs of inventories in excess of norms are equal to the costs of maintaining strategic reserves of coal above the normative amount for a given power plant. Export bonuses depend on how much energy PSE transmits abroad. Revenues by virtue of export bonuses are divided among the generation plants and PSE using a given proportion. Revenues on the sales of electricity are calculated against the amount of MWh of energy generated. Table 7.7 shows the structure of revenues on the sales of electricity.

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Table 7.7 Revenues on Electricity Sales at EGP (000s of PLN)

	1993	1994	1995	30.06.19 96
Sales Revenues on Electricity	107 141	120.831	143.193	93.383
Capacity				
Sales Revenues on Electricity	208.065	338.586	388.604	214 386
Total	315.206	459.417	531.797	307.769
	= = =	= = =	= = =	= = =
	= =	= =	= =	= =
Structure of Sales Revenues:				
Sales Revenues on Electricity	34,0%	26,3%	26,9%	30,3%
Capacity				
Sales Revenues on Electricity	66,0%	73,7%	73,1%	69,8%
Price and Sales Volume Indices				
Net Output of Electricity	7 733 82	7.860.19	8 039 15	4 249.48
[MWh]	8	9	2	2
Volume Index		1,02	1,02	
Mean Electricity Price	26,90	43,08	48,34	50,45
[PLN/MWh]				
Price Index	-	1,60	1,12	1,04
Annual Average Inflation Rate	44,1%	33 6%	25 3%	
Single Component Electricity				
Price [PLN/MWh]	40,76	58,45	66,15	72,43
Single Component Price Index	-	1,43	1,13	1,09

The generation of electricity in 1993-1995 and the first half of 1996 increased slightly. The increase in sales revenues was primarily caused by higher sales prices

7.4.2 Variable Costs of Energy Generation

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Table 7.8 Variable Costs of Energy Generation (000s of PLN)

	1993	1994	1995	30.06.1996
Basic Fuel	165.602	280 873	314.180	174 148
Auxiliary Fuel	1.394	1.571	2.853	1.605
Sorbent	398	949	2,790	1.136
Environmental Costs	26.119	29.503	35.206	20 857
<hr/>				
Variable Costs of Energy Generation	193.513	312.896	355.029	197.746
	==	==	==	==
	==	==	==	==
Structure of Variable Costs				
Basic Fuel	85,6%	90,0%	88,5%	88,1%
Auxiliary Fuel	0,7%	0,5%	0,8%	0,8%
Sorbent	0,2%	0,1%	0,8%	0,6%
Environmental Costs	13,5%	9,4%	9,9%	10,5%
<hr/>				
Total	100,0%	100,0%	100,0%	100,0%
	==	==	==	==
	==	==	==	==

The principal percentage share in total variable costs of energy generation is held by basic fuel, viz hard coal. The percentage share held by the auxiliary fuel called mazout in the structure of variable costs remains at a relatively stable level and is closely linked to the number of times energy blocks are started up. In recent years the percentage share of sorbent has increased as caused by commissioning installations to remove sulfur from exhaust in a portion of the blocks and it will continue to grow in the future in connection with the plans to commission installations to remove sulfur in all energy blocks.

The environmental costs divided into their main component parts are displayed in Table 7.9. The line item entitled utilizing burned waste includes external services to truck away and make use of the ash and cinder from EGP. Fees for commercial usage of the environment include fees for emitting gases, using water resources and storing waste. The fees for storing waste include costs to store waste which was not trucked away or utilized by external companies.

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Table 7.9 Environmental Costs (000s of PLN)

	1993	1994	1995	30.06.1996
Using Burned Waste	16.149	16.457	18 609	10 046
Fees for Commercial Usage of the Environment, Including:	9.970	13.046	16.597	10.811
Fees for Emission of Dust and Gases	9 362	12 382	15.602	10.054
Fees for Storing Waste	322	194	383	379
Water Usage Fees	286	470	612	378
Environmental Costs	26.119	29.503	35.206	20.857
	= = =	= = =	= = =	= = =

The costs of transporting generation fuel have been included in the line items entitled basic fuel, auxiliary fuel and sorbent. The costs of transporting generation fuel by types of fuels are depicted in Table 7 10 Fuel is delivered by rail, transportation costs are directly linked to the amount of each fuel used

Table 7.10 Fuel Transportation Costs (000s of PLN)

	1993	1994	1995	30.06.1996
Basic Fuel Transportation Costs	b.d	18.310	21 385	13.358
Auxiliary Fuel Transportation Costs	b d	64	187	69
Sorbent Transportation Costs	b d	638	1 473	445
Total	14.451	19.012	23.045	13.872
	= = =	= = =	= = =	= = =

7.4.3 Other Revenues

In addition to its core activities, EGP generates revenues on other activities including the sale of materials and merchandise, rendering automobile transportation services, workshop services, rental and lease of space, rendering hotel, recreational and training services

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Table 7.11 EGP's Other Revenues (000s of PLN)

	1993	1994	1995	30.06.1996
Sales Revenues on Work and Services Unrelated to Core Business	2 208	2.274	2.303	1.343
Sales Revenues on Merchandise and Materials	929	845	1.168	406
Value of the Merchandise and Materials Sold	(777)	(637)	(859)	(337)
Other Revenues	2.360	2.482	2.612	1.412

7.4.4 Operating Costs

The operating costs are presented in table 7.12 Fixed operating costs at EGP are comprised by the usage of other materials (primarily including materials for refurbishment projects), energy purchased for lighting purposes, external services, taxes and fees, salary costs and employee benefits, depreciation, other operating costs

Table 7.12 Operating Costs

Operating Costs	82.030	127.304	161.365	93.696
Materials and Energy	9 096	11 300	10 823	5.832
External Services	32 026	49 437	52 644	22 246
Taxes and Fees	1.899	2.220	4 053	2 481
Wages and Salaries	12.864	19.897	25 451	14.273
Employee Benefits	7.428	10 369	13 360	10.008
Depreciation	17.349	33.300	45 093	32.557
Others	1 386	2.495	10 398	6.688
Cost of Manufacturing Benefits for Own Needs	(18)	(1.714)	(457)	(389)

The level of operating costs to sales revenues in 1993-1995 and the first half of 1996 ranged from 26,0% to 30,4% The line item entitled benefits for own needs includes costs incurred by the power plant that are not charged to the result. These costs are mainly comprised by the manufacture of fixed assets on its own, the costs associated with social activities which is charged to the Company Social Benefits Fund. The amount of benefits for the company's own needs lowers the items in costs by kind, mainly, materials, salaries and external services

7 4 4.1 Depreciation

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In 1993-1995 EGP revaluated its assets in conformance with the provisions of law currently in effect. As a result of revaluation on 1 January 1993, 1 January 1994 and 1 January 1995 non-current assets grew by 6,809, 9,839 and 479,740 thousand PLN, respectively. The 1995 revaluation increased the gross value of fixed assets more than five fold.

The depreciation charges in 1993 and 1994 grew in proportion to the increase in the gross value of fixed assets after revaluation. After revaluation on 1 January 1995 EGP amended its depreciation rates for those assets, for which the depreciation rates surpassed the limits set forth in the tax regulations as concerned revaluated fixed assets. In connection with the above, the accounting policy for fixed assets lost its continuity and depreciation charges did not increase in proportion to the increase in the gross value of the fixed assets. The tax limits are in effect during the 1995-1997 period. As regards new fixed assets purchased after 01.01.1995 EGP has been employing the GUS (Central Statistic Office) rates as listed in the decree issued by the Minister of Finance.

AAP analyzed the amount of these depreciation charges in 1995 and 1996. If the accounting policy were to have been maintained the depreciation charges in 1995 and in the first half of 1996 would have been higher by 58,595 thousand PLN and 24,075 thousand PLN, respectively. In 1994 and 1995 EGP used its right to deduct investment expenditures from its taxable income.

Depreciation in 1994 includes the total amount of the investment tax break worth 11,073 thousand PLN. In 1995 the principle of settling investment tax breaks over a five year period was accepted from the time when the asset is registered for usage. In conformance to this principle the costs in the first half of 1996 were burdened with a charge in the amount of 494 thousand PLN.

Pursuant to the interpretation provided by the Minister of Finance pertaining to the settlement of investment tax breaks, which opinion was publicized after 30 June 1996, the 1995 investment tax break is currently settled by EGP at the depreciation for the fixed asset to which the investment tax break applies.

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Table 7.13 Depreciation in 1993-1995 and the First Half of 1996

	1993	1994	1995	30.06.1996
Depreciation	17.34	33.30	45.09	32.557
	9	0	3	
Mean Depreciation Rate	5,3%	5,9%	2,1%	3,0%
Mean Depreciation Rate by GUS Groups.				
Buildings and Structures	3,0%	3,2%	1,4%	1,8%
Technical Equipment and Machinery	6,5%	7,8%	2,3%	3,4%
Vehicles	9,0%	8,8%	5,2%	5,6%
Other Fixed Assets (Excluding Equipment)	17,3%	16,4%	14,5%	14,4%

7.4.4 2 External Services

Table 7.14 External Services in 1993-1995 and the First Half of 1996 (000s of PLN)

	1993	1994	1995	30.06.1996
External Transport	237	656	481	179
External Refurbishment Services	21.904	33.957	39.352	15.643
Other External Services	9.885	14.824	12.811	6.424
External Services	32.026	49.437	52.664	22.246
	=====	=====	=====	=====
	=	=	=	=

The costs of external services do not include fuel transportation costs and the costs for utilizing burned waste, which were incorporated in the variable costs of energy output.

The external transportation line item primarily encompasses the transportation of all other materials

In 1993-1995 the Electric Generation Plant established subsidiaries to render refurbishment services thereby reducing employment in its own brigades. In connection with the above, a large portion of machine and equipment refurbishment for core business activities is commissioned externally

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After preparing financial statements dated 30 June 1996 EGP reviewed its refurbishment costs. As a consequence of this review it was determined that a portion of the modernization to these fixed assets conducted in the first half of 1996 should not have been classified as refurbishments but as improvements augmenting the value of fixed assets. In connection with the above it was stated that the amount of the refurbishments for the first half of 1996 was overvalued by 3,968.3 thousand PLN. At the same time the value of investments underway as of 30 June 1996 were undervalued by this same amount.

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7 4 4 3 Wages, Salaries and Payroll Costs

The principles of remuneration for the EGP employees are governed by the "Company Collective Agreement" executed on 12 October 1993. The primary form of salary employed at EGP is the time and bonus form of salary.

Besides base pay employees have the right to additional benefits which were described in detail in the organizational analysis in this report.

Table 7.15 EGP's Costs on Wages, Salaries and Payroll Costs from 1993 to the First Half of 1996 (000s of PLN)

	1993	1994	1995	30.06.19 96
Basic Salaries	5 307	7 701	10 838	7.257
Bonuses	2 315	3 351	5.266	2.044
Other Components	5 242	8 845	9.347	4.972
Payroll Taxes	5.792	8 848	11.601	6.445
Other Benefits	1.636	1 521	1.759	3.563
	-----	-----	-----	-----
Costs of Salaries and Benefits	20.292	30.266	38.811	24.281
	= = =	= = =	= = =	= = =

Liabilities on leave unused by EGP employees as of 30 June 1996 were worth 4,567 thousand PLN (calculations are presented in table 7 16)

Table 7.16 Calculating the Estimated Liability on Unused Leave Time (PLN)

Number of Days of Unused Leave as of 30 June 1996	44 41
	9
Number of Working Days Per Month	22
Number of Person-Months of Unused Leave as of 30 June 1996	2.019
Average Monthly Basic Salary in June 1996 [PLN]	1,526
ZUS Payroll Tax on Monthly Wage (48 2%) [PLN]	736
Total Cost Per Person-Month [PLN]	2.262
Estimated Total Liability on Unused Leave [000s PLN]	4.567

AAP calculated the amount of the liability on unused leave but it did make any adjustments to EGP's financial statements.

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7.4.4.4. Consumption of Materials and Energy

This item includes non-generation fuel consumption, spare parts, office materials, other materials, the consumption of electricity to light buildings and the grounds of EGP. Refurbishments conducted by internal staff constitute the largest percentage share in this line item.

7.4.4.5 Other Operating Costs

Other operating costs include business travel, insurance premiums, costs of representation, advertising costs and others.

7.4.5 Other Operating Revenues and Expenses

Tables 7.17 and 7.18 depict the structure of other operating revenues and expenses.

Table 7.17 Other Operating Revenues (000s of PLN)

	1993	1994	1995	30.06.1996
Revenues on Selling off Property, Plant and Equipment	640	1,232	1,052	16
Surpluses of Manufacturing Fuel as Discovered	-	6 043	11.837	-
Surplus Fixed Assets as Discovered	-	2 295	-	-
Revaluation of Manufacturing Fuel	6 857	3 460	-	-
Fee for Storing Coal on EGP's Grounds	-	-	-	298
Fee for Surpassing Limiting Parameters for Coal	-	-	-	100
Others	376	693	806	-
	-----	-----	-----	-----
Other Operating Revenues	7.873	13.723	13.695	414
	= = =	= = =	= = =	= = =

At the end of 1993 and 1994 generation fuel was not valued at historical prices but at current prices. The difference between the valuation of inventories using these two methods is shown in revenues under the line item: revaluation of generation fuel. In 1995 the accounting rules changed and fuel is shown at actual purchase prices.

Coal for generation is not weighed, its consumption is determined approximately by using an indicator for the use of the coal's chemical energy to generate 1 MWh of energy. Since this system as described is not exact, there are differences between actual amounts and amounts as recorded when inventories are taken. The surplus fuel as discovered in 1994 and 1995 was posted as other operating revenues, and not as a

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reduction in fuel consumption. EGP made an inventory of its generation fuel on July 31, 1996 and not on June 30, 1996. AAP made an analysis which showed that the fuel costs in the first half of 1996 should be lower by about 11,650.7 thousand PLN

The surplus fixed assets discovered include those fixed assets that were previously liquidated and which were regenerated through the company's own efforts and were re-entered into the register of fixed assets after they were appraised by an independent expert appraiser.

Table 7.18 Other Operating Costs (000s of PLN)

	1993	1994	1995	30.06.1996
				96
Value of Property, Plant and Equipment Sold	419	419	1,516	59
Cost to Maintain Social Facilities	-	-	658	363
Charitable Contributions	3.357	1.214	1.565	179
Sanction Fees in favor of the State Treasury	-	772	-	-
1995 Investment Tax Break	-	-	-	494
Others	86	746	1 486	137
	-----	-----	-----	-----
Other Operating Costs	3.862	3.151	5.225	1.232
	= = =	= = =	= = =	= = =

The costs to maintain social facilities in 1993-1994 were burdens upon costs by kind, while starting from 1995 they are show as other operating costs Charitable contributions include the sum of small amounts given to pre-schools, schools, hospitals, churches, foundations etc. EGP decided to settle its 1995 income tax break over a five year period As a consequence thereof the costs for the first half of 1996 were charged with 494 thousand PLN

7.4.6 Financial Revenues

Financial revenues generally include dividends on shares and interest received. Table 7.19 depicts the structure of financial revenues.

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Table 7.19 Financial Revenues (000s of PLN)

	1993	1994	1995	30.06.1996
Dividends on Shares				
	242	344	377	205
Interest Received, including:	221	103	1 095	572
Interest on Bank Accounts	170	90	649	572
Interest on Loans Disbursed	51	13	446	-
FX Translation	20	716	1	-
Interest on Guarantees Made	-	828	-	-
Other	-	13	-	-
	-----	-----	-----	-----
Total	483	2.004	1.473	777
	=====	=====	=====	=====

7.4.7 Financial Costs

Financial costs are the interest costs, fx translation and commission fees on bank loans drawn. Table 7 20 depicts the structure of financial costs

Table 7.20 Financial Costs (000s of PLN)

	1993	1994	1995	30.06.1996
Interest Paid	1.960	6 688	8 507	7.183
FX Translation	722	147	75	1
Commission Fees on Bank Loans Drawn	285	519	578	290
	-----	-----	-----	-----
Total	2.967	7.354	9.160	7.474
	=====	=====	=====	=====

In regards to financial costs EGP reclassified interest costs on liabilities paid irregularly in 1993-1994 from extraordinary losses to financial costs and costs of banking fees to other operating costs in order to maintain continuity in accounting principles.

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Table 7.21 Interest Paid (000s of PLN)

	1993	1994	1995	30.06.1996
Loan Interest	1.845	6.407	8.442	7.151
Interest on Irregular Servicing of Liabilities	20	9	18	32
Interest Due to the Budget	-	-	2	-
Discount of Liabilities	95	272	45	-
Total	1.960	6.688	8.507	7.183

The discount of liabilities line item includes the commission fees assessed by the bank on EGP's liabilities covered by the bank.

7.4.8 Extraordinary Profits and Losses

The balances of the extraordinary profits and losses were adjusted to maintain continuity in accounting standards in 1993-1995 and in the first half of 1996. These adjustments primarily encompass a reclassification of interest income and costs for irregular payments in financial costs and revenues

Table 7.22 Extraordinary Profits and Losses (000s of PLN)

	1993	1994	1995	30.06.1996
Extraordinary Profits Including:	192	307	328	236
Compensation on Damages Caused by Circumstances of Fate	192	307	324	232
Decrease in Liabilities to Jastrzêbska Coal Company			4	4
Extraordinary Losses Including:	(366)	(74)	(421)	(248)
Costs of Removing Damages Caused by Circumstances of Fate	(366)	(74)	(408)	(247)
Others	-	-	(13)	(1)
Balance on Extraordinary Items	(174)	233	(93)	(12)

7.4.9 Mandatory Reduction in Financial Result

Table 7.23 Mandatory Reduction in Financial Result (000s of PLN)

	1993	1994	1995	30.06.1996
Income Tax Paid	19.857	13.202	4.805	3.751
Other Mandatory Reductions	5.282	3.143	8.934	1.013
Including:				
Income Tax Provision	-	-	2.371	-
Dividend for State Treasury	5.282	3.143	6.563	1.013
Mandatory Reduction of Profit	25.139	16.345	13.739	4.764
	==	==	==	==
	==	==	==	==

In 1995 a corporate income tax provision was established against the utilization of an investment tax break worth 5,928 thousand PLN

7.5 Balance Sheet

7.5.1 Long-Term Assets

7.5.1.1 Property, Plant and Equipment

Buildings and structures and equipment and machinery make up the largest portion of fixed assets in terms of worth. Their percentage share in total fixed assets over the years under consideration ranged from 72,9% to 95,6%. The increase in the value of the machinery and equipment in 1995-1996 is the result of running an investment program primarily encompassing this group of fixed assets. The net value and percentage share of individual groups of assets in the total value of property, plant and equipment are depicted in table 7.24

Table 7.24 EGP's Property, Plant and Equipment (000s of PLN)

	1993	1994	1995	30.06.1996
Property, Plant and Equipment	183.253	227.548	716.014	693.055
Land	48	8.151	78	78
Buildings and Structures	86.887	91.902	312.279	308.396
Technical Equipment and Machinery	58.161	73.957	340.987	354.023

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Vehicles	6.297	7 106	9 354	8.702
Other Fixed Assets	869	822	985	913
Investments Underway	28 586	40.547	52 185	16.956
Advance Fees for Investments	2.405	5 063	146	3.987

Percentage Share in Fixed Assets

Land	0,0%	3,6%	0,0%	0,0%
Buildings and Structures	47,4%	40,4%	43,6%	44,5%
Technical Equipment and Machinery	31,7%	32,5%	47,6%	51,1%
Vehicles	3,4%	3,1%	1,3%	1,3%
Other Fixed Assets	0,5%	0,4%	0,1%	0,1%
Investments Underway	15,6%	17,8%	7,3%	2,4%
Advance Fees for Investments	1,3%	2,2%	0,0%	0,6%

The increases/decreases in fixed assets have been presented in detail in Tables 7 25.A - 7.25.D.

The balance sheet value of fixed assets changed as a result of the following.

- a revaluation of fixed assets on 1 January 1993, 1 January 1994 and 1 January 1995 in conformance with the provisions of law in force,
- b investment outlays incurred by EGP to modernize energy blocks and other fixed assets,
- c. the sale and liquidation of fixed assets,
- d. the depreciation charges posted.

The revaluation conducted on 1 January 1995 exerted the largest influence on increasing the value of fixed assets. The aim of revaluation was to show fixed assets at levels approximate to their market values while incorporating the level of their utilization.

As a result of revaluation the net value of fixed assets increased 3 6 times. The net value of technical equipment and machinery grew by the greatest amount, viz. 4 6 times

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Table 7.26 Increase in the Value of EGP's Fixed Assets as a Consequence of Revaluation on 1 January 1995

	Buildings and Structure s	Technical Equipment and Machinery	Vehicles	Other Fixed Assets	Total
Increase in Gross Worth	3,4	7,1	2,0	1,2	5,5
Increase in Accumulated Depreciation	3,7	8,3	2,9	1,3	7,1
Increase in Net Worth	3,4	4,6	1,3	1,2	3,6

The investment plan for the 1996-2001 period assumes that the main directions for investment will be maintained. The planned expenditures are primarily appropriated for technical equipment and machinery in order to modernize energy blocks and reduce the emission of harmful substances into the environment.

Table 7.27 Planned Financial Outlays for Investment and Refurbishment Purposes in Fixed Prices from 30.06.1996 (000s of PLN)

	II po³ 1996	1997	1998	1999	2000	2001
Investment Outlays	38 998	146 968	125 546	126 150	82 908	54 152
Refurbishment Outlays	28 394	32 540	30 370	34 730	34 600	41 740
Total	67.392	179.418	155.916	160.880	117.508	95.892
	= = =	= = =	= = =	= = =	= = =	= = =

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Table 7.25.A Increase/Decrease in Fixed Assets in 1993 (000s of PLN)

Group of Fixed Assets	Land	Buildings and Structures	Technical Equipment and Machinery	Vehicles	Other Fixed Assets	Furnishings	Investments Underway	Advance Payments for Investments	Total
<i>Gross Fixed Assets</i>									
As of 31 December 1992	15	126.274	173.209	6.040	910	553	12.986	1 326	321.313
Revaluation	-	2 286	3 622	2 959	130	-	-	-	8 997
After Revaluation	15	128.560	176 831	8.999	1.040	553	12.986	1.326	330.310
Investment Purchasing							37 302	1 079	38 381
Direct Purchases of Fixed Assets	-	-	-	-	-	580	-	-	580
Transfer from Investments to Fixed Assets	-	5 036	15 336	444	457	340	(21 702)	-	(89)
Sale and Liquidation of Fixed Assets	(9)	(4 794)	(1 448)	(110)	(53)		-	-	(6 411)
Other Increases	42	47	-	-	-	18	-	-	107
As of 31 December 1993	48	128.849	190.719	9.333	1.444	1.491	28.586	2.405	362.875
<i>Accumulated Depreciation</i>									
As of 31 December 1992	-	38.754	120.610	1.803	394	553	-	-	162.114
Revaluation	-	172	1 443	527	46	-	-	-	2 188
After Revaluation	-	38.926	122.053	2.331	440	553	-	-	164.302
Planned Depreciation	-	3 871	11 547	814	180	920	-	-	17 332
Depreciation on Investment Tax Break	-	-	-	-	-	-	-	-	-
Depreciation on Investment Tax Break Transferred	-	-	-	-	-	-	-	-	-
Other Unplanned Depreciation	-	-	-	-	-	-	-	-	-
Other Changes	-	(835)	(1 042)	(108)	(45)	18	-	-	(2 012)
As of 31 December 1993	-	41.962	132.558	3.036	575	1.491	-	-	179.622
<i>Net Fixed Assets</i>									
As of 31 December 1992	15	87.520	52.599	4.237	516	-	12.986	1.326	159.199
As of 31 December 1993	48	86.887	58.161	6.297	869	-	28.586	2.405	183.253

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Table 7.25.B Increase/Decrease in Fixed Assets in 1994 (000s of PLN)

Group of Fixed Assets	Land	Buildings and Structures	Technical Equipment and Machinery	Vehicles	Other Fixed Assets	Furnishings	Investments Underway	Advance Payments for Investments	Total
<i>Gross Fixed Assets</i>									
As of 31 December 1993	48	128.849	190.719	9.333	1.444	1.491	28.586	2.405	362.875
Revaluation	-	1 898	7 986	2 441	243	-	-	-	12 568
After Revaluation	48	130.747	198.705	11.774	1.687	1.491	28.586	2.405	375.443
Investment Purchasing							43 878	2 658	46 536
Direct Purchases of Fixed Assets	8 678	-	-	-	-	638	-	-	9 316
Transfer from Investments to Fixed Assets	-	7 649	23 077	99	292	599	(31 917)	-	(201)
Sale and Liquidation of Fixed Assets	(575)	(816)	(2 471)	(408)	(265)	(9)	-	-	(4 544)
Other Increases	-	104	2 414	48	-	-	-	-	2 566
As of 31 December 1994	8.151	137.684	221.725	11.513	1.714	2.719	40.547	5.063	429.116
<i>Accumulated Depreciation</i>									
As of 31 December 1993	-	41.962	132.558	3.036	575	1.491	-	-	179.622
Revaluation	-	121	1 911	607	91	-	-	-	2 730
After Revaluation	-	42.083	134.469	3.643	666	1.491	-	-	182.352
Planned Depreciation	-	4 124	15 517	1 042	276	1 237	-	-	22 196
Depreciation on Investment Tax Break Transferred	-	-	-	-	-	-	-	-	-
Depreciation on Investment Tax Break	-	-	-	-	-	-	-	-	-
Other Unplanned Depreciation	-	-	-	-	-	-	-	-	-
Other Changes	-	(425)	(2 218)	(278)	(50)	(9)	-	-	(2 980)
As of 31 December 1994	-	45.782	147.768	4.407	892	2.719	-	-	201.568
<i>Net Fixed Assets</i>									
As of 31 December 1993	48	86.887	58.161	6.297	869	-	28.586	2.405	183.253
As of 31 December 1994	8.151	91.902	73.957	7.106	822	-	40.547	5.063	227.548

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Table 7.25.C Increase/Decrease in Fixed Assets in 1995 (000s of PLN)

Group of Fixed Assets	Land	Buildings and Structures	Technical Equipment and Machinery	Vehicles	Other Fixed Assets	Furnishings	Investments Underway	Advance Payments for Investments	Total
<i>Gross Fixed Assets</i>									
As of 31 December 1994	8.151	137.684	221.725	11.513	1.714	2.719	40.547	5.063	429.116
Revaluation	45	137.684	221.725	11.513	1.756	2.719	40.547	5.063	421.052
After Revaluation	-	332.018	1.345.391	11.448	313	-	-	-	1.689.170
Investment Purchasing	45	469.702	1.567.116	22.961	2.069	2.719	40.547	5.063	2.110.222
Direct Purchases of Fixed Assets	-	-	-	-	-	-	79.574	-	79.574
Transfer from Investments to Fixed Assets	-	-	-	-	-	853	-	-	853
Sale and Liquidation of Fixed Assets	-	19.776	46.733	293	345	153	(67.936)	-	(636)
Other Increases	-	(2.397)	(4.873)	(44)	(71)	(11)	-	-	(7.396)
As of 31 December 1995	33	450	-	-	-	-	-	(4.917)	(4.434)
	78	487.531	1.608.976	23.210	2.343	3.714	52.185	146	2.178.183
<i>Accumulated Depreciation</i>									
As of 31 December 1994	-	-	-	-	-	-	-	-	-
Revaluation	-	45.782	147.768	4.407	892	2.719	-	-	201.568
After Revaluation	-	123.362	1.077.528	8.304	235	-	-	-	1.209.429
Planned Depreciation	-	169.144	1.225.296	12.711	1.127	2.719	-	-	1.410.997
Depreciation on Investment Tax Break	-	6.668	35.830	1.189	299	1.006	-	-	44.992
Depreciation on Investment Tax Break Transferred	-	-	-	-	-	-	-	-	-
Other Unplanned Depreciation	-	-	11.073	-	-	-	-	-	11.073
Other Changes	-	-	-	-	-	-	-	-	-
As of 31 December 1995	-	(560)	(4.210)	(44)	(68)	(11)	-	-	(4.893)
	-	175.252	1.267.989	13.856	1.358	3.714	-	-	1.462.169
<i>Net Fixed Assets</i>									
As of 31 December 1994	-	-	-	-	-	-	-	-	-
As of 31 December 1995	8.151	91.902	73.957	7.106	822	-	40.547	5.063	227.548
As of 1 January 1995	45	91.902	73.957	7.106	864	-	40.547	5.063	219.484
After Revaluation	45	300.558	341.820	10.250	942	-	40.547	5.063	699.225
As of 31 December 1995	78	312.279	340.987	9.354	985	-	52.185	146	716.014

Initial Financial and Economic Analysis of the EGP

Table 7.25.D Increase/Decrease in Fixed Assets in First Half of 1996 (000s of PLN)

Group of Fixed Assets	Land	Buildings and Structures	Technical Equipment and Machinery	Vehicles	Other Fixed Assets	Furnishings	Investments Underway	Advance Payments for Investments	Total
<i>Gross Fixed Assets</i>									
As of 31 December 1995	78	487.531	1.608.976	23.210	2.343	3.714	52.185	146	2.178.183
Revaluation	-	-	-	-	-	-	-	-	-
After Revaluation	78	487.531	1.608.976	23.210	2.343	3.714	52.185	146	2.178.183
Investment Purchasing							11 446	3 841	15 287
Direct Purchases of Fixed Assets	-	-	-	-	-	346	-	-	346
Transfer from Investments to Fixed Assets	-	408	46 028	-	97	-	(46 675)	-	(142)
Sale and Liquidation of Fixed Assets	-	(91)	(519)	(8)	(16)	-	-	-	(634)
Other Increases	-	-	-	-	-	-	-	-	-
As of 30 June 1996	78	487.848	1.654.485	23.202	2.424	4.060	16.956	3.987	2.193.040
<i>Accumulated Depreciation</i>									
As of 31 December 1995	-	175.252	1.267.989	13 856	1.358	3.714	-	-	1 462.169
Revaluation	-	-	-	-	-	-	-	-	-
After Revaluation	-	175.252	1.267.989	13.856	1.358	3.714	-	-	1.462.169
Planned Depreciation	-	4 237	27 063	651	169	346	-	-	32 466
Depreciation on Investment Tax Break Transferred	-	-	-	-	-	-	-	-	-
Depreciation on Investment Tax Break	-	-	5 928	-	-	-	-	-	5 928
Other Unplanned Depreciation	-	-	-	-	-	-	-	-	-
Other Changes	-	(38)	(518)	(7)	(16)	-	-	-	(578)
As of 30 June 1996	-	179.452	1.300.462	14.501	1 511	4.060	-	-	1.499.985
<i>Net Fixed Assets</i>									
As of 31 December 1995	78	312.279	340.987	9.354	985	-	52.185	146	716 014
As of 30 June 1996	78	308.396	354.023	8.702	913	-	16.956	3 987	693.055

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Initial Financial and Economic Analysis of the EGP

7.5.1.2 Intangible Assets

The intangibles are primarily comprised by computer programs purchased and licenses. Table 7.28 depicts the changes in intangibles.

Table 7.28 Increase/Decrease in Intangibles from 1993 to 30.06.1996

<i>Gross Worth</i>	1993	1994	1995	30.06.1996
Opening Balance	74	92	294	878
Transfers from Investments	23	202	593	142
Sales and Liquidation	(5)	-	(9)	(7)
Closing Balance	92	294	878	1.013
 <i>Accumulated Depreciation</i>				
Opening Balance	21	32	65	157
Depreciation	15	33	101	90
Sales and Liquidation	(4)	-	(9)	(7)
Closing Balance	32	65	157	240
 <i>Net Worth</i>				
Opening Balance	53	60	229	721
Closing Balance	60	229	721	773

7.5.1.3 Financial Assets

The value of individual components of financial assets has been specified in Table 7.29

Table 7.29 EGP's Financial Assets from 1993 to 30.06.1996

	1993	1994	1995	30.06.1996
				6
Shares	3 323	4 338	5.374	7.074
Long-term Loans Made	3 573	5 187	4 250	4 199
	-----	-----	-----	-----
Total	6 896	9 525	9.624	11 273
	= = =	= = =	= = =	= = =

A detailed statement of the entities, whose shares are held or in which an equity interest is held by EGP along with information about revenues and profits has been laid out in Supplement I.

The balance of long-term non-bank loans are made up by non-bank loans to the Housing Cooperative at the Rybnik Electricity Generation Plant and at the end of 1993 and 1994 for the "Modelpol" company. The loans made to the Housing Cooperative, whose

balance on 30 06 1996 was 4,199 thousand PLN do not bear any interest, and the repayment period is spread over 30 years.

7.5 1 4 Long-term Receivables

This item includes long-term housing loans made to EGP's employees.

7.5.2 Inventories

Table 7 30 depicts the value structure of inventories over individual years

Table 7.30 Inventories (000s of PLN)

	1993	1994	1995	30.06.1996
Materials, including	17.811	33.146	37.956	31.104
Basic Fuel	9.170	24.156	27.821	16.901
Auxiliary Fuel	336	358	432	515
Sorbent	72	221	547	502
Other Materials	8.233	8.411	9.156	13.186
Others	225	50	15	24
Total	18.036	33.196	37.971	31.128
	===	===	===	===

Coal is the most valuable item in the structure of inventories. The coal inventory on 30.06 1996 was 247 thousand tons which corresponds to 22 days of average consumption during the first quarter of 1996. The coal inventory on 30 06 1996 does not incorporate the results of the inventory taken on 31 07 1996. As described in section 7 4 5 AAP made an analysis which showed that the value of this inventory should be higher by about 11,650.7 thousand PLN.

The second most valuable item are other materials which are comprised by spare parts, refurbishment materials, operation materials, oils, grease, gasoline. The high value of the inventories in this item is derived from the necessity of maintaining a reserve of spare parts in case of a break down. The increase in inventories of other materials by more than 44% from 31 12 1995 to 30 06 1996 is the result of having collected materials for the refurbishment season which will be conducted in the first half of 1996.

7 5 3 Receivables and Claims

7 5 3 1 Analysis of the Receivables Balance on Deliveries and Services

Table 7.31 displays the structure of receivables on deliveries and services

Table 7.31 Receivables on Deliveries and Services (000s of PLN)

	1993	1994	1995	30.06.1996
Receivables on the Sale of Electricity to PSE	26 685	30.069	40 486	30.802
Receivables on the Sale of Thermal Energy	40	59	80	13
Receivables on Other Sales	3 057	2.354	5.697	3 229
	-----	-----	-----	-----
	-			
Total Receivables on Deliveries and Services	29 782	32 482	46 263	34.044
	==	==	==	==
Structure of Receivables on Deliveries and Services:				
Receivables on the Sale of Electricity to PSE	89,6%	92,6%	87,5%	90,5%
Receivables on the Sale of Thermal Energy	0,1%	0,2%	0,2%	0,0%
Receivables on Other Sales	10,3%	7,2%	12,3%	9,5%

Since about 90% of the balance of receivables on deliveries and services falls to settlements with PSE, EGP does not have problems with collecting receivables.

Settlements with PSE proceed according to the following principles: on the 28th day of each month PSE pays the first installment of 30% against planned output in a given month, by the 8th day of the next month it pays the next installment of 35% of planned output. This is settled at the beginning of the next month, when the actual amount of output is known. Taking into consideration the necessity of reconciling the actual output of energy with the National Capacity Dispatcher and the deadline for payment on invoice settlements, which is 14 days, the payment of a settlement invoice usually occurs on the 20th day of the next month after the month of sale.

A large portion of EGP's receivables and liabilities, primarily on the purchase of coal and sale of energy is regulated in a compensation system. The parties to this compensation system are EGP, the Górnol¹ski Power Company S A in Gliwice, PSE and coal companies. These compensations are conducted three times per month; they are governed by standing agreements. EGP reconciles from 20 to 30% of its receivables from PSE in this system. Besides the system for standing compensation, individual compensation schemes are employed from time to time.

7.5 3.1 Analysis of Balances on Other Receivables

Table 7.32 Other Receivables (000s of PLN)

	1993	1994	1995	30.06.1996
Receivables on Taxes, Customs Duties and Social Insurance, Including:	5.874	3.252	6.978	2.442
Corporate Income Tax	-	-	3.578	1.660
VAT	5.861	3.222	3.356	736
Others	13	30	44	46
Employee Settlements	3	5	33	134
Other	191	226	291	186
	-----	-----	-----	-----
Total Other Receivables	6.068	3.483	7.302	2.762
	=====	=====	=====	=====

VAT receivables are derived from the fact that the tax rate on selling electricity is 12%, while the majority of the services and materials purchased, excluding coal, is taxed at the 22% rate.

7.5.4 Accruals and Pre-paid Expenses

Table 7.33 Accruals and Pre-paid Expenses (000s of PLN)

	1993	1994	1995	30.06.1996
Investment Tax Break	-	-	5.928	5.434
Fuel Purchasing Costs	830	1.808	2.999	1.896
Others	-	-	18	897
	-----	-----	-----	-----
Total	830	1.808	8.945	8.227
	=====	=====	=====	=====

The line item entitled investment tax break is the unreconciled portion of the investment tax break utilized in 1995. In 1994 and 1995 EGP used the right to deduct investment expenditures from income: 11,073 thousand PLN and 5,928 thousand PLN, respectively. The 1994 tax break fully included the costs thereof. The 1995 tax break is being settled over a five year period. The balance on the accruals and pre-paid expenses account („RMC”) as of 31.12.1995 and 30.06.1996 corresponds to the unreconciled portion of the 1995 tax break. The costs of buying fuel are reconciled through the RMC account. The balance at the end of the period corresponds to the costs of purchasing the fuel in the inventories.

Pursuant to the interpretation provided by the Ministry of Finance pertaining the settlement of investment tax breaks which was publicized after 30 June 1996, the 1995

Initial Financial and Economic Analysis of the EGP

income tax break is currently being reconciled by EGP using the depreciation rate schedule for the fixed asset to which the investment tax break applied

The other items as of 30.06 1996 includes the amount of 466.5 thousand PLN for insurance costs, 290 thousand PLN as a charge to the company employee benefit fund and 122.8 in usufruct fees for land.

7 5.5 Liabilities on Deliveries and Services

7 5.5 1 Analysis of the Balance of Liabilities on Deliveries and Services

Table 7 34 portrays the liabilities on deliveries and services by type of expense.

Table 7.34 Liabilities (000s of PLN)

	1993	1994	1995	30.06.1996
				6
Coal Purchases	22.803	36 652	14.364	15.870
Transport	1.074	945	1.119	1.085
Liabilities on Other Services	4.768	5.550	16 806	3 641
Purchasing Materials	1 117	513	999	922
Investment Purchases	2 921	1.881	4 217	1.988
	-----	-----	-----	-----
Total	32.683	45 541	37.505	23 506
	= = = =	= = =	= = = =	= = = =

Liabilities to coal companies for the delivery of fuel i.e. coal are the main item in these liabilities on deliveries and services.

7 5.5 2 Term Structure of Liabilities

The term structure of liabilities on 30 June 1996 shows that there are not any liabilities which are overdue by more than three months

Table 7.35 Term Structure of Liabilities (Excluding Bank and Non-bank Loans) as of 30.06.1996 (000s of PLN)

Liabilities	Gross Amount	% of Balance
Up to 3 Months	30 119	100%

In conformance with information provided on 30 06.1996 there are not any liabilities for overdue payments that have not been posted.

7.5 5 2 Analysis of Other Liabilities

Table 7.36 Other Liabilities

	1993	1994	1995	30.06.1996
				6
Liabilities for Taxes, Customs				
Duties and ZUS	1.597	3.857	2.587	2.193
Salary Liabilities	635	113	146	122
Liabilities on Investment Tax	-	11 072	5.928	-
Break	-	-	-	-
Other Liabilities	210	9 324	1.495	4.298
	-----	-----	-----	-----
Total	2 442	24.366	10.156	6 613
	=====	=====	=====	=====

The balance of other liabilities on 30 June 1996 primarily includes unvoiced deliveries of goods and services. The other liabilities on 31 12 1994 include 8 141 thousand PLN of liabilities for the usufruct right on land.

7.5 6 Accruals and Deferred Income

Table 7.37 depicts the balance of accruals, costs and deferred income

Table 7.37 Accruals and Deferred Income (000s of PLN)

	1993	1994	1995	30.06.1996
				6
Environmental Fees, Including				
Creating Dust	4 853	7.060	8.137	18.627
Storing Waste	4.760	6.743	7.677	17.731
Heavy Water Usage	24	49	139	519
Deferred Income	69	268	321	377
	251	-	-	-
	-----	-----	-----	-----
Total	5.104	7 060	8 137	18 627

The fees for utilizing the environment are assessed and charged against monthly costs. The assessment is made by analysis of the amount of pollutants emitted, as well as the amount of sewage and waste removed. The rates for unit fees are governed by the Decree issued by the Council of Ministers on 27 December 1993. These fees are payable for half-year periods.

Initial Financial and Economic Analysis of the EGP

7.5 7 Special Purpose Funds

The special purpose fund line item as of 31 December 1995 includes the company social benefits fund as established in compliance with the relevant provisions of law and the Staff Fund.

Table 7.38 Special Purpose Funds (000s of PLN)

	1993	1994	1995	30.06.1996
Staff Fund	180	1.063	1.303	1.155
ZFES	800	2.360	3.047	3.927
Total	980	3.423	4.350	5.082

7.5.8 Provisions

On 31.12 1995 and 30 06 1996 deferred income tax provisions against the usage of an investment tax break in 1995 were established. This provision was established at the end of 1995 and is worth 2 371 thousand PLN and was not revaluated on 30.06 1996.

The other provisions shown as of 30 06.1996 amounting to 199 thousand PLN were established against receivables under dispute, under court cases and from companies in dissolution and bankruptcy. These provisions are shown in the balance sheet on the liabilities side and do not reduce relevant items on the assets side.

7.5.9 Bank and Non-bank Loans

EGP on 30 06.1996 held the following bank and non-bank loans:

Table 7.39 Bank and Non-bank Loans (000s of PLN)

Short-term Bank Loans

Current Account Loan at the Bank Energetyki in Radom, Oddzia ³ Rybnik up to 25,000 thousand PLN.	9.998
---	-------

Current Account Loan at Bank G ¹ ski in Katowice up to 15,000 thousand PLN	
---	--

Total	----- 9.998 = = = =
--------------	----------------------------------

Long-term Bank Loans

Long-term Loan from PBK Warszawa drawn to modernize block four. It is under repayment in quarterly installments of 3,800 thousand PLN each	39 000
--	--------

Preferential Non-bank Loans for Pro-ecological Investments from the Provincial and National Environmental Protection Funds	17 000
--	--------

World Bank Loan in Swiss Francs to Purchase Equipment from ABB.	183
---	-----

Total	----- 56.183 = = = = =
--------------	-------------------------------------

Initial Financial and Economic Analysis of the EGP

7.5.10 Funds

7.5.10.1 Equity Funds

EGP's equity funds at the end of subsequent periods and the division of profits for subsequent years are shown in table 7.40.

Table 7.40 Change of Equity and Division of Profit at EGP from 1993 to 1995 and in the First Half of 1996 (000s of PLN)

	31.12.93	31.12.94	31.12.95	30.06.96
Equity (Fund)	191.772	205 810	683.566	685.101
Founding Fund	67.547	70 326	74.033	74.033
Company Fund	98 038	108.843	114 736	114 735
Revaluation Reserve	6 809	9.839	479 740	479.740
Retained Earnings Brought Forward	643	5 620	9 612	10 854
Net Fiscal Financial Result	18.735	11 182	5.445	5 739
 Division of Net Profit				
Charge to Company Fund	6 726	162	-	-
Retained Earnings	5.000	4 000	1 242	-
Charge to Company Social Benefit Fund	3 000	2.000	1.000	-
Charge to Staff Fund	4.009	5 020	3 203	-
 Total	18.735	11.182	5.445	-

As of 1 October 1996 the EGP state-owned enterprise was transformed into a corporation wholly-owned by the State Treasury. Its share capital is 401,100,000 PLN

7.5.11 Off-the-Balance-Sheet Items

7.5.11.1 Co-Signed Loans

As of 30 September 1996 EGP co-signed loans for external business entities in the amount of 302 805 thousand PLN. They are generally co-signed loans for coal companies and other electric generation plants. A list thereof current as of 30 September 1996 is set forth in table 7.41.

Initial Financial and Economic Analysis of the EGP

Table 7.41 List of Co-signed Loans Current as of 30 September 1996

Borrower	Amount of Co-signing (000s)		Valid until	Institution for whom the loan was co-signed	What was co-signed
	in foreign currency	PLN			
KWK "D'bieńsko"		6 000	31 12 2005	NFOCE	Non-bank Loan
KWK "Krupiński"		2 000	30 06 1996	NFOCE	Non-bank Loan
"Jaworzno IIII" Power Plant	59 670 DEM	109 733	30 09 2000	Bank CEI'ski O/Jaworzno	Bank Loan
"Jaworzno III" Power Plant		30 000	31 12 1998	NFOCE	Non-bank Loan
"Siersza" Power Plant		2 500	15 06 1997	Bank Ochrony Cierodowska	Bank Loan
"RAFAKO" S A		2 327	30 09 2003	NFOCE	Non-bank Loan
"RAFAKO" S A	5 000 USD	14 055	31 12 1998	Bank CEI'ski O/Racibórz	Bank Loan
Głiwicka Coal Company		4 300	09 12 1996	Bank Energetyki	Bank Loan
Głiwicka Coal Company		8 000	31 12 1996	PBK O/Zabrze	Bank Loan
Jastrzębska Coal Company		4 000	29 12 1996	Bank Handlowy	Bank Loan
Rybnicka Coal Company		15 000	31 12 1996	Bank CEI'ski O/Rybnik	Bank Loan
Rybnicka Coal Company		10 000	30 03 1997	PBK O/Rybnik	Bank Loan
Rybnicka Coal Company		10 000	31 10 1996	PBK O/Rybnik	Bank Loan
Rybnicka Coal Company		12 000	30 11 1996	PBK O/Rybnik	Bank Loan
Rybnicka Coal Company		16 000	13 12 1996	BPH O/Rybnik	Bank Loan
Rybnicka Coal Company		6 300	20 12 1996	BEN O/Rybnik	Bank Loan
Rybnicka Coal Company		15 000	29 05 1999	PBK O/Rybnik	Bank Loan
Rybnicka Coal Company		10 000	31 12 1996	Bank Handlowy	Bank Loan
Głiwicka Coal Company		3 200	31 12 2000	NFOCE	Non-bank Loan (co-signed bill of exchange)
PHU "ECOL"		700	10 12 1996	Bank CEI'ski O/Rybnik	Bank Loan
PHU "ECOL"		400	30 09 1998	Bank CEI'ski O/Rybnik	Bank Loan
PPH "UTEX"		800	27 08 1997	BEN O/Rybnik	Bank Loan
PTK i GK		2 000	14 07 1997	BEN O/Rybnik	Bank Loan
PPU "Ekorem"		100	27 12 1996	BEN O/Rybnik	Bank Loan
PRB "Erbud"		500	18 04 1999	Bank CEI'ski O/Rybnik	Bank Loan
PRB "Erbud"		150	30 12 1997	Bank CEI'ski O/Rybnik	Bank Loan
PPUH "Nower"		470	31 03 1997	Bank CEI'ski O/Rybnik	Bank Loan
Głiwicka Coal Company		8 000	31 12 1996	Bank Zachodni O/Ruda CEI'ska	Bank Loan
Głiwicka Coal Company		5 000	31 12 1996	BPH O/Głiwice	Bank Loan
PTK i GK		2 000	20 01 1997	BEN O/Rybnik	Bank Loan
PTK i GK		1 500	28 02 1997	Bank CEI'ski O/Rybnik	Bank Loan
PRB "Erbud"		350	31 01 1997	Bank CEI'ski O/Rybnik	Bank Loan
PPU "Energ - Inwest"		300	24 10 1996	BEN O/Rybnik	Bank Loan
PPU "Energ - Inwest"		120	07 01 1997	Bank CEI'ski O/Rybnik	Bank Guarantee
TOTAL		302.805			

“RYBNIK” Electricity Generation Plant S.A.

*Consulting Report on an Illustrative Initial Valuation
as of 30 June 1996*

February 1997

*Arthur Andersen Polska Sp. z o.o.
Corporate Finance*

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1. Principles for Drawing Up this Report

1.1 Scope of the Work

In the pilot program pertaining to the analysis of the opportunities to privatize the sub-sector dealing in electricity generation in Poland ("The Program") as funded with American Government aid funds ("USAID") Arthur Andersen Polska Sp. z o.o. ("AAP") prepared an illustrative initial valuation ("initial valuation") of the equity at the "Rybnik" S.A. EGP located in Rybnik (hereinafter referred to as "EGP" or "Electricity Generation Plant"). In compliance with the scope of work agreed upon with the Bechtel Corporation ("Bechtel") which is the Program coordinator in Poland, the initial valuation was prepared using adjusted net book value, discounted cash flow and tax shield methods ("DCF") and the multiple method

The initial valuation based on adjusted book value and the multiple method was conducted using the financial statements prepared by EGP as of 30 June 1996 in accordance with Polish Accounting Standards and on the basis of the results of a limited review of these financial statements as completed by AAP. The initial valuation using discounted cash flow and tax shields was conducted using EGP's financial projections for 1996-2002 as prepared by EGP's Management Board displayed in conformance with Polish accounting standards by AAP.

1.2 Subject and Date of Valuation

The initial valuation was prepared on 30 June 1996, it is a valuation of EGP's equity. On 1 October 1996 the state-owned enterprise known as the "Rybnik" EGP was transformed into a joint stock company wholly owned by the State Treasury known as Elektrownia "Rybnik" S.A. EGP's share capital is divided into 40 110 000 (in words: forty million one hundred ten thousand shares) of common shares, each with a par value of 10 PLN. All shares belong to the State Treasury, in whose name the Minister of Industry and Trade is acting

Although EGP was a state-owned enterprise on valuation day, the grounds for this valuation were the assumption that this is an initial valuation of a minority interest holding of stock listed on the stock exchange. Minority interest means a packet of shares that does not give the shareholder the ability to govern the company's activities

1.3 The Purpose of this Valuation

The purpose of this valuation is to analyze and assess the opportunities for privatizing EGP and to assist in formulating an initial concept for equity modification at EGP. The results of the initial valuation are illustrative in nature and do not constitute a valuation as understood by a price offer for a potential buyer of shares. The ultimate valuation of EGP would call for the utilization of additional analytical and auditing procedures which were not carried out as a result of certain contractual limitations.

1.4 The Basis of this Valuation

Initial valuation of EGP was prepared using the concept of adjusted net book value, economic value (the DCF method) and market value (the multiple method). In the practice of company valuation, besides a well developed concept of replacement value, there is no precise definition of economic or market value, which would enable one to value a company without a certain dose of subjectivity.

When using the adjusted book value method for valuation, the company's book value is adjusted if the book value of specific assets and liabilities diverges significantly from their market value. This adjustment calls for the valuator to make a subjective judgment of the degree of importance in book and market value divergence on individual assets and liabilities. On the DCF method the subjective approach must be employed for assumptions pertaining to financial projections and the specification of the discount rate. On the multiple method the subjective approach must be employed for assumptions pertaining to the rate of profit capitalization.

As mentioned above, the initial valuation was made under the assumption that the subject of this valuation is a minority interest holding of shares listed on the stock exchange. Alteration to these assumptions will signify the methodological invalidity of the assumptions made in this initial valuation as presented in this Report and would require adjustments for prospective lack of share liquidity and the premium for purchasing a packet of shares giving governance capabilities over EGP.

Finally we would like to say that market value may only be assessed in a true sales transaction, whose parties are free buyers and sellers with the necessary knowledge about key facts. This transaction will be the result of negotiations between the buyer and the seller and may employ different assumptions than the ones used to carry out the valuation of EGP.

1.5 Method of Performing this Work

The work association with EGP's initial valuation was conducted from October to November 1996. EGP's Management Board is accountable for the truth and fairness of the information forming the grounds for conducting this initial valuation and the financial projections encompassing the period from 30 June 1996 to 31 December 2002.

The scope of work performed by AAP did not include an audit into the truth and fairness of the information prepared by the Management Board and EGP employees to draw up the initial valuation presented in this report, nor did it encompass an assessment of the premises accepted by the Management Board concerning the financial projections for 1996-2002. Respectively, unless it is otherwise expressly indicated we did not perform any audits and we fully relied on the information obtained from the Management Board and EGP employees.

1.6 Documents and Sources of Information

In preparing the initial valuation on EGP as of 30 June 1996 we used the following sources of information

- a reports from certified accountants at EGP for the years ending 31 December 1993, 1994 and 1995 as drawn up by Przedsiębiorstwo Usług Księgowych "KIFIN" Sp. z o.o with headquarters in Czerwionka, ul. Kolejowa 2,
- b the results of the limited review of financial statements for the period ending 30 June 1996 as performed by AAP,
- c F-01, G10 1 financial statements for EGP for 1993, 1994 and 1995 and for the period ending 30 June 1996,
- d additional unaudited information from the accounting department, the planning and economic analysis department, the organization and management department, the material management department, the employee affairs department, the chief environmental protection expert's department and the chief investment project engineer's department,
- e conversations conducted with EGP's Management Board and employees of the aforementioned departments,

- f the report on the legal circumstances as conducted by the “Szubielska, Gromek, Zakrzewskand and Janiak” Kancelaria Prawnicza Sp. z o o law firm within this Program,
- g the environmental protection report about EGP prepared by the Institute of Ecology for Industrial Grounds in Katowice,
- h. technical analysis of EGP prepared by EGP employees,
- i - documents about demonopolizing and privatizing the electric energy sector as prepared by the Ministry of Industry and Trade (MIT) which outlines in greater detail the government’s intentions as pertains to structural changes in the electric energy sector,
- j the document entitled “Poland’s Energy Policy Premises up to the Year 2010” as prepared by the Ministry of Industry and Trade (MIT) and ratified by the Council of Ministers in specifying the bases for energy policy up to 2010,
- k. current legal regulations governing the electric energy sector, including EGP, and the draft versions of the Energy Law (the government draft version and the parliamentary draft version [bills]),
- l. statistical annual chronicles on the energy sector as prepared by the Energy Metric Division at the Energy Computer Center,
- m other, publicly-available materials about EGP that we did not audit and about the electricity generation sector in Poland and around the world

2. The Independence and Extent of Andersen Polska Sp. z o.o.'s Liability

The advisory report on the initial valuation of EGP is one of the component parts of the initial pre-privatization analyses.

Neither Arthur Andersen Polska Sp. z o.o., nor the employees of AAP who prepared this report did not receive, are not receiving and will not receive any financial or material benefits from EGP for the preparation of this report.

Neither Arthur Andersen Polska Sp. z o.o., its partners or other people working on this report are not tied to EGP in any way whatsoever and in connection with the above are fully capable of providing independent advisory services.

If decisions are made on the basis of this report please pay attention to the principles employed in drawing up this report, the investment risks involved and the premises used for making an initial valuation of EGP. We also ask that special attention be paid to the purposes of this initial valuation, the grounds accepted for this initial valuation and the manner in which the work involved was conducted.

We wish to say that market value may only be assessed in a true sales transaction, whose parties are free buyers and sellers with the necessary knowledge about key facts. This transaction will be the result of negotiations between the buyer and the seller and may employ different assumptions than the ones used to carry out the valuation of EGP.

This report was prepared by Arthur Andersen Polska Sp. z o.o. with due diligence. Arthur Andersen Polska Sp. z o.o., its partners, employees or sub-contractors are not liable to EGP for mistakes and omissions associated to the preparation of this report.

Furthermore, Arthur Andersen Polska Sp. z o.o. is not liable for any events or changes in management conditions affecting EGP's value after the day when this initial valuation was performed and we do not accept the responsibility for updating this report so that it would incorporate such events by making changes in the premises employed herein.

3. Investment Risks

3.1 Growth Perspectives in the Electric Energy Sector

3.1.1 Structural Changes in the Energy Market

The Ministry of Industry and Trade (MIT) plans to demonopolize and privatize the electric energy sector. The directions of change discussed in the paper entitled "Poland's energy policy premises up to 2010" substantially affect the management conditions in this sector. At the present stage it is difficult to foresee the consequences of these changes.

3.1.2 Increased Competition

According to MIT's line of thought the primary element of the competitive energy market in the future will be an exchange market for system generators of electricity.

EGP sells some of its energy in long and medium term contracts, while a portion is sold on spot transactions. The planned changes in the market structure will make competition among generators more severe and may affect the level of sales on capacity and electricity realized in that area not encompassed by medium and long-term contracts.

At present it is difficult to assess the impact on sales of electricity and capacity at EGP and its competitive position that will be exerted by an energy exchange market.

3.2 Price Risk

3.2.1 Price Regulation

Prices on electricity and capacity on wholesale trade is supervised by MIT. This means that EGP's financial standing is very much dependent on the policy realized by MIT. MIT as the owner of all companies in the electric energy sector has its own policy for distributing income in the sector.

The price setting system for generators will not change for two years after the new energy law is ratified, that date is currently not known. Afterwards, price policy will be conducted by the Energy Regulation Office ("URE"). At present

it is not clear how URE will conduct price policy since URE will have to discharge its primary goals to protect the interests of final consumers and suppliers while ensuring the operational security of the national electric energy system.

It is assumed that the prices paid to electricity generators will be shaped by the market to an ever greater extent, which will be grown over the next few years, while incorporating restricted price growth to final consumers.

3.2.2 Price Path

According to MIT for energy companies to become companies that full operate on commercial principles in the near future, electricity price growth at least until the year 2003 should be maintained at 5-7% above inflation (excluding VAT).

On the other hand MF has plans in 1996, 1997 and 1998 for prices to final consumers (excluding VAT) to grow at inflation or below, which when accompanied by an increase in VAT tax rates by 5% in 1997 and 5% in 1998 means that the sales price growth for companies in the electric energy sector will be below inflation. The MF policy may cause the entire sector's profitability to deteriorate significantly if at the same time it intends to maintain import parity on imported coal for electricity generators.

At present it is not clear how MIT will try to divide the planned price surpluses among the individual companies in the sector.

3.3 Guarantees Made

As of 30 September 1996 the amount of assignments and guarantees made by EGP was 302 805 thousand PLN. Of this amount 134 800 thousand PLN was on guarantees made to coal companies and mines, 139 733 000s PLN was for guarantees made to the "Jaworzno III" Electric Generation Plant, and 28.272 thousand PLN for other entities.

The amount of assignments and guarantees equals nearly half of EGP's net asset value on 30 June 1996 which was 685 101 thousand PLN. If in the future it were to have to make good on these liabilities there is a significant risk that EGP will not be able to discharge them.

3.4 Coal Prices

The basic fuel - hard coal has the largest percentage share in variable costs of electricity generation. EGP's profitability is closely tied to coal consumption and its prices. At present the price for a ton of normative coal is the PLN equivalent of about 32 American dollars. There is a risk that the strong mining lobby will force the base price on normative coal to increase above 32 dollars per ton.

3.5 Legal Regulations Governing the Electric Energy Sector

The primary legal acts governing the electric energy sector were established before 1990 and are not suited to the sector's current needs nor to the needs of change in its structure. These are as follows: the 1984 law on energy management, the 1982 law on prices, the 1986 ordinance number 64 issued by the Minister of Finance and the 1990 Resolution number 95 adopted by the Council of Ministers.

In October 1995 the government directed a draft version of the Energy Law to the Sejm. At present the date when the new law will come into force and in what form it will come into force is not known.

3.6 Changes in Organizational Structure

EGP is implementing changes in its organizational structure. Over the 1989-1995 period EGP has spun off a number of companies performing auxiliary functions. EGP's Management Board plans to spin off auxiliary activities so that EGP may concentrate on electricity generation. The companies spun off are expected to become economically independent gradually and that they will expand their activities to serve other business units.

It is not clear to what extent the new organizational structure will allow EGP to adapt better to changes in market structure and to make better use of the resources it has.

3.7 Funding

The assumption was made in the financial projections that the EGP will be able to gain financing in the form of loans to carry out its modernization projects. As of the day when this valuation was drawn up, it was not clear whether EGP will be able to obtain such funding and if so on what conditions.

3.8 Environmental Protection

At present in EGP's water and sewage management there are some difficulties in meeting the requirements set forth in water rights permits, e.g. the relevant temperature of water in the tank, i.e. below 26°C, the relevant quality of sewage piped into the Rudy river from the industrial and rain waste treatment plant and the quality of the water piped to the river from the drainage pumping station. Maintaining water temperature in the tank below 26°C will be relatively difficult in the future, as the blocks become more efficient. Although the presence of algae water blossoms in the tank is not caused by EGP to a large degree, nevertheless the failure to take action in the near future, by EGP too, to eliminate this phenomenon may limit the ability to use the tank fully for industrial purposes.

Work is currently underway at EGP to implement a semi-dry installation for removing sulfur from exhaust. If EGP does not receive a permit to store fly-ash in underground mines after removing sulfur it may be faced with the alternative of building a new storage location for the ash or resigning from the construction of a semi-dry installation for removing sulfur from exhaust e.g. on four blocks.

Actions to meet noise requirements must be taken at EGP, work to determine the impact exerted by the semi-dry installation for removing sulfur on the efficiency of electro filters and the amount of reduction in gas compounds of chlorine and fluor must also be undertaken.

4. Initial valuation based on Net Adjusted Book Value

4.1 Net Book Value

According to the financial statements ending 30 June 1996 EGP's net book value was 685.101 thousand PLN. These statements were prepared by EGP in conformance with Polish accounting standards.

4.2 Net Adjusted Book Value

EGP's calculation of adjusted net book value relies on making adjustments to net book value as a consequence of divergence between the valuation of book and market value. The adjustments presented in table 4.1 are only illustrative in nature. The illustrative amount of adjustments was determined by AAP using EGP's information and the results of a limited review of EGP as of 30 June 1996.

Table 4.1 Calculating EGP's Net Adjusted Book Value on 30 June 1996
(000s PLN)

	30 June 1996
Net book value	685.101
Adjustments.	
Depreciation Adjustment	(82.670)
Provision for Anniversary Awards	(10.054)
Provision for Unused Leave	(4.560)
Provision for Retirement Severance Pay	(2.104)
Adjusted costs for usage of environment in 1st half of 1996	(900)
Adjusted costs of services	(840)
Provision for excess inventories	(490)
Adjusted insurance costs	(440)
Provision for receivables from housing cooperative	(350)
Adjusted amount of coal consumption (result of inventory)	11.650
Adjusted valuation of inventories using FIFO method	5.310
Reduction in refurbishment costs by 1996 investment outlays	2.320
Total	(83.128)
	=====
Net adjusted book value	601.973
	=====

EGP's adjusted net book value on 30 June 1996 was 601.973 thousand PLN. The adjusted book value has been used later in this report to illustrate the price to book value multiple

4.3 Description of Adjustments.

4 3.1 Depreciation Adjustment

EGP revalued its fixed assets on 1 January 1995. During the 1995-1996 period depreciation for accounting purposes was set at tax regulation levels for determining the cost of revenues. In connection with the above the net book value of fixed assets in the balance sheet was overvalued.

4 3.2 Provisions for Anniversary Awards, Unused Leave and Retirement Severance Pay

The total value of adjustments for the provisions on anniversary awards, unused leave and retirement severance pay is 16 718 thousand PLN.

4 3.3 Adjusted Costs for Usage of Environment during 1st half of 1996 .

EGP makes monthly charges for costs on fees for the economic usage of the environment on the basis of monthly data on emissions. These costs are reconciled at half-year intervals on the basis of half-year data on emissions. As of 30 June 1996 the amount charged to costs was 900 thousand PLN lower than the amount derived from half-year reconciliation.

4 3.4 Adjusted Costs of Services

The adjustment on mistaken postings in the second half of 1996 on invoices for refurbishment services in the first half of 1996 was worth 840 thousand PLN.

4.3.5 Provision for Excess Inventories

Using the term structure on inventories as prepared by a general reserve was created for possible losses on the sales of excessive and difficult to sell inventories in the amount of 490 thousand PLN.

4.3.6 Adjusted Insurance Costs

This adjustment was made because property insurance was incorrectly settled. This adjustment was worth 440 thousand PLN.

4.3.7 Provision on Receivables from Housing Cooperative

This provision is for the unpaid receivables from the housing cooperative. This provision is worth 350 thousand PLN.

4.3.8 Adjusted Inventory Valuation Using FIFO and Amount of Coal Consumption

The inventory assessment performed at the end of the first half of 1996 was not done by a method approved statutorily. Adjustments to the inventory valuation using FIFO were estimated at 5 310 thousand PLN. As a result of the inventory effort undertaken at the end of the first half of 1996 surplus coal inventory worth 11 650 thousand PLN was uncovered.

4.3.9 Reduction of Refurbishment Costs by 1996 Investment Outlays

EGP made a review of its investment and refurbishment outlays for the first half of 1996, on this basis it reclassified a portion of the refurbishment outlays as investments and estimated the amount of the potential tax liability resulting from the erroneous classification of investment outlays. The amount of the adjustment is 2.320 thousand PLN.

The list of adjustments does not include an adjustment for the guarantees made by EGP. If in the future it were to have to make good on them there is a substantial risk that EGP would be unable to discharge them.

Setting a full list of adjustments to EGP's net book value on 30 June 1996 would call for a detailed audit of EGP's accounts on this *tê datê*, which was not included in the scope of AAP's work.

5. Initial valuation Using DCF

5.1 Methodology of Initial Valuation

5.1.1 Description of the Method

DCF valuation makes it possible to calculate EGP's value and its equity value as the sum of discounted cash flow as generated by the company. Company value is the sum of free discounted cash flow assuming financing no bank loans and discounted cash flow on tax shields on the interest costs derived from the planned financing of EGP with bank loans. Considering the fact that these flows hold a variable level of risk they are discounted using different rates.

EGP's free cash flow is calculated as the sum of operating resources generated by the company less taxes and outlays to increase current assets, refurbishments and investment projects, assuming no financing with loans.

Tax shield flows are calculated as the amount of tax benefits the company yields thanks to financing activities with loans. The amount of the tax shield is equal to the product of the income tax rate and the interest costs.

Company value is then adjusted by the amount of bank loans and the value of cash surplus on the date of valuation. The value obtained in this manner is the valuation of EGP's equity. The aforementioned definition still conforms to the rights held by lenders and shareholders. Shareholders have the right to obtain a dividend and the assets that remain after satisfying creditors and lenders.

DCF valuation using long-term investment projects is the most appropriate method for the valuation of EGP from an economic point of view. The primary limitation of this method is the uncertainty with which the forecasting of future cash flow is imbedded and the problems with defining the proper discount rate.

5.1.2 Financial Projection Period

The DCF valuation is based on the financial projects made by EGP's Management Board for the period from 30 June 1996 to 31 December 2002.

5 1.3 Value of Projections over Years and Residual Value

The initial valuation of EGP is the sum of two components. The first one is the value created over the years of the financial projections attached hereto which is the sum of discounted cash flow over the 1996-2001 period. The second element is the sum of the residual values discounted to the valuation date from the periods after the financial projections, in other words after the year 2001. This figures is comprised by the post 2001 residual value of free cash flow without bank loans and the post 2001 residual value on tax shields. Both residual values were defined using the financial projections up to 2002, for which a separate set of assumptions in terms of normal operations. A detailed description of these premises and residual value calculations is to be found later in this report.

5 1.4 Discount Rate

There are two discount rates in the FCF method depending upon the risk associated with the two flows. For free cash flow without loans the discount rate is equal to the rate of return at 10% above the expected rate of inflation while on tax shield flows the discount rate is equal to the rate of inflation plus a 5% premium for the cost of the loan. It was assumed that the EGP's business risk will not change in the foreseeable future.

5.2 Description of Basic Scenario

EGP's initial valuation was conducted using a basic scenario. The main tenants of this scenario are as follows:

5.2.1 Macro-economic Premises

Table 1 shows the macro-economic premises. Inflation is expected to decline gradually from 19,8 % in 1996 to 8,0 % in 2002. Interest rates, the lombard loan rate and the re-discount rate will remain at their historical level in regards to inflation. The PLN exchange rate to the American dollar will stay at the inflation parity base without PLN appreciation to the USD.

5.2.2 Premises pertaining to P&L Statement

Sales of Capacity and Electricity

Tables IIB shows the parameters of electricity and capacity output. Sales volume will grow from 8.529 GWh in 1996 to 9.236 GWh in 2002 as the demand for electricity increases and long-term contracts are in force.

The impact of introducing a local energy market, an exchange market and third party access to EGP's distribution system were not reflected in these financial projections.

Capacity and Electricity Prices

Prices for the electricity from those blocks not included in long-term contracts are expected to increase in proportion to variable costs on these blocks and that EGP will retain its profit margin on 1996 electricity sales at the level from the first half of 1996. Electricity prices for blocks operating on long-term contracts will range about the level covering these blocks' variable costs (zero margin).

The projected changes in electricity capacity prices in the 1996-2002 period have been depicted on page 26. As a result of changes in VAT tax rates from 1997 to 1998 by 5% per year, the effective increase in sales prices on EGP's capacity will be below the rate of inflation. During 1999 - 2000 the price of capacity will increase in real terms by 3,5% above the level of indexation and fees for capacity.

Thermal Energy Sales

The amount of thermal energy sold during the 1996-2002 period will be 100.000 GJ per annum. The price per unit of thermal energy will range about the rate of inflation. The unit variable cost will grow in proportion to the increase in variable costs of electricity generation.

Basic and Auxiliary Fuel

It was assumed that all coal used by EGP during the 1997-2002 period is normative coal, i.e. its caloric value is 21.000 kJ/kg, 0,9% sulfur content 22% and ash. It was assumed that the price for normative coal will be 80,50 PLN per ton at average prices in the first half of 1996 i.e. PLN equivalent value of 28 75 USD at the exchange rate posted on 30 September 1996 while over later years it will flow with the rate of inflation. During the second half of 1996 the actual parameters of coal partially based on the results from the first half of 1996 and the price paid for coal of such parameters, i.e. 80,04 PLN per ton.

The price of mazout was assumed to be 238,91 z³ per ton at average prices in the second half of 1996. Over the following years the price on mazout will grow along with inflation. Table IID contains a calculation of the costs on basic and auxiliary fuels.

Fees for Using the Environment

In conformance with the assumptions made the amount of fees for the economic usage of the environment will grow along with inflation from 1997-2002 for the previous year. Table IIAb has a calculation of the amount of emissions.

Payroll and Employee-benefit Costs

EGP's employment was assumed to decline gradually where in 2002 it will have 1 300 employees. For the purpose of calculating wages it was assumed that employee salaries would be a single expense including all wage components at once. The amount of pay-roll tax over the 1996-2002 period as a result of ZUS tax will be constant at 48,2%.

It was assumed that the real amount of the wage fund will not increase in the period under projection, which means in conjunction with downsizing an annual increase in wages of about 4% above annual average inflation. Table IIC1 contains detailed calculations.

External Services and Other Fixed Costs

In conformance with the assumptions made the costs of external services from 1997 to 2002 will grow at 3% above inflation, while the remaining fixed costs will grow at 2% above the rate of inflation.

Other Premises pertaining to the P&L Statement

It was assumed that EGP will not receive interest on overdue payments for electricity and that it will not pay interest for the failure to pay its liabilities on time. It was also assumed that in these years covered by the financial projections there will be no extraordinary revenues or costs. Revenues on other operations were assumed to be at the same level as projected by the budget department at EGP for the first half of 1996 while inflationary growth was projected for the following years. Other operating costs include the costs of charitable contributions and the costs of maintaining social facilities. These costs will grow at inflation during the projection period.

The schedule and amount of costs for planned refurbishment is set forth in Table IIB.

EGP's corporate income tax reconciliation and the deferred assets and liabilities associated therewith by virtue of the planned investment tax break are included. It was assumed that from 1996 to 2000 the corporate income tax rate will fall 2% per year from 40% in 1996 to 32% in 2000 while it will remain at this level in future years.

5.2.3 Balance Sheet Premises

Effectiveness of Current Assets Management

The level of commercial receivables, inventories, operating cash and commercial liabilities was specified using turnover ratios. The assumed values for current asset turnover are depicted in table III.

Other Assets and Liabilities

Other receivables, pre-paid debt and accruals, other liabilities, special purpose funds will fluctuate along with inflation, while the balances of the items mentioned were freed up of any acts of fate. Deferred income and accruals will change as the environmental fees grow Long-term loans will decrease annually by 275 thousand PLN, i e by an amount that will allow for the loans to be repaid fully within 30 years

Investment Outlays

Investment outlays were accepted using EGP's investment plans. The basic scenario calls for outlays as listed in the table below (millions of PLN in fixed prices on 30 June 1996)

	2 nd Half 1996	1997	1998	1999	2000	2001	2002
Pro-ecology Investment Projects	15,4	39,1	25,5	55,1	35,0	20,0	-
Other Block Investments	12,5	82,9	76,4	63,1	34,9	17,2	20,0
Non-block Plant	1,5	25,0	23,6	8,0	13,0	17,0	5,0
Others	9,6	-	-	-	-	-	-
Total	39,0	147,0	125,5	126,2	82,9	54,2	25,0

Depreciation Rates on Non-current Assets

The depreciation of non-current assets at EGP as of 30 June 1996 was set up on the basis of EGP's depreciation plan for 1996-2002. Over the 1995-1997 period the amount of depreciation charges was limited by tax regulations.

The depreciation of fixed assets purchased after 30 June 1996 is assessed with the following depreciation rates

Group of Fixed Assets	Rate
Buildings and Structures	3,0%
Plant, Property and Equipment	10,5%
Vehicles	15,0%
Other Fixed Assets	20,0%
Intangibles	33,3%

Revaluation of Assets

It was assumed that revaluation will take place only in 1998 and will equal the rate of inflation in 1997.

Financing Structure

Setting the financial leverage multiple is done by minimalizing the cash surplus balance to the indispensable level of operating cash.

The costs of bank loans depended on the lombard and re-discount loan rates (in correspondence to the terms and conditions on loans executed before 30 June 1996) Table IIIC displays a calculation of loan costs. The cost of capital was assumed to be equal to the rate of assets free of risk plus a 10% premium

5.2.4 Guarantees

It was assumed that EGP will not have to make any payments on its guarantees. Otherwise, EGP could lose its current liquidity at the end of 1996.

5.2.5 Residual Values

Residual value for cash flow was calculated using the annuity formula for free cash flow in 2002

$$WR1_{2001} = WSP_{2002} / (NKK_{2002} - I_{2002})$$

where: $WR1_{2001}$ - residual value of cash flow,
 WSP_{2002} - free cash flow in 2002 ,
 NKK_{2002} - nominal growth of equity in 2002 ,
 I_{2002} - inflation in 2002.

Residual value for benefit flow by using loans to finance activities calculated using the annuity formula for tax shields in 2002:

$$WR2_{2001} = WSP_{2002} / (NKKR_{2002} - I_{2002})$$

where $WR2_{2001}$ - residual value of tax shield flow,
 WSP_{2002} - tax shield flow in 2002 ,
 $NKKR_{2002}$ - nominal cost of loans in 2002 ,
 I_{2002} - inflation in 2002

5.3 Results of Illustrative Initial Valuation of EGP's Equity

The illustrative initial valuation of EGP using the DCF method for the basic scenario has been depicted below in table 5.3.1.

Table 5.3.1 The illustrative initial valuation of EGP using the DCF method on 30 June 1996 (000s PLN)

	Real Cost of Capital		
	8%	10%	12%
Company value in projection period	(39 282)	(40 254)	(41 043)
Residual Value	508 360	381 191	298 948
<i>Residual value as a % of company value in projection period</i>	<i>-1 294,1%</i>	<i>- 947,0%</i>	<i>-728,4%</i>
Company value	469.078	340.937	257.905
Loans	(66 181)	(66.181)	(66 181)
Cash Surplus	15 822	15 822	15 822
Equity Value	418.718	290.578	207.546

Depending on the real discount rate assumed, company value fluctuates from 257.905 to 469 078 thousand PLN

Table 5.3.2 Change in EGP Valuation at Rate of Real Growth on Cash Flow after 2001 using a 10% Real Cost of Capital

Rate of Real Growth	Company value	Equity
2% Growth	428 702	378 343
1% Growth	379 944	329 585
0%	340 937	290 578
1% Decline	309 022	258 663
2% Decline	284 427	232 067

5.4 Sensitivity Analysis in the Illustrative Initial Valuation

AAP made a sensitivity analysis on the valuation of the company's value and its equity value as regards the primary amounts on residual value and the sales parameters during the period under financial projection. The tables below show the results of the sensitivity analysis for a 10% real cost of capital

Table 5.3.1 shows that EGP's valuation depends on the company's growth perspectives after 2001 and the residual value assumptions. The tables below show the changes in the illustrative initial valuation as a result of changes to the residual value assumptions

Table 5.4.1 Changes in the Illustrative Initial Value on Changes in Residual Value Premises (000s PLN)

	Company value	Equity
Basic Scenario	340 937	290 578
Increase on sales of 20% to 11 083 GWh	362 449	312.089
Decline in sales of 20% to 7 388 GWh	285 603	235 244
Increase on sales margin by 2% to 12,8%	374 223	323 864
Decline in sales margin by 2% to 8,7%	302 646	252 287
Increase in fees for capacity by 10% to 9 281 z ³	398 393	348 034
Increase in fees for capacity by 30% to 10 968 z ³	513 305	462 946
Increase in investment outlays by 20% to 30 mln z ³	306 704	256 344
Decline in investment outlays by 20% to 20 mln z ³	375 170	324 811

Fees for capacity and investment outlays in fixed prices from 30 June 1996

Another important factor is the price path on capacity prices during 1997-2002. The tables below show the changes in the illustrative initial valuation as a result of changes to the price path on capacity assumptions

Table 5.4.2 Changes in Illustrative Initial Valuation as a Consequence of Changes in Price Path on Fees for Capacity (000s PLN)

	Company value	Equity value
Price Path on Fees for Capacity		
Basic Scenario	340 937	290 578
Inflationary Scenario	372 037	321 677
Growth Scenario	362 577	312 217
Optimistic Scenario	521 816	471 457

The price paths under analysis on fees for capacity (real increase/decrease in fees for capacity compared to last year's price at an assumed manner for indexing fees) are as follows

Price Path on Fees for Capacity	1997	1998	1999	2000	2001	2002
Basic Scenario	-6.5%	-3.5%	3.5%	3.5%	0.0%	0.0%
Inflationary Scenario	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Scenario	-5.0%	-5.0%	5.0%	5.0%	0.0%	0.0%
Optimistic Scenario	0.0%	0.0%	5.0%	5.0%	5.0%	5.0%

6. Initial Valuation using Multiple Methods

6.1 Methodology of Initial Valuation

Multiple-based valuation is based on the general premise that the company's equity value depends on its ability to generate profits, the rate of return expected by investors as juxtaposed against investment risk and the expected rate of return on normalized future profits.

The company's ability to generate profits is specified on the way to normalcy by adjusting the balance sheet profit with single time items and not ones that are constantly reappearing. Investor expectations concerning rate of return and rate of growth on normalized profits in the future are reflected in the capitalization multiple estimated using comparable transactions. The company's equity value is the product of normalized profit and the capitalization multiple.

6.2 Normalization of Net Profit

EGP's financial result from 1993 to the first half of 1996 varied greatly. Its volatility was caused by changes in the profitability of the electric energy sector, which were the consequences of MF's pricing policy and changes in coal prices. For the above reasons it is difficult to assess a normalized net profit level for EGP, at least one that could be the grounds for a multiple-based valuation.

To calculate EGP's initial valuation by the multiple-based method the following illustrative scope of net profit was assumed.

- a) net profit projected in 1996,
- b) net profit projected in 1996 if EGP's net profit margin were the same as in 1993, 1994 and 1995,
- c) the net arithmetic mean profit defined in sub-sections a and b

6.3 Setting the Rate of Capitalization

To value EGP the price to earnings multiple was used as the rate of capitalization on the company's equity. Since the Warsaw Stock Exchange has been operating for only a short period and since there are not any companies from the energy sector on it, the decision was made to use the P/E multiple in an illustrative range of values. The P/E multiples for Power Gen PLC, National Power PLC and Scottish Power

electricity generation plants listed on the London Stock Exchange on 28 June 1996 were used to give an example.

Table 5.6 P/E Multiples on 28 June 1996

FT-SE 100	14.3
Index of energy sector companies	7.9
National Power PLC	7.8
Power Gen PLC	6.1
Scottish Power	8.7

6.4 Results of Initial Valuation

The results of the initial valuation using the multiple method are as follows

**Table 5.7 Results of Initial Valuation using Multiple Method
(000s PLN)**

P/E Multiple	6,1	7,4	8,7
Net Profit			
Projected for 1996	69 621	84 458	99 295
Comparable for 1995	104 879	127 231	149 582
Comparable for 1994	120 942	146.717	172 492
Comparable for 1993	295 531	358 513	421 495
Arithmetic Mean	147,743	179,230	210.716

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7. Summary of Initial Valuation

The results of the illustrative initial valuation of EGP by the adjusted net book value, the DCF and multiple methods.

**Table 5.8 Range on Illustrative Initial Valuation for EGP on 30 June 1996
(000s PLN)**

Adjusted Net book value		601.973		
Initial valuation of equity	Minimum	Mean	Maximum	
DCF Method	207 546	290 578	471 457	
Multiple Method	147 743	179 230	210 716	
P/BV Multiple				
DCF Method	0,34	0,48	0,78	
Multiple Method	0,25	0,30	0,35	

The illustrative initial valuation of equity shows that EGP's equity value on the DCF method and the multiple method ranges from 147,743 thousand PLN to 471 743 thousand PLN. This means that the P/BV multiple when using the adjusted book value fluctuates in the 0,25 to 0,78 range

8. Reservations pertaining to the Scope, Manner of Using this Report and Its Dissemination

In keeping with our usual practice, this report is solely for EGP's usage and is confidential for EGP's management board, its advisors and others authorized to see it. We do not accept any liability on EGP's unlimited utilization of this report, nor by its advisors or other people authorized to gain access to it

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9. Financial Projections from the EGP's Management Board

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Table 1

Power Plant "Rybnik"

Macroeconomic Parameters of Projections

	2nd half '96	1997	1998	1999	2000	2001	2002
Polish Monetary Assumptions							
Yearly Inflation Rate	19.8%	16.0%	13.0%	11.0%	10.0%	9.0%	8.0%
Average Yearly Inflation Rate	20.4%	17.9%	14.5%	12.0%	10.5%	9.5%	8.5%
Lombard Rate above Inflation	5.2%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Lombard Credit	25.0%	20.0%	17.0%	15.0%	14.0%	13.0%	12.0%
Discount Rate above Inflation	2.2%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Rediscount Credit	22.0%	18.0%	15.0%	13.0%	12.0%	11.0%	10.0%
Revaluation of Fixed Assets							
Revaluation Rate in relation to Inflation	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Part of the year depreciation (in the year of putting investment to use)	25%	50%	50%	50%	50%	50%	50%
Corporate Income Tax	40.0%	38.0%	36.0%	34.0%	32.0%	32.0%	32.0%

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Power Plant "Rybnik"

Projection of the Power Plant Income Statement (thousands PLN)

Current Prices

	2nd half '96	1997	1998	1999	2000	2001	2002
ELECTRIC ENERGY AND CAPACITY							
Sales	328,070	727,029	874,718	960,816	1,056,795	1,195,619	1,277,995
Capacity	79 779	186 737	240 884	280 792	280 484	310 848	291,524
1/2 ctn. Energy	227 680	516 767	587 950	640 963	732 629	835 885	832 603
System Services and Export Bonus	8 784	19 698	32 187	35 449	40 062	45 306	50 142
Cost Refund of the Fuel Stock, beyond Standard	3 986	3 627	3 698	3 612	3 621	3 580	3 525
Price Correction for the Previous Periods	7 852						
Costs of sales	203,428	482,690	558,885	608,436	684,916	780,678	861,683
Immunex	38.0%	33.6%	36.2%	36.7%	33.7%	34.7%	32.6%
Transmission Costs	6 917	11 737	13 438	15 610	16 630	18 209	19 757
Percent Prod Transmission Costs	5 208	11 737	13 438	15 050	16 630	18 209	19 757
Transmission Cost Correction for the Previous Periods	1 709						
Variable Costs	196,511	470 953	545 447	593,386	668,286	762 468	841 926
Basic Fuel	181 370	408 443	473 506	514 828	576 588	652 676	722 892
Correction of the Basic Fuel for the Previous Period	(11 651)						
Supplementary Fuel	1 685	3 782	4 416	4 857	5 487	6 210	6 876
Services	2 271	7 451	11 985	18 371	27 342	36 317	43 468
Environmental Costs	22 839	51 277	55 481	55 331	58 889	67 288	68 690
Balance of Heat Sales	146	363	427	468	541	597	652
Sales of Heat Energy	249	621	720	813	903	993	1,083
Costs of sales	113	257	292	328	362	396	430
Other Revenue	1 577	3 467	3 918	4 349	4 784	5 214	5 632
Costs Profit	126,364	248,169	320,178	357,215	377,204	420,752	423,996
% of the Sales	38.5%	34.1%	36.6%	37.2%	35.7%	35.2%	33.7%
Fixed Costs	105,493	206,442	299,829	318,804	343,517	383,501	394,346
% of the Sales	32.1%	28.4%	33.5%	33.2%	32.5%	32.1%	30.8%
Depreciation	33 640	76 856	146 873	146 732	152 133	158 274	142 809
Salaries	15 980	34 333	39 308	44 024	48 645	53 266	57 793
Social Security Tax	7 702	16 549	18 947	21 219	23 447	25 674	27 858
Contracted Overhaul	23 694	31 443	33 693	43 152	47 504	62 750	73 399
Overhaul Materials	4 700	6 810	7 296	9 344	10 287	13 589	15 897
Other Contracted Services	6 558	15 218	17 945	20 701	23 561	26 573	29 686
Other Costs	13 220	25 233	29 467	33 652	37 940	42 375	46 896
Operating Income	20,871	41,727	26,649	38,381	33,689	37,251	28,250
% of Sales	6.4%	5.7%	3.0%	4.0%	3.2%	3.1%	2.2%
Other Operating Revenues and Costs	(2,891)	(2,398)	(3,789)	(3,007)	(3,308)	(3,606)	(3,894)
Other Operating Revenue	1 100						
Other Operating Costs	3 991	2 398	2 709	3 007	3 308	3 606	3 894
Extraordinary Income							
Extraordinary Loss							
Income before Tax	17,980	39,330	22,860	35,374	30,381	33,645	24,356
% of Sales	5.5%	5.4%	2.6%	3.7%	2.9%	2.8%	1.9%
Immunex Costs	8 179	22 065	26 750	27 489	26 940	20 349	11 304
Immunex Income	475	874	718	760	1 046	1 120	1 168
Income before Tax	10,276	18,138	(972)	8,855	4,386	14,416	14,218
% of Sales	3.1%	2.5%	0.1%	0.9%	0.4%	1.2%	1.1%
Income Tax	4,110	6,893	(314)	3,011	1,435	4,613	4,550
Int Payable TAX	4,585	7 367	160	3 485	1 910	4 613	4 550
Deferred Tax	(474)	(474)	(474)	(474)	(474)		
Effective Tax Rate	40.0%	38.0%	36.0%	34.0%	32.0%	37.0%	32.0%
Net Income	6,166	11,246	(658)	5,844	3,050	9,803	9,669
Shareholders Dividend	925	1 687		877	458	1 470	1 450
Retained Profit	5,241	9,559	(658)	4,967	2,593	8,333	8,219

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Power Plant "Rybnik"

Vertical Structure of the Income Statement (%)

Current Prices

	2nd half '96	1997	1998	1999	2000	2001	2002
ELECTRIC ENERGY AND POWER							
Sales	100.0%						
Capacity	24.3%	25.7%	28.7%	29.2%	26.5%	26.0%	22.8%
Electr. Energy	69.4%	71.1%	67.2%	66.7%	69.3%	69.9%	73.0%
System Services and Export Boms	2.7%	2.7%	3.7%	3.7%	3.8%	3.8%	3.9%
Cost Refund of the Fuel Stocks beyond Standard	1.2%	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%
Price Corrections for the Previous Period	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Costs of Sale	62.0%	66.4%	63.9%	63.3%	64.8%	65.3%	67.4%
Transmission Costs	1.6%	1.6%	1.5%	1.6%	1.6%	1.5%	1.5%
Variable Costs	59.9%	64.8*	62.4%	61.8*	63.2%	63.8%	65.9
Its is Fuel	55.3%	56.2%	54.1%	53.6%	54.6%	54.6%	56.6%
Supplementary fuel	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Sorbent	0.7%	1.0%	1.4%	1.9%	2.6%	3.0%	3.4%
Environmental Costs	7.0%	7.1%	6.3%	5.8%	5.6%	5.6%	5.4%
Balance of Heat Sales	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%
Other Revenues	0.5%	0.5%	0.4%	0.5%	0.5%	0.4%	0.4%
Gross Profit	38.5%	34.1%	36.6%	37.2%	35.7%	35.2%	33.1%
Other Operating Costs	32.2%	28.4%	33.6%	33.2%	32.5%	32.1%	30.9%
Depreciation	10.3%	10.6%	16.8%	15.3%	14.4%	13.3%	11.2%
Salaries	4.9%	4.7%	4.5%	4.6%	4.6%	4.5%	4.5%
Social Security Tax	2.3%	2.3%	2.2%	2.2%	2.2%	2.1%	2.2%
Contracted Overhauls	7.2%	4.3%	3.9%	4.5%	4.5%	5.2%	5.7%
Overhaul Materials	1.4%	0.9%	0.8%	1.0%	1.0%	1.1%	1.2%
Other contracted Services	2.0%	2.1%	2.1%	2.2%	2.2%	2.2%	2.3%
Other Costs	4.0%	3.5%	3.4%	3.5%	3.6%	3.6%	3.7%
Operating Income	0.0%						
Other Operating Revenues and Costs	-0.9%	-0.3%	0.3%	0.3%	-0.3%	-0.3%	0.3%
Other Operating Revenues	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs	-1.2%	-0.3%	0.3%	0.3%	-0.3%	-0.3%	0.3%
Extraordinary Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraordinary Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earnings before Financial Costs	5.5%	5.4%	2.7%	3.7%	2.9%	2.8%	1.9%
Financial Costs	2.5%	3.0%	2.9%	2.9%	2.5%	1.7%	0.9%
Financial Income	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Earnings before Tax	3.1%	2.5%	0.1%	0.9%	0.4%	1.2%	1.1%
Income Tax	1.3%	0.9%	0.0%	0.3%	0.1%	0.4%	0.4%
Profit Tax payable	1.4%	1.0%	0.0%	0.4%	0.2%	0.4%	0.4%
D.J. and Tax	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Net Profit	1.9%	1.5%	-0.1%	0.6%	0.3%	0.8%	0.8%
Shareholders Dividend	0.3%	0.2%	0.0%	0.1%	0.0%	0.1%	0.1%
Retained Profit	1.6%	1.3%	-0.1%	0.5%	0.2%	0.7%	0.6%

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Power Plant "Rybniak"

Income Statement Dynamics

Projection in current zloties

	2nd half '96	1997	1998	1999	2000	2001	2002
ELECTRIC ENERGY AND CAPACITY							
Sales	106.6%	114.3%	120.3%	109.8%	110.0%	113.1%	106.9%
Capacity	90.6%	111.3%	134.4%	111.9%	99.9%	110.8%	93.8%
Electric Energy	106.3	117.0%	113.8%	109.0%	114.3%	114.1%	111.5%
System services and Export Bonus	117.3	137.4%	103.4%	110.1%	113.0%	113.1%	110.7%
Cost Refund of the Fuel stocks beyond Standard		98.0%	96.8%	97.7%	100.2%	98.9%	98.5%
Price Corrections for the Previous Periods							
Costs of Sales	100.0%	118.6%	115.8%	108.9%	112.6%	114.0%	110.4%
Transmission Costs		107.0%	114.5%	112.0%	110.5%	109.5%	108.5%
Variable Costs	99.4%	119.5%	115.8%	108.8%	112.4%	114.1%	110.4%
Basic Fuel	104.1	114.9%	115.9%	108.7%	112.0%	113.2%	110.8%
Supplementary Fuel	104.9	115.0%	116.7%	110.0%	113.0%	113.2%	110.7%
Worment	197.9	210.7%	160.8%	153.3%	148.8%	132.8%	113.7%
Environmental Costs	107.5	117.3%	108.2%	98.7%	108.4%	114.2%	102.1%
Sales of Heat Energy	50.2%	83.1%	117.6%	113.7%	111.3%	110.3%	109.3%
Other Sales	111.7%	116.0%	113.0%	111.0%	110.0%	109.0%	108.0%
Gross Profit	119.2%	106.8%	129.0%	111.6%	105.6%	111.5%	100.4%
Other Operating Costs	120.0%	106.7%	142.2%	108.6%	107.7%	111.6%	102.8%
Depreciation	101.1	116.1%	191.1%	99.9%	103.7%	104.7%	89.7%
Salaries	112.0	113.5%	114.5%	112.0%	110.5%	109.5%	108.5%
Social Security Tax	119.5	117.0%	114.5%	112.0%	110.5%	109.5%	108.5%
Contracted Overhauls	151.5	79.9%	107.2%	128.1%	110.1%	132.1%	117.0%
Overhaul Materials	126.0	80.8%	107.1%	128.1%	110.1%	132.1%	117.0%
Other Contracted Services	100.0	116.1%	117.9%	115.4%	113.8%	112.8%	111.8%
Other Costs	151.4%	114.9%	116.8%	114.2%	112.7%	111.7%	110.7%
Operating Profit	115.8%	107.3%	143.0%	144.0%	87.8%	110.6%	75.8%
Other Operating Revenues and Costs	353.4%	64.6%	113.0%	111.0%	110.0%	109.0%	108.0%
Other Operating Revenues		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Operating Costs		45.9%	113.0%	111.0%	110.0%	109.0%	108.0%
Extraordinary Profit	0.0	0.0%	0.0	0.0	0.0%	0.0	0.0%
Extraordinary Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earnings before Financial Costs	104.5%	111.8%	60.9%	147.8%	85.9%	110.7%	72.4%
Financial Costs	109.4	141.0%	116.7%	106.8%	98.0%	75.5%	55.6%
Financial Revenues	61.2%	69.9%	107.3	104.4	106.8%	107.1	104.2
Earnings before Tax	97.8%	87.3%	-4.8%	1014.9%	50.7%	321.4%	98.6%
Income Tax	109.6%	87.7%	-1.6%	958.5%	47.7%	321.4%	98.6%
Income Tax Payable	122.2%	88.4%	2.2%	2175.8%	54.8%	241.6%	98.6%
Deferred Tax		100.0%	100.0%	100.0%	100.0%	0.0%	#DIV/0!
Net Profit	91.3%	87.1%	5.0%	1046.6%	42.2%	321.4%	98.6%
Shareholders Dividend	91.1%	87.0%	0.0%	#DIV/0!	52.2%	321.4%	98.6%
Retained Profit	91.3%	87.1%	5.0%	889.6%	52.2%	321.4%	98.6%

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Table III

Power Plant "Rybmk"

Balance Sheet Projection (thousands PLN)

Current Prices

	1993	1994	1995	30/6/96	31/12/96	1997	1998	1999	2000	2001	2002
ASSETS	248,699	314,411	835,055	807,680	825,955	951,389	1,129,512	1,194,417	1,200,447	1,166,787	1,108,290
(Fixed Assets)	192,764	240,176	729,301	709,172	717,273	817,874	970,998	1,019,966	1,011,046	956,022	868,509
Tangibles	181,253	227,548	716,013	693,055	700,404	798,053	948,936	997,467	989,002	934,017	846,189
Intangibles	60	229	721	773	1,524	4,751	7,268	7,980	7,800	8,038	8,618
Shares	3,323	4,338	5,374	7,074	7,074	7,074	7,074	7,074	7,074	7,074	7,074
Long Term Loans	6,128	8,062	7,193	8,271	8,271	7,996	7,720	7,445	7,169	6,894	6,618
Receivables and Other Assets	36,680	37,773	62,810	45,034	67,754	85,338	102,205	111,108	118,593	131,169	138,055
Trade Receivables	29,782	32,482	46,263	34,044	58,532	69,914	87,711	96,343	103,959	119,889	128,150
Other Receivables	207	261	1,946	2,027	851	987	1,115	1,238	1,362	1,484	1,603
VAT Receivables	5,861	3,222	3,356	736	2,145	8,083	6,905	6,938	4,560	2,978	1,375
Prepayments	830	1,809	8,945	8,227	6,227	6,353	6,471	6,587	6,703	6,817	6,927
Inventories	18,036	33,196	37,971	31,128	34,622	40,967	47,635	53,816	60,328	67,739	74,622
Basic Fuel	9,170	24,156	27,822	16,901	27,857	32,452	37,626	41,891	45,957	50,426	55,059
Supplementary Fuel	136	358	432	515	750	854	989	1,101	1,209	1,324	1,444
Sorbent	73	221	547	502	923	1,580	1,975	3,160	4,521	6,142	7,246
Other Materials	8,457	8,460	9,170	13,209	5,092	6,082	7,044	7,664	8,631	9,847	10,873
Operating Cash	1,220	3,266	5,273	6,524	6,305	7,209	8,674	9,528	10,479	11,856	12,573
Surplus of Cash			-	15,822	-	(0)		(0)		0	14,441
LIABILITIES	248,698	314,412	835,056	807,680	825,955	951,389	1,129,512	1,194,417	1,200,447	1,166,787	1,108,290
Liabilities and Funds	41,209	80,511	60,347	54,027	32,578	84,909	102,754	112,503	127,001	144,105	158,610
Trade Liabilities	32,683	45,541	37,505	23,506	12,487	61,108	70,754	77,027	86,709	98,833	109,089
VAT Liabilities					1,573	1,946	6,950	7,397	9,250	11,265	12,607
Other Liabilities	2,442	24,486	10,355	6,811	3,110	3,607	4,076	4,524	4,977	5,425	5,859
Special Funds	980	3,424	4,320	5,082	5,562	6,452	7,291	8,093	8,903	9,704	10,480
Accruals	5,104	7,060	8,137	18,628	9,846	11,795	13,682	15,461	17,162	18,878	20,577
Bank Loans	15,718	28,090	88,771	66,181	101,138	165,156	201,039	251,703	241,115	182,019	100,798
Deferred Tax Liabilities	-	-	2,371	2,371	1,897	1,423	949	474	0	0	0
Equity	191,772	205,811	685,566	685,101	690,341	699,900	824,770	829,738	832,331	840,663	848,881
Share Capital	67,547	70,327	74,033	74,033	74,033	74,033	74,033	74,033	74,033	74,033	74,033
Spare Capital	98,681	114,461	124,348	125,589	131,328	136,569	146,128	150,569	153,129	153,129	161,462
Residual Reserve	6,809	9,879	479,740	479,740	479,740	479,740	605,168	605,168	605,168	605,168	605,168
Net Profit/(Loss) for the current year	18,735	11,182	5,445	5,779	5,241	9,559	(558)	4,967	2,593	8,331	8,218
Working Capital Indexes (in days)											
Trade Receivables	36.9	27.6	34.0	22.6	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Basic Fuel	20.2	31.4	32.1	17.7	28.6	29.0	29.0	29.7	29.1	28.2	27.8
Supplementary Fuel	88.0	83.2	55.1	58.6	83.2	82.4	81.8	82.8	80.4	77.8	76.6
Sorbent	66.5	84.9	71.5	80.7	98.9	77.4	60.2	62.8	60.3	61.7	60.8
Other Materials	8.0	4.9	4.7	12.2	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Cash in hand	1.4	2.6	3.6	3.9	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Trade Liabilities	66.0	56.8	41.3	24.3	10.0	41.3	41.3	41.3	41.3	41.3	41.3
VAT Rate on Sales	7%	7%	7%	12%	12%	17%	22%	22%	22%	22%	22%
VAT Rate on Fuel purchases	7%	7%	7%	12%	12%	12%	12%	12%	12%	12%	12%
VAT receivables/payables calculation	0	0	0	0	1,573	1,946	6,950	7,397	9,250	11,265	12,607

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Table II

Powe Plant "Rybnik"

Vertical Structure of the Balance Sheet

Current Prices

	1993	1994	1995	30/6/96	II po' 1996	1997	1998	1999	2000	2001	2002
ASSETS	100 0%										
Fixed Assets	77 5%	76 4%	87 3%	87 8%	86 8%	86 0%	86 0%	85 4%	84 2%	81 9%	78 4%
Tangibles	73 7%	72 4%	85 7%	85 8%	84 8%	83 9%	84 0%	83 5%	82 4%	80 1%	76 4%
Intangibles	0 0%	0 1%	0 1%	0 1%	0 2%	0 5%	0 6%	0 7%	0 6%	0 7%	0 8%
Financial fixed assets	1 3%	1 4%	0 6%	0 9%	0 9%	0 7%	0 6%	0 6%	0 6%	0 6%	0 6%
Long Term Receivables	2 5%	2 6%	0 9%	1 0%	1 0%	0 8%	0 7%	0 6%	0 6%	0 6%	0 6%
Receivables and other Assets	14 7%	12 0%	7 8%	6 6%	8 2%	9 0%	9 0%	9 3%	9 8%	11 2%	12 5%
Trade Receivables	12 0%	10 3%	5 5%	4 2%	7 1%	7 3%	7 8%	8 1%	8 8%	10 3%	11 6%
Other Receivables	0 1%	0 1%	0 5%	0 4%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%
VAT Receivables	2 4%	1 0%	0 4%	0 1%	0 3%	0 8%	0 6%	0 6%	0 4%	0 3%	0 1%
Prepayments	0 3%	0 6%	1 1%	1 0%	0 8%	0 7%	0 6%	0 6%	0 6%	0 6%	0 6%
Inventory	7 3%	10 6%	4 5%	3 9%	4 2%	4 3%	4 2%	4 5%	5 0%	5 8%	6 7%
Basic Incl	3 7%	7 7%	3 3%	2 1%	3 4%	3 4%	3 3%	3 5%	3 8%	4 3%	5 0%
Additional Incl	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%
Serbit	0 0%	0 1%	0 1%	0 1%	0 1%	0 2%	0 2%	0 3%	0 4%	0 5%	0 7%
Other Materials	3 4%	2 7%	1 1%	1 6%	0 6%	0 6%	0 6%	0 6%	0 7%	0 8%	1 0%
Operating Cash	0 5%	1 0%	0 6%	0 8%	0 9%	1 0%	1 1%				
Surplus of Cash	0 0%	0 0%	0 0%	2 0%	0 0%	1 3%					
LIABILITIES	100 0%										
Liabilities and Funds	16 6%	25 6%	7 2%	6 7%	3 9%	8 9%	9 1%	9 4%	10 6%	12 4%	14 3%
Trade Liabilities	13 1%	14 5%	4 5%	2 9%	1 5%	6 4%	6 3%	6 4%	7 2%	8 5%	9 8%
VAT Liabilities	0 0%	0 0%	0 0%	0 0%	0 2%	0 2%	0 6%	0 6%	0 8%	1 0%	1 1%
Other Liabilities	1 0%	7 8%	1 2%	0 8%	0 4%	0 4%	0 4%	0 4%	0 4%	0 5%	0 5%
Special Funds	0 4%	1 1%	0 5%	0 6%	0 7%	0 7%	0 6%	0 7%	0 7%	0 8%	0 9%
Accruals	2 1%	2 2%	1 0%	2 3%	1 2%	1 2%	1 2%	1 3%	1 4%	1 6%	1 9%
Bank Loans	6 3%	8 9%	10 6%	8 2%	12 2%	17 4%	17 8%	21 1%	20 1%	15 6%	9 1%
Deferred Tax Liabilities	0 0%	0 0%	0 3%	0 3%	0 2%	0 1%	0 1%	0 0%	0 0%	0 0%	0 0%
Equity	77 1%	65 5%	81 9%	84 8%	83 6%	73 6%	73 0%	69 5%	69 3%	72 0%	76 6%
Share Capital	27 2%	22 4%	8 9%	9 2%	9 0%	7 8%	6 6%	6 2%	6 2%	6 3%	6 7%
Share Capital	19 7%	36 4%	14 9%	15 5%	15 9%	14 4%	12 9%	12 2%	12 5%	13 1%	14 6%
Reserve	2 7%	1 1%	5 7%	5 9%	5 8%	5 0%	5 3%	5 0%	5 0%	5 1%	5 4%
Net Profit / (loss) for the current year	7 5%	1 6%	0 7%	0 7%	0 6%	1 0%	0 0%	0 4%	0 2%	0 7%	0 7%

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Table II

Power Plant "Rybnik"

Balance Sheet Dynamics (PLN)

Projection in Current Prices

	1993	1994	1995	30/6/96	11 mo' 1996	1997	1998	1999	2000	2001	2002
ASSETS		126.4%	265.6%	96.7%	102.3%	115.2%	118.7%	105.7%	100.5%	97.2%	95.0%
Fixed Assets		124.6%	303.7%	97.2%	101.1%	114.0%	118.7%	105.0%	99.1%	94.6%	90.8%
Tangibles	124.2.4	314.7%	96.8%	101.1%	113.9%	118.9%	105.1%	99.2%	94.4%	90.6%	
Intangibles	381.8%	315.2%	107.2%	197.2%	311.7.4	153.0.4	109.8%	97.7%	103.0%	107.2%	
Financial Fixed Assets	130.5%	123.9%	131.6.4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Long Term Receivables	131.6%	89.2%	115.0%	100.0%	96.7%	96.6%	96.4%	96.3%	96.2%	96.0%	
Receivables and other Assets		103.0%	165.5%	72.0%	150.5%	126.0%	119.8%	108.7%	106.7%	110.6%	105.2%
Trade Receivables	109.1%	142.4.4	73.6.4	171.9.4	119.4%	125.5.4	109.8%	110.0%	113.1%	106.9%	
Other Receivables	126.1.4	1511.4.4	51.4%	42.0.4	116.0%	113.0%	111.0.4	110.0%	109.0.4	108.0.4	
VAT Receivables	55.0.4	104.2%	21.9.4	291.4%	376.9.4	85.4%	100.5%	65.7%	65.3.	46.2%	
Prepayments	217.8%	494.7%	92.0.4	75.7%	102.0.4	101.9.4	101.8%	101.8%	101.7.4	101.7.4	
Inventory		184.1%	114.4%	82.0%	111.2%	118.3%	113.0%	112.1%	112.3%	112.3%	110.2%
Basic Incl	263.4%	115.2%	60.7%	164.8.4	116.5%	115.9%	111.3%	109.7%	109.7.4	109.2.4	
Supplementary Incl	106.5%	120.7%	119.2%	145.6%	113.8.4	115.9.4	111.3.4	109.8%	109.5%	109.1%	
Sorbent	304.6%	247.6%	91.9%	183.8.4	171.1.4	125.0.4	160.0%	143.1%	135.9%	118.0.4	
Other Materials	100.0%	108.4%	144.0.4	38.5%	119.5%	115.8%	108.8%	112.6%	114.1.4	110.4%	
Operating Cash		287.7%	161.5%	123.7%	96.6%	114.3%	120.3%	109.8%	110.0%	113.1%	106.9%
Surplus of cash		#DIV/0!	#DIV/0!	#DIV/0!	0.0%	#DIV/0!	0.0%	#DIV/0!	0.0%	#DIV/0!	#####
LIABILITIES		126.4%	265.6%	96.7%	102.3%	115.2%	118.7%	105.7%	100.5%	97.2%	95.0%
Payables and Funds		195.4%	75.0%	89.5%	60.3%	260.6%	121.0%	109.5%	112.9%	113.5%	110.1%
Trade Payables	139.3.4	82.4%	62.7%	53.1%	489.4%	115.8%	108.9%	112.6%	114.0%	110.4%	
VAT Payables	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	123.7.4	357.1.4	106.4%	125.1%	121.8%	111.9%	
Other Payables	1002.7%	42.3%	58.4	45.7%	116.0%	113.0.4	111.0%	110.0%	109.0.4	108.0.4	
Special Funds	349.4%	127.0%	116.8%	109.5%	116.0%	113.0%	111.0%	110.0%	109.0.4	108.0%	
Accruals	138.3%	115.3%	228.9.4	52.9.4	119.8%	116.0%	113.0%	111.0%	110.0%	109.0.4	
Bank Loans		178.7%	318.0%	74.6%	152.8%	163.3%	121.7%	125.2%	95.8%	75.5%	55.4%
Deferred Tax Payables		#DIV/0!	#DIV/0!	100.0%	80.0%	75.0%	66.7%	50.0%	0.0%	100.0%	100.0%
Equity		107.3%	332.1%	100.2%	100.8%	101.4%	117.8%	100.6%	100.3%	101.0%	101.0%
Share Capital	104.1%	105.3%	100.0%	100.0.4	100.0.4	100.0%	100.0%	100.0%	100.0%	100.0%	
Spare Capital	116.0%	108.6.4	101.0.4	104.6%	104.0%	104.0%	99.6.4	103.4%	101.7%	105.4%	
Residual Income	144.5%	4876.0.4	100.0.4	100.0%	100.0%	126.1%	100.0%	100.0%	100.0%	100.0%	
NET Profit/(loss) for Current Year	59.7.4	48.7%	105.4%	91.3%	162.4%	5.8%	889.6%	52.2%	321.4%	98.6%	

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Table IV

Power Plant "Rybnik"

Cash Flow (thousands PLN)

Projection in Current Prices

	2nd half '96	1997	1998	1999	2000	2001	2002
EBIT	18,455	40,204	24,877	36,353	31,426	34,765	25,523
Income Tax	(7 382)	(15 277)	(8 956)	(12 360)	(10 056)	(11 125)	(8 167)
Change in deferred Taxes	(474)	(474)	(474)	(474)	(474)	0	0
EBIT with Tax corrections	10,599	24,452	15,447	23,519	20,895	23,641	17,356
Depreciation	33 640	76 856	146 873	146 732	152 133	159 274	142 809
Gross Cash Flow	44,239	101,308	162,320	170 250	173,028	182 915	160,165
Changes in Working Capital	(47 445)	27 773	(6 879)	(5 914)	(175)	(3 985)	196
(Increase)/Decrease of Cash in hand	219	(904)	(1 465)	(854)	(952)	(1 377)	(817)
(Increase)/Decrease of Receivables	(22 721)	(17 584)	(16 867)	(8 904)	(7 485)	(12 576)	(6 886)
(Increase)/Decrease of Inventories	(3 494)	(6 345)	(6 668)	(6 181)	(6 512)	(7 411)	(6 882)
(Increase)/Decrease of Other Assets		275	275	275	275	275	275
Increase/(Decrease) of Liabilities and Funds	(21 449)	52 331	17 845	9 749	14 499	17 103	14 506
Operating Cash Flow	(3,205)	129,081	155,441	164,336	172 853	178,930	160,360
Tangible investments	(41 741)	(177 732)	(174 844)	(195 974)	(143 488)	(104 526)	(55 562)
Cash available	(44 947)	(48,651)	(19,403)	(31,638)	29,364	74,404	104,799
Financing	44,946	48,651	19,403	31,638	(29,364)	(74,404)	(104,799)
Debt level changes	34 957	64 018	35 883	50 664	(10 588)	(59 096)	(81 221)
Cost of Credit and Interests received corrected with Tax influence	(4 908)	(13 681)	(16 480)	(18 149)	(18 319)	(13 838)	(7 687)
Changes in Equity	0	0	(0)	(0)	0	0	0
Gross Dividend	(925)	(1 687)	0	(877)	(458)	(1 470)	(1 450)
Changes in the Surplus of Cash	15 822	0	(0)	0	(0)	(0)	(14 441)
Taxes	(7,382)	(15,277)	(8,956)	(12,360)	(10,056)	(11,125)	(8,167)
Corporate Income Tax	(4 110)	(6 893)	314	(3 011)	(1 435)	(4 613)	(4 550)
Tax shield on Costs of Credit	(3 272)	(8 385)	(9 270)	(9 350)	(8 621)	(6 512)	(3 617)

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Table V

Power Plant "Rybnik"

Discounted Cash Flow Valuation (thousands PLZ)

Projection in Current Prices

	2nd half '96	1997	1998	1999	2000	2001	2002
1 Undiscounted Cash Flow with No Loan Assumption	(44,947)	(48,651)	(19,403)	(31,638)	29,364	74,404	104,799
2 Financial leverage Index (loans / (loans + equity))	12.8%	19.1%	19.6%	23.3%	22.5%	17.8%	10.6%
3 Cash Flow Discount Rate Calculation with No Loan Assumption							
Risk-free Rate of Assets	19.8%	16.0%	13.0%	11.0%	10.0%	9.0%	8.0%
Risk Premium	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Nominal Yearly Rate of Return	29.8%	26.0%	23.0%	21.0%	20.0%	19.0%	18.0%
Nominal Half Year Rate of Return	13.9%	12.2%	10.9%	10.0%	9.5%	9.1%	8.6%
Discount Rate	6.7%	27.9%	24.5%	22.0%	20.5%	19.5%	18.5%
Cumulative Discount Index	0.94	0.73	0.59	0.48	0.40	0.33	0.28
Discounted Cash Flow Calculation							
Adjusted Discounted Cash Flow	(42,109)	(35,641)	(11,418)	(15,261)	11,755	24,924	
Discounted Residual Value*						351,062	
	(42,109)	(35,641)	(11,418)	(15,261)	11,755	375,986	
Sum of Discounted Adjusted Cash Flow and Residual Value	283,312						
5 Discount Factor Calculation for the Value of Tax Shields							
Cost of Credit Premium over Inflation	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Inflation Rate in the Current Year	19.8%	16.0%	13.0%	11.0%	10.0%	9.0%	8.0%
Nominal Yearly Rate of Return	24.8%	21.0%	18.0%	16.0%	15.0%	14.0%	13.0%
Nominal Half Yearly Rate of Return	11.7%	10.0%	8.6%	7.7%	7.2%	6.8%	6.3%
Discount Rate	5.7%	22.9%	19.5%	17.0%	15.5%	14.5%	13.5%
Skumulowany czynnik dyskontowy	0.95	0.77	0.64	0.55	0.48	0.42	0.37
Tax Shield Discounted Value Calculation							
Value of the Tax Shields on the Tax costs	3,272	8,385	9,270	9,350	8,621	6,512	3,617
Discounted Value of the Tax Shields	3,096	6,456	5,973	5,149	4,111	2,712	1,327
Discounted Residual Value						30,129	
	3,096	6,456	5,973	5,149	4,111	32,841	
Sum of the Discounted Cash Flow and Residual Value	57,625						
7 Valuation of the Power Plant "Rybnik"							
Indicative Valuation of the Power Plant "Rybnik"	340,937						
Bank Loans and Credits on 30.06.1996	66,181						
Surplus of Cash on 30.06.96	15,822						
Indicative Valuation of Equity of the Power Plant "Rybnik"	290,578						

*residual value cash flow in 2002/ risk premium

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Table II A a

Power Plant "Rybniak"

Income Statement Forecast in the Power Units (PLN) Sales

Projection in Current Prices

Power Units I 8	Units	2nd half 96	1997	1998	1999	2000	2001	2002
Sales	PLN/a	316,231,830	723,201,977	871,020,192	957,203,788	1,053,174,911	1,192,038,946	1,274,469,261
Capacity	PLN/a	79,778,614	186,716,671	250,881,581	280,791,777	280,483,582	310,847,785	291,524,260
Share of Total Sales	%	23.2%	25.8%	28.8%	29.3%	26.6%	26.1%	22.9%
Net Zero Available Capacity in it	MW	1,324	1,370	1,346	1,362	1,426	1,470	1,488
Contracted Capacity	MW	1,205	1,230	1,226	1,234	1,295	1,333	1,339
Non-contracted Capacity	MW	119	140	120	128	131	137	149
Ineffective Capacity Charge	PLN/MWm-c	10,039	11,161	15,530	17,175	16,394	17,624	16,323
Electric Energy	PLN/a	227,689,436	516,767,117	587,949,520	640,962,623	732,629,043	835,885,134	932,801,450
Share of Total Sales	%	72.0%	71.3%	67.3%	67.0%	69.6%	70.1%	73.2%
Gross generation	MWh	4,595,692	9,165,253	9,345,952	9,178,554	9,183,966	9,698,697	9,898,768
Own Consumption Index								
Net generation	MWh	4,280,421	8,538,430	8,716,458	8,571,687	8,766,687	9,054,118	9,235,551
Power Units Working Hours	h	25,472	49,448	52,024	50,670	49,255	49,306	49,657
Average Price of the Electric Energy	PLN/MWh	53.19	60.52	67.45	74.78	81.57	92.32	101.00
Gross Profit on the Electric Energy Sales	PLN	19,527,116	45,811,925	42,502,056	47,576,138	64,142,997	71,416,751	90,877,568
Margin	%	9.4%	9.7%	7.8%	8.0%	9.6%	9.6%	10.8%
System Use	PLN/a	5,160,370	12,648,406	21,216,231	25,602,316	28,931,874	32,721,019	36,213,342
Export Bonus	PLN/a	3,403,410	7,649,782	8,940,859	9,847,052	11,128,413	12,585,007	13,928,209
Single Unit Price of Electric Energy	PLN/MWh	73.88	84.70	99.93	111.67	120.13	131.66	138.00
Heat Energy	PLN/a							
Share of Total Sales	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net generation	GJ	50,000	100,000	100,000	100,000	100,000	100,000	100,000
Price of Heat Energy	PLN/GJ							

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Table II A b

Power Plant "Rybnik"

Forecast of the Project's Income Statement in the power units (PLN) - Variable Costs of Energy generation

Power Units 1 8	Unit	2nd half 96	1997	1998	1999	2000	2001	2002
Generation Variable Costs	PLN/a	208,162,321	470,953,191	545,447,463	593,386,285	668,286,045	762,468,381	841,925,882
Generation Variable Costs/ MWh	PLN/MWh	48.63	45.16	62.58	69.23	76.23	84.21	91.16
Increase of Variable Costs/MWh	%		13.42%	13.45%	10.63%	10.12%	10.47%	8.25%
1.1 Basic Fuel	PLN/a	181,369,530	408,442,554	473,565,788	514,827,562	576,568,097	652,676,193	722,891,899
Share in the Total Variable Costs	%	87.1%	86.7%	86.8%	86.0%	86.3%	85.6%	85.9%
1.1.1 Fuel Consumption	t/a	2,107,223	4,189,103	4,242,308	4,117,968	4,173,630	4,314,709	4,404,554
1.1.2 price of the basic fuel	PLN/t	80.04	90.71	103.85	116.31	128.52	140.73	152.69
1.1.3 Price of transport of the basic fuel	PLN/t	6.03	6.79	7.78	8.71	9.63	10.54	11.44
2. Supplementary Fuel	PLN/a	1,683,126	3,782,278	4,415,712	4,856,822	5,486,838	6,209,530	6,876,249
Share in the Total Variable Costs	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
2.1 fuel consumption	t/a	6,434	12,831	13,084	12,850	13,138	13,578	13,858
2.2 price of the supplementary fuelena paliwa pomocniczego	PLN/t	238.91	269.20	308.21	345.18	381.42	417.65	451.15
2.3 Transport price of the supplementary fuel	PLN/t	22.69	25.57	29.27	32.78	36.22	39.67	43.04
3. Surbent	PLN/a	2,270,595	7,451,275	11,985,024	18,371,342	27,342,112	36,316,938	43,468,134
Share in the Total variable costs	%	0.5%	1.2%	1.9%	2.7%	3.2%	3.6%	3.6%
3.1 Ca(OH)2	PLN/a	987,466	3,803,338	6,713,710	11,205,312	17,959,686	24,506,216	30,389,292
Share in the Total variable costs	%	0.5%	0.8%	1.2%	1.9%	2.7%	3.2%	3.6%
3.1.1 consumption	t/a	6,228	21,288	32,821	48,912	70,947	88,410	101,047
3.1.2 price together with transport	PLN/t	158.56	178.66	204.55	229.09	251.14	277.19	300.74
3.2 Dolomite	PLN/a	1,283,130	3,647,937	5,271,315	7,166,030	9,382,426	11,810,721	13,078,842
Share in total variable costs	%	0.6%	0.8%	1.0%	1.2%	1.4%	1.6%	1.6%
3.2.1 consumption	t/a	53,200	119,425	175,973	213,602	233,905	230,961	296,963
3.2.2 price together with transport	PLN/t	23.22	26.16	29.96	33.55	37.07	40.59	44.04
4. Environmental Costs	PLN/a	12,625,435	28,325,492	28,685,547	25,858,547	25,593,805	29,585,095	26,953,194
Share in the Total variable costs	%	6.1%	6.0%	5.3%	4.4%	3.8%	3.9%	3.2%
4.1 NO2 Emissions	PLN/a	7,771,647	17,509,415	17,058,062	13,782,730	12,141,382	14,281,804	9,930,462
Share in Total variable costs	%	3.7%	3.7%	3.1%	2.3%	1.8%	1.9%	1.2%
4.1.1 Emission capacity	t/a	32,382	60,898	51,145	36,570	29,023	31,036	19,798
4.1.2 unit price	PLN/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.2 NO2 Emissions	PLN/a	2,718,173	5,786,644	5,873,432	5,932,772	6,671,247	7,592,395	8,453,301
Share in Total variable costs	%	1.3%	1.2%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Emission Capacity	t/a	11,726	20,126	17,100	15,742	15,647	16,099	16,853
4.2.2 Unit price	PLN/t	240.00	287.52	311.52	376.88	418.34	460.17	501.59
4.3 CO Emissions	PLN/a	79,483	189,145	221,702	242,497	272,199	309,558	344,465
Share in Total variable costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Emission Capacity	t/a	1,325	2,631	2,659	2,574	2,603	2,691	2,747
4.3.2 unit price	PLN/t	60.00	71.88	83.18	94.22	104.58	115.04	125.40
4.4 CO2 Emissions	PLN/a	544,206	1,296,072	1,522,544	1,670,050	1,878,814	2,136,555	2,377,339
Share in Total variable costs	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Emission Capacity	t/a	4,186,200	8,122,026	8,427,752	8,180,748	8,291,130	8,571,598	8,750,086
4.4.2 Unit price	PLN/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Dust Emissions	PLN/a	936,790	2,169,657	2,383,881	2,425,991	2,582,478	2,936,774	3,257,251
Share in Total variable costs	%	0.4%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%
4.5.1 Emission Capacity	t/a	7,205	13,931	13,196	11,884	11,907	11,782	12,027
4.5.2 unit price	PLN/t	130.00	155.74	180.66	204.14	226.60	249.26	271.69
4.6 Other Emissions	PLN/a	0	1	1	1	1	2	2
Share in Total variable costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 Consumption	t/a	5	9	9	9	9	10	10
4.6.2 unit price	PLN/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Charge for waste utilization	PLN/a	211,301	504,837	597,157	662,701	752,800	855,012	951,189
Share in Total variable costs	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Capacity	t/a	26,747	53,342	54,391	51,419	54,615	56,446	57,611
4.7.2 unit price	PLN/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 sewage water charges	PLN/a	19,807	47,321	55,975	62,119	70,495	80,146	89,161
Share in Total variable costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Capacity	m ³ /a	303,316	604,307	616,833	605,785	619,142	640,114	653,119
4.8.2 unit price	PLN/m ³	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water use charges	PLN/a	344,217	822,400	972,792	1,079,566	1,225,136	1,392,849	1,549,524
Share in Total variable costs	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Capacity	m ³ /a	4,917,390	9,806,821	10,000,160	9,821,053	10,040,844	10,377,606	10,591,682
4.9.2 unit price	PLN/t	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Costs of waste utilization	PLN/a	10,213,935	22,951,592	26,795,392	29,472,132	33,295,194	37,680,625	41,726,406
Share in Total variable costs	%	4.9%	4.9%	4.9%	4.9%	5.0%	5.0%	5.0%
5.1 waste amount	t/a	599,718	1,196,066	1,219,647	1,197,801	1,224,608	1,265,480	1,291,789
5.2 unit cost of waste utilization	PLN/t	17.03	19.19	21.97	24.61	27.19	29.77	32.30
Variable costs of Heat Generation	PLN/a	113,900	257,207	292,416	327,585	362,030	396,476	430,235
Variable costs of Heat Generation/GJ	PLN/GJ	2.26	2.47	2.92	3.28	3.62	3.96	4.30

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Table II A 1 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 1	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PLN/a	44,215,977	52,880,956	133,192,510	143,959,603	174,191,165	173,479,046	178,446,557
Capacity	PLN/a	9,043,708	13,470,489	61,242,351	66,166,525	79,915,284	79,318,923	38,770,812
Share in Total Sales	%	20.3%	23.3%	46.0%	46.0%	43.9%	43.7%	23.0%
Net Zone Available Capacity in t	MW	187	124	199	185	198	181	198
Contracted Capacity	MW	168	112	179	173	190	173	178
New contracted Capacity	MW	19	12	20	12	8	8	20
Capacity Charge	PLN/MWm-c	8 288	9 284	28 479	31 851	35 036	38 189	16 742
Effective Capacity Charge	PLN-MWm-c	8 081	9 052	25 607	29 856	31 622	36 425	16 323
Electric Energy	PLN/a	31,649,815	37,399,610	67,256,612	72,686,354	88,166,101	87,972,255	122,031,415
Share in Total Sales	%	76.1%	70.7%	50.3%	50.3%	50.6%	50.7%	72.4%
Net Generation	MWh	617,088	602,640	1,076,100	1,018,120	1,119,400	1,038,120	1,208,235
Power Unit Working Hours/roczny godzin pracy bloku	h	3 308	4 859	5 399	5 621	5 752	5 721	6 104
Price of the Electric Energy/Cena energii elektrycznej	PLN/MWh	54.53	62.06	62.50	70.02	77.38	84.74	101.00
Gross Profit on Electric Energy Sales	PLN	3 841 536	4 269 618			(0)		10 927 130
Profit Margin on Electric Energy Sales	%	12.9%	12.9%	0.0%	0.0%	0.0%	0.0%	9.8%
System Services	PLN/a	772,780	850,373	2,869,889	3,100,708	3,760,515	3,751,702	4,717,587
Export Bonuses	PLN/a	490,654	539,919	1,103,803	1,192,580	1,446,352	1,442,962	1,822,149
Simple tariff price of Electric Energy	PLN/MWh	71.23	86.72	123.10	137.89	152.09	166.15	138.52
Heat Energy	PLN/a	259,000	620,564	719,854	813,435	902,913	993,204	1,082,593
Share in Total Sales	%	0.6%	1.2%	0.5%	0.6%	0.5%	0.6%	0.6%
Net Generation of Heat/Produkcja netto	GJ	50 000	100 000	100 000	100 000	100 000	100 000	100 000
Price of Heat	PLN/GJ	5.18	6.21	7.20	8.13	9.03	9.93	10.83
Fuel Consumption Norms								
Average assumed parameters of coal								
Ash Content	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Sulphur Content	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Calorific Value	kJ/kg	21 409	21 000	21 000	21 000	21 000	21 000	21 000
Consumption of Fuel's Chemical Energy per kWh								
Basic Fuel Consumption/ycie paliwa podstawowego	g/kWh	9 740	9 554	9 444	9 444	9 444	9 444	9 444
Supplementary Fuel Consumption	g/kWh	455	455	450	450	450	450	450
Water Consumption	m ³ /MWh	1 40	1 40	1 40	1 40	1 40	1 40	1 40
Consumption of Ca(OH) ₂	g/kWh	1 07	1 07	1 07	1 07	1 07	1 07	1 07
Dolomite consumption	g/kWh		3 60	3 00	3 00	3 00	3 00	3 00
Norms of Emissions								
SO ₂	Mg/MWh	8.12	7.71	2.02	2.02	2.02	2.02	2.02
NO ₂	Mg/MWh	3.15	3.39	1.72	1.72	1.72	1.72	1.72
CO	Mg/MWh	0.29	0.29	0.28	0.28	0.28	0.28	0.28
CO ₂	Mg/MWh	903.83	903.83	893.40	893.40	893.40	893.40	893.40
Dust	Mg/MWh	1.62	1.62	1.23	1.23	1.23	1.23	1.23
Other emissions	Mg/MWh	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volume of Solid Waste in t	Mg/MWh	136.32	136.32	136.32	136.32	136.32	136.32	136.32
Stored in Land Fills	kg/MWh	5.82	5.82	5.82	5.82	5.82	5.82	5.82
Utilized by Contractors	kg/MWh	130.50	130.50	130.50	130.50	130.50	130.50	130.50
Volume of sewage	m ³ /MWh	0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Table II A 1 b

Power Plant "Rybnik"

Projection in current prices

Power Unit 1	Unit	2nd half 96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	29,808,299	33,129,992	67,256,712	72,686,354	88,166,101	87,972,254	111,106,286
Variable Costs of Generation per MWh	PI N/a/MWh	48.30	54.97	62.50	70.02	77.38	84.74	91.96
<i>Increase of Variable Cost of Generation</i>	%		13.81%	13.69%	12.03%	10.51%	9.51%	8.51%
1.1 Basic Fuel	PI N/a	25,983,884	28,745,358	57,900,401	62,557,209	75,868,907	75,691,095	95,581,467
<i>Share in Total Variable Costs</i>	%	87.2%	86.8%	86.1%	86.1%	86.1%	86.0%	86.0%
1.1.1 consumption	t/a	301,889	294,821	518,685	500,378	549,196	500,378	582,374
1.1.2 Price of Basic Fuel	PI N/t	80.04	90.71	101.85	116.31	128.52	140.73	152.69
1.1.3 Transport Price	PL N/t	6.03	6.79	7.78	8.71	9.63	10.54	11.44
2. Supplementary Fuel	PI N/a	243,013	267,414	544,939	588,768	714,053	712,379	899,581
<i>Share in Total Variable Costs</i>	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
2.1 consumption	t/a	929	907	1,615	1,558	1,710	1,558	1,813
2.2 Price of Supplementary Fuel	PI N/t	238.91	269.20	308.21	345.18	381.42	417.65	453.15
2.3 Transport Price	PL N/t	22.69	25.57	29.27	32.78	36.22	39.67	43.04
3. Sulfur	PI N/a		61,036	3,295,952	3,668,866	4,449,572	4,439,144	5,705,678
<i>Share in Total Variable Costs</i>	%	0.0%	0.0%	3.5%	3.5%	3.5%	3.5%	3.5%
3.1 Ca(OH)₂	PI N/a			2,359,261	2,549,011	3,091,421	3,084,476	3,894,647
<i>Share in Total Variable Costs</i>	%	0.0%	0.0%	3.5%	3.5%	3.5%	3.5%	3.5%
3.1.1 consumption	t/a			11,534	11,127	12,212	11,127	12,950
3.1.2 Price (transport inclusive)	PL N/t	158.56	178.66	204.55	229.09	251.14	277.19	300.74
3.2 Dolomite	PI N/a		61,036	1,036,492	1,119,854	1,358,151	1,354,968	1,711,031
<i>Share in Total Variable Costs</i>	%	0.0%	0.2%	1.5%	1.5%	1.5%	1.5%	1.5%
3.2.1 consumption	t/a		2,313	14,601	33,380	36,637	33,380	38,850
3.2.2 Price (transport inclusive)	PL N/t	21.22	26.16	23.36	33.55	37.07	40.59	41.04
4. Environmental Costs	PI N/a	2,107,849	2,433,869	2,108,923	2,298,755	2,800,558	2,806,782	3,560,729
<i>Share in Total Variable Costs</i>	%	7.1%	7.3%	3.1%	3.2%	3.2%	3.2%	3.2%
4.1 Emission of SO₂	PI N/a	1,293,099	1,436,473	777,049	847,075	1,031,985	1,034,279	1,312,103
<i>Share in Total Variable Costs</i>	%	4.3%	4.3%	1.2%	1.2%	1.2%	1.2%	1.2%
4.1.1 Volume	t/a	5,388	4,996	2,330	2,248	2,467	2,248	2,616
4.1.2 Unit Price	PI N/t	240.00	287.52	331.52	376.88	418.34	460.17	501.59
4.2 Emission of NO₂	PI N/a	501,633	631,601	661,646	721,272	878,720	880,673	1,117,236
<i>Share in Total Variable Costs</i>	%	1.7%	1.9%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	t/a	2,090	2,197	1,984	1,914	2,101	1,914	2,227
4.2.2 Unit Price	PI N/t	240.00	287.52	331.52	376.88	418.34	460.17	501.59
4.3 Emission of CO	PI N/a	11,546	13,508	26,927	29,354	35,762	35,841	45,469
<i>Share in Total Variable Costs</i>	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Volume	t/a	192	188	323	312	342	312	363
4.3.2 Unit Price	PL N/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO₂	PI N/a	77,964	91,214	186,155	202,931	247,229	247,779	314,336
<i>Share in Total Variable Costs</i>	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	t/a	599,724	585,682	1,030,426	994,058	1,091,040	994,058	1,156,953
4.4.2 Unit Price	PI N/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Emission of Dust	PI N/a	139,741	163,490	256,291	279,388	340,376	341,133	432,767
<i>Share in Total Variable Costs</i>	%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%
4.5.1 Volume	t/a	1,075	1,050	1,419	1,369	1,502	1,369	1,593
4.5.2 Unit Price	PL N/t	130.00	155.74	180.66	204.14	226.60	249.26	271.60
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
<i>Share in Total Variable Costs</i>	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 volume	t/a	0.66	0.65	1.15	1.11	1.22	1.11	1.30
4.6.2 Unit Price	PI N/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Waste utilization fee	PI N/a	30,508	35,693	73,695	80,336	97,873	98,090	124,439
<i>Share in Total Variable Costs</i>	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	t/a	3,862	3,771	6,713	6,476	7,108	6,476	7,537
4.7.2 Unit Price	PI N/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage drop fees	PI N/a	2,860	3,346	6,908	7,530	9,174	9,155	11,663
<i>Share in Total Variable Costs</i>	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m ³ /a	41,793	42,768	76,123	71,416	80,601	71,436	85,470
4.8.2 Unit Price	PI N/m ³	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water consumption fee	PI N/a	49,699	58,145	120,051	130,870	159,438	159,793	202,716
<i>Share in Total Variable Costs</i>	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m ³ /a	709,984	693,360	1,234,112	1,190,556	1,306,708	1,190,556	1,385,050
4.9.2 Unit Price	PI N/t	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Waste utilization Costs	PI N/a	1,374,652	1,622,719	3,306,797	3,572,755	4,333,010	4,322,855	5,458,830
<i>Share in Total Variable Costs</i>	%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
5.1 Volume	t/a	86,591	84,564	150,516	145,203	159,369	145,203	168,998
5.2 Unit Price of waste utilization	PI N/t	17.03	19.19	21.97	24.61	27.19	29.77	32.10
Generation Variable Costs	PI N/a	113,000	247,207	292,416	327,585	362,030	396,476	430,235
Generation Variable Costs per GJ	PI N/GJ	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II A 2 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 2	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PLN/a	39,641,581	98,057,043	72,055,750	126,138,514	129,413,871	154,111,456	151,721,798
Capacity	PLN/a	8,241,444	20,246,065	14,044,980	28,244,342	30,094,993	35,631,916	35,483,229
<i>Share in Total Sales</i>	%	20.8%	20.6%	19.5%	22.4%	23.3%	23.7%	23.4%
Net Zone Available Capacity in it	MW	170	186	116	199	184	198	181
Contracted Capacity	MW	153	168	104	179	166	178	163
Non contracted Capacity	MW	17	19	12	20	18	20	18
Capacity Charge	PLN/MWm-e	8,288	9,284	10,392	12,154	13,963	15,360	16,742
Effective Capacity Charge	PLN/MWm-e	8,081	9,052	10,132	11,850	13,614	14,976	16,323
Availability Factor	PLN/a	10,263,836	75,032,539	55,147,454	92,807,351	94,250,025	112,433,616	110,307,848
<i>Share in Total Sales</i>	%	76.3%	76.3%	76.3%	73.6%	72.8%	73.0%	72.7%
Net Generation	MWh	554,994	1,204,350	775,401	1,208,235	1,109,199	1,208,235	1,032,377
Power Unit Working Hours (liczn. godzin pracy bloku)	h	3,265	6,461	6,713	6,083	6,021	6,094	6,030
Price of the Electric Energy (Cena energii elektrycznej)	PLN/MWh	54.53	62.30	71.12	76.89	84.97	93.06	100.98
Gross Profit on Electric Energy Sales	PLN	3,454,983	8,565,872	6,295,749	10,605,357	10,759,781	12,835,658	12,592,976
<i>Profit Margin on Electric Energy Sales</i>	%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%
System Services	PLN/a	695,019	1,699,434	2,067,951	3,608,816	3,660,838	4,366,486	4,283,298
Transport Expenses	PLN/a	441,282	1,079,006	795,366	1,388,006	1,408,015	1,679,418	1,647,422
Single tariff price of Electric Energy	PLN/MWh	71.43	81.42	92.93	104.40	116.67	127.55	138.89
Heat Energy	PLN/a							
<i>Share in Total Sales</i>	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Generation of Heat (Produkcja netto)	GJ							
Price of Heat	PLN/GJ	5.18	6.21	7.20	8.13	9.03	9.93	10.83
Fuel Consumption Norms								
<i>Average assumed parameters of coal</i>	%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Ash Content	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Sulphur Content	UJ/kg	21,409	21,000	21,000	21,000	21,000	21,000	21,000
Caloric Value								
Consumption of Fuels Chemical Energy per kWh	LJ/AWh	9,740	9,554	9,554	9,154	9,154	9,154	9,154
Basic Fuel Consumption (Zużycie paliwa podstawowego)	g/AWh	455	455	455	436	436	436	436
Supplementary Fuel Consumption	g/AWh	1,40	1,40	1,40	1,40	1,40	1,40	1,40
Water Consumption	m ³ /MWh	1,07	1,07	1,07	1,07	1,07	1,07	1,07
Consumption of Ca(OH) ₂	g/AWh				10,00	10,00	10,00	10,00
Dolomite consumption	g/AWh			3,60	3,00	3,00	3,00	3,00
Norms of Emissions								
SO ₂	kg/MWh	8.12	8.73	7.71	1.36	1.96	1.96	1.96
NO ₂	kg/MWh	3.15	3.39	3.39	1.67	1.67	1.67	1.67
CO	kg/MWh	0.29	0.29	0.29	0.27	0.27	0.27	0.27
CO ₂	kg/MWh	903.83	903.83	903.83	865.99	865.99	865.99	865.99
Dust	kg/MWh	1.62	1.62	1.62	1.19	1.19	1.19	1.19
Other emissions	kg/MWh	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volume of Solid Waste in it	kg/MWh	136.32	136.32	136.32	136.32	136.32	136.32	136.32
Stored in Land Fills	kg/MWh	5.82	5.82	5.82	5.82	5.82	5.82	5.82
Utilized by Contractors	kg/MWh	130.50	130.50	130.50	130.50	130.50	130.50	130.50
Volume of sewage	m ³ /MWh	0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Table II A 2 b

Power Plant "Rybnik"

Projection in current prices

Power Unit 2	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	26,808,853	66,466,611	48,851,704	82,291,994	83,490,244	99,597,958	97,714,872
Variable Costs of Generation per MWh	PI N/MWh	48.30	55.19	63.00	68.11	75.27	82.43	89.45
Increase of Variable Cost of Generation	%		14.29%	14.16%	8.11%	10.51%	9.51%	8.51%
1.1 Basic Fuel	PLN/a	23,368,998	57,446,349	42,345,336	70,575,732	71,593,114	85,393,107	83,766,245
Share in Total Variable Costs	%	87.2%	86.4%	86.7%	85.8%	85.8%	85.7%	85.7%
1.1.1 consumption	t/a	271,512	589,186	379,339	564,516	518,244	564,516	510,385
1.1.2 Price of Basic Fuel	PLN/a	80.04	90.71	103.85	116.31	128.52	140.73	152.69
1.1.3 Transport Price	PI N/t	6.03	6.79	7.78	8.71	9.63	10.54	11.44
2. Supplementary Fuel	PI N/a	218,560	534,415	393,933	685,248	695,126	829,116	813,320
Share in Total Variable Costs	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
2.1 consumption	t/a	835	1,813	1,167	1,813	1,664	1,813	1,639
2.2 Price of Supplementary Fuel	PLN/t	238.91	269.20	308.21	345.18	381.42	417.65	451.15
2.3 Transport Price	PI N/t	22.69	25.57	29.27	32.78	36.22	39.67	41.04
3. Sulfur	PI N/a			89,913	4,270,076	4,331,621	5,166,578	5,068,148
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	3.6%	3.6%	3.6%	3.6%
3.1 Ca(OH) ₂	PI N/a				2,966,713	3,009,479	3,589,574	3,521,188
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	3.6%	3.6%	3.6%	3.6%
3.1.1 consumption	t/a				12,950	11,889	12,950	11,708
3.1.2 Price (transport inclusive)	PI N/t	158.56	178.66	204.55	223.09	253.14	277.19	300.74
3.2 Dolomite	PI N/a			89,913	1,303,363	1,322,151	1,577,604	1,546,960
Share in Total Variable Costs	%	0.0%	0.0%	0.2%	1.6%	1.6%	1.6%	1.6%
3.2.1 consumption	t/a			3,002	38,850	35,666	38,850	35,125
3.2.2 Price (transport inclusive)	PI N/t	23.22	26.16	29.96	33.55	37.07	40.59	44.04
4. Environmental Costs	PI N/a	1,895,028	5,242,968	3,632,064	2,602,722	2,642,215	3,177,923	3,131,778
Share in Total Variable Costs	%	7.1%	7.9%	7.4%	3.2%	3.2%	3.2%	3.2%
4.1 Emission of SO ₂	PI N/a	1,162,281	3,250,514	2,144,002	956,600	974,793	1,168,008	1,151,048
Share in Total Variable Costs	%	4.3%	4.9%	4.4%	1.2%	1.2%	1.2%	1.2%
4.1.1 Volume	t/a	4,846	11,305	6,428	2,538	2,330	2,538	2,295
4.1.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.2 Emission of NO ₂	PI N/a	451,157	1,262,227	942,693	815,062	830,561	995,191	980,740
Share in Total Variable Costs	%	1.7%	1.9%	1.9%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	t/a	1,880	4,390	2,826	2,163	1,985	2,163	1,955
4.2.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.3 Emission of CO	PI N/a	16,384	26,995	20,161	32,944	33,571	40,225	39,641
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Volume	t/a	173	376	242	350	321	350	316
4.3.2 Unit Price	PLN/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO ₂	PI N/a	70,119	182,287	136,141	228,939	233,292	279,534	275,475
Share in Total Variable Costs	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	t/a	539,377	1,170,460	753,584	1,121,457	1,029,534	1,121,457	1,013,920
4.4.2 Unit Price	PI N/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Emission of Dust	PI N/a	125,679	326,727	244,016	314,596	320,578	384,122	378,544
Share in Total Variable Costs	%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%
4.5.1 Volume	t/a	967	2,098	1,351	1,541	1,415	1,541	1,393
4.5.2 Unit Price	PI N/t	130.00	155.74	180.66	204.14	226.00	249.26	271.69
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 Volume	t/a	0.60	1.30	0.83	1.30	1.19	1.30	1.17
4.6.2 Unit Price	PI N/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Waste utilization Fee	PLN/a	27,438	71,331	53,273	93,500	95,278	114,164	112,506
Share in Total Variable Costs	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	t/a	3,473	7,537	4,853	7,537	6,919	7,537	6,814
4.7.2 Unit Price	PI N/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage drop Fees	PI N/a	2,572	6,686	4,994	8,764	8,931	10,701	10,546
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m ³ /a	39,387	85,470	55,029	85,470	78,464	85,470	77,274
4.8.2 Unit Price	PI N/m ³	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water Consumption Fee	PI N/a	44,698	116,201	86,784	152,316	155,212	185,978	183,277
Share in Total Variable Costs	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m ³ /a	638,542	1,385,650	832,131	1,385,650	1,272,072	1,385,650	1,252,780
4.9.2 Unit Price	PLN/m ³	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Waste utilization Costs	PI N/a	1,326,266	3,242,934	2,390,459	4,158,216	4,218,159	5,031,234	4,935,381
Share in Total Variable Costs	%	4.9%	4.9%	4.9%	5.1%	5.1%	5.1%	5.1%
5.1 Volume	t/a	77,878	1,089,998	108,807	168,998	155,145	168,998	152,792
5.2 Unit Price of waste utilization	PI N/t	17.03	19.19	21.97	24.61	27.19	29.77	32.30
Availability factor (in days)	PI N/a							
Generation Variable Costs	PI N/a							
Generation Variable Costs per GJ	PI N/GJ	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II A 3 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 3	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PLN/a	45,350,643	97,367,713	106,868,015	88,799,244	140,545,870	142,464,300	168,036,759
Capacity	PLN/a	9 043 708	20 246 065	20 910 015	16 370 340	32 359 193	31 131 449	38 770 812
Share in Total Sales	%	19.9%	20.8%	19.6%	20.3%	23.0%	23.3%	23.1%
Net Zone Available Capacity in t	MW	187	186	172	115	198	184	198
Contracted Capacity	MW	168	168	155	104	178	166	178
Non-constructed Capacity	MW	19	19	17	12	20	18	20
Capacity Charge	PLN/MWm-c	8,288	9,284	10,392	12,154	13,963	15,360	16,742
Ineffective Capacity Charge	PLN/MWm-c	8,081	9,052	10,132	11,850	13,614	14,976	16,323
Availability Factor								
Electric Energy	PLN/a	34 993 067	74 343 208	81 693 485	61 222 117	102 665 246	103 783 869	122 706 211
Share in Total Sales	%	77.2%	76.4%	76.4	75.8%	73.0%	72.8%	73.0%
	MWh	690 023	1 295 000	1,241 781	831 767	1 295 000	1 188 562	1 295 000
Own consumption rate	%	7.0*	7.0*	7.0	7.0*	6.7*	6.7*	6.7*
Net Generation	MWh	641 721	1 204 350	1 154 856	775 403	1 208 215	1 108 928	1 208 215
Power Unit Working Hours/year, godzin pracy bloku	h	1 440	6 161	6 715	6 736	6 100	6 915	6 104
Price of the Electric Energy/Gen energy electricity/energy	PLN/MWh	53.53	61.73	70.74	78.96	84.97	93.59	101.56
Gross Profit on Electric Energy Sales	PLN	1 994 882	8 487 177	9 326 300	6 989 246	11 720 480	11,848 185	14 008 399
Profit Margin on Electric Energy Sales	%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%	12.9%
System Services	PLN/a	803 628	1 090 413	1 079 928	2 316 013	3 987 700	4 007 598	4 737 587
Expense Items	PLN/a	510 240	1 079 006	1 184 588	890 774	1 533 731	1,541 384	1 822 149
Single tariff price of Electric Energy	PLN/MWh	70.67	80.85	92.54	104.20	116.12	128.47	139.08
Heat Energy								
Share in Total Sales	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Generation of Heat/Produkcja netto	GJ							
Price of Heat	PLN/GJ	5.18	6.21	7.20	8.13	9.03	9.93	10.83
Fuel Consumption Norms								
Average assumed parameters of coal								
Ash Content	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Sulphur Content	%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Caloric Value	kJ/kg	21 409	21 000	21 000	21 000	21 000	21 000	21 000
Consumption of Fuel's Chemical Energy per KWh	kJ/kWh	9 740	9 554	9 554	9 554	9 154	9 154	9 154
Basic Fuel Consumption/Zajscie paliwa podstawowego	g/kWh	455	455	455	455	416	416	416
Supplementary Fuel Consumption	g/kWh	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Water Consumption	m ³ /MWh	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Consumption of Ca(OH) ₂	g/kWh					10.00	11.59	11.59
Dolomite consumption	g/kWh				3.60	30.00	30.00	30.00
Norms of Emissions								
SO ₂	Mg/MWh	8.12	8.73	8.73	7.71	1.96	1.96	1.96
NO ₂	Mg/MWh	3.15	1.75	1.75	1.75	1.67	1.67	1.67
CO	Mg/MWh	0.29	0.29	0.29	0.29	0.27	0.27	0.27
CO ₂	Mg/MWh	903.83	903.83	903.83	903.83	865.99	865.99	865.99
Dust	Mg/MWh	1.62	1.62	1.62	1.62	1.19	1.19	1.19
Other emissions	Mg/MWh	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volume of Solid Waste in t	M ³ /MWh	136.12	136.12	136.12	136.12	136.12	136.12	136.12
Stored in Land Fills	kg/MWh	5.82	5.82	5.82	5.82	5.82	5.82	5.82
Unloaded by Contractors	kg/MWh	130.50	130.50	130.50	130.50	130.50	130.50	130.50
Volume of sewage	m ³ /MWh	0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Table II A 3 b

Power Plant "Rybnik"

Projection in current prices

Power Unit 3	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	30,998,185	65,856,031	72,367,185	54,232,872	90,944,765	91,935,684	108,697,812
Variable Costs of Generation per MWh	PI N/a/MWh	48.30	54.68	62.66	69.94	75.27	82.90	89.96
Increases of Variable Cost of Generation	%		13.20%	14.60%	11.61%	7.62%	10.14%	8.51%
1.1 Basic Fuel	PI N/a	27,020,796	57,446,349	63,067,540	47,424,886	77,985,386	78,374,519	92,650,538
Share in Total Variable Costs	%	87.2%	87.2%	87.1%	87.1%	85.8%	85.2%	85.2%
1.1.1 Consumption	t/a	313,940	589,186	564,973	379,339	564,516	518,118	564,516
1.1.2 Price of Basic Fuel	PI N/t	80.04	90.71	103.85	116.11	138.52	140.73	152.69
1.1.3 Transport Inc	PI N/t	6.03	6.79	7.78	8.71	9.61	10.54	11.44
2. Supplementary Fuel	PI N/a	252,714	534,415	586,708	441,187	757,191	760,969	899,581
Share in Total Variable Costs	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
2.1 Consumption	t/a	96f	1,813	1,718	1,167	1,813	1,664	1,813
2.2 Price of Supplementary Fuel	PI N/t	238.91	269.20	308.21	345.18	381.42	417.65	451.15
2.3 Transport Inc.	PI N/t	22.69	25.57	29.27	32.78	36.22	39.67	41.04
3. Sorbent	PI N/a				100,498	4,718,386	5,265,762	6,224,927
Share in Total Variable Costs	%	0.0%	0.0	0.0%	0.0%	3.6%	4.2%	4.2%
3.1 Ca(OH)2	PI N/a					3,278,184	3,818,374	4,513,896
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	3.6%	4.2%	4.2%
3.1.1 Consumption	t/a					12,950	13,775	15,009
3.1.2 Price (transport inclusive)	PI N/t	158.56	178.66	204.55	229.09	251.14	277.19	300.74
3.2 Dolomite	PI N/a				100,698	1,440,201	1,447,388	1,711,031
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.2%	1.6%	1.6%	1.6%
3.2.1 Consumption	t/a				3,002	38,850	35,657	38,850
3.2.2 Price (transport inclusive)	PI N/t	21.22	26.16	29.96	33.55	37.07	40.59	44.04
4. Environmental Costs	PI N/a	2,191,158	4,632,333	5,152,678	3,588,894	2,889,021	2,916,725	3,463,936
Share in Total Variable Costs	%	7.1%	7.0%	7.1%	6.6%	3.2%	3.2%	3.2%
4.1 Emission of SO2	PI N/a	1,344,817	3,250,514	3,614,624	2,422,722	1,064,836	1,073,808	1,273,129
Share in Total Variable Costs	%	4.3%	4.9%	4.9%	4.5%	1.2%	1.2%	1.2%
4.1.1 Volume	t/a	5,603	11,305	10,841	6,428	2,518	2,330	2,518
4.1.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.2 Emission of NO2	PI N/a	521,657	651,592	724,785	549,904	904,719	913,395	1,084,758
Share in Total Variable Costs	%	1.7%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	t/a	2,174	2,266	2,173	1,459	2,161	1,985	2,163
4.2.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.3 Emission of CO	PI N/a	12,006	26,995	30,027	22,782	36,568	36,919	43,845
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Volume	t/a	200	376	360	242	350	321	350
4.3.2 Unit Price	PI N/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO2	PI N/a	81,076	182,287	202,764	152,840	254,122	256,459	304,692
Share in Total Variable Costs	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	t/a	623,663	1,170,460	1,122,359	751,584	1,121,457	1,020,283	1,121,457
4.4.2 Unit Price	PI N/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Emission of Dust	PI N/a	145,319	326,727	363,428	275,738	349,202	352,550	418,693
Share in Total Variable Costs	%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%
4.5.1 Volume	t/a	1,118	2,098	2,012	1,351	1,541	1,414	1,541
4.5.2 Unit Price	PI N/t	130.00	155.74	180.66	204.14	226.60	249.26	271.69
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 Volume	t/a	0.69	1.30	1.24	0.83	1.19	1.19	1.30
4.6.2 Unit Price	PI N/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Waste utilization Fee	PI N/a	31,726	71,331	79,343	60,199	103,785	104,781	124,439
Share in Total Variable Costs	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	t/a	4,016	7,537	7,227	4,853	7,537	6,917	7,537
4.7.2 Unit Price	PI N/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage drag Fees	PI N/a	2,974	6,086	7,437	5,643	9,728	9,822	11,664
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m3/a	45,542	85,470	81,958	55,023	85,470	78,445	85,470
4.8.2 Unit Price	PI N/m3	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water Consumption Fee	PI N/a	51,683	116,201	129,243	98,066	169,070	170,192	202,716
Share in Total Variable Costs	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m3/a	738,125	1,385,650	1,328,706	892,131	1,385,650	1,271,761	1,385,650
4.9.2 Unit Price	PI N/t	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Waste utilization Costs	PI N/a	1,433,517	3,242,934	3,460,259	2,677,207	4,494,782	4,617,709	5,458,830
Share in Total Variable Costs	%	4.9%	4.9%	4.9%	4.9%	5.0%	5.0%	5.0%
5.1 Volume	t/a	90,048	168,998	162,052	108,807	168,998	155,107	168,998
5.2 Unit Price of waste utilization Availability Factor (in days)	PI N/t	17.03	19.19	21.97	24.61	27.19	29.77	32.30
Generation Variable Costs	PI N/a							
Generation Variable Costs per G1	PI N/G1	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II A 4 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 4	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PI N/a	62,648,119	130,574,962	166,217,820	165,141,723	113,097,196	158,775,755	154,709,338
Capacity	PI N/a	25 735 tca	59,466,7ca	74,415 713	74 567 083	26 510 010	35 631 936	36 050 053
<i>Share in Total Sales</i>		47.1%	43.5%	44.8%	45.2%	23.4%	22.4%	23.7%
<i>Net Zone Available Capacity in it</i>	MW	210	198	199	193	162	198	184
<i>Contracted Capacity</i>	MW	202	175	194	175	146	178	166
<i>Non contracted Capacity</i>	MW	8	23	5	18	16	20	18
<i>Capacity Charge</i>	PI N/MWm-c	21 215	28 280	31 957	35 472	13 963	15,360	16 742
<i>Ineffective Capacity Charge</i>	PLN/MWm-c	20 440	25 028	31 116	32 228	13 614	14 976	16 323
<i>Availability Factor</i>								
Electric Energy	PI N/a	35 370 094	68 170 611	86 590 230	85 435 382	82 097 838	117 097 915	112 638 703
<i>Share in Total Sales</i>	%	56.5%	52.2%	52.1%	51.7%	72.6%	73.8%	72.8%
	MWh	801 376	1 357 500	1 504 699	1 324 789	1 047 122	1 235 000	1 188 562
<i>Own consumption rate</i>								
<i>Net Generation</i>	MWh	753 567	1 273 335	1 411 408	1 242 652	982 388	1 208 235	1 108 928
<i>Lower Unit Working Hours/dobowa, godzin pracy bloku</i>	h	3 591	6 411	7 082	6 445	6 054	6 094	6 025
<i>Price of the Electric Energy/energia elektrycznej</i>	PI N/MWh	46.94	53.54	61.35	68.75	83.57	96.92	101.57
<i>Gross Income on Electric Energy Sales</i>	PI N				0	7 772 862	11 086 600	10 664 411
<i>Profit Margin in Electric Energy Sales</i>	%	0.0%	0.0%	0.0%	0.0%	10.5%	10.5%	10.5%
System Services	PI N/a	943 692	1 796 777	3 764 134	3 711 614	3 242 307	4 366 486	4 348 198
Export Business	PI N/a	599 169	1 140 811	1 447 744	1 427 544	1 247 041	1 679 418	1 672 384
<i>Single tariff price of Electric Energy</i>	PI N/MWh	83.14	102.55	117.77	132.89	115.12	131.41	139.51
Heat Energy	PI N/a							
<i>Share in Total Sales</i>	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>Net Generation of Heat/Produkcja netto</i>	GJ							
<i>Price of Heat</i>	PI N/GJ	5.18	6.21	7.20	8.13	9.03	9.93	10.83
Fuel Consumption Norms								
<i>Average assumed parameters of coal</i>								
<i>Ash Content</i>	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
<i>Sulphur Content</i>	%	0.8%	0.9%	0.9%	0.9%	0.8%	0.8%	0.9%
<i>Calorific Value</i>	kJ/kg	21 409	21 000	21 000	21 000	21 000	21 000	21 000
<i>Consumption of Fuel's Chemical Energy per kWh</i>	kJ/AWh	9 428	9 444	9 444	9 444	9 444	9 444	9 444
<i>Basic Fuel Consumption/zasie paliwa podstawowego</i>	g/AWh	450	450	450	450	450	450	450
<i>Supplementary Fuel Consumption</i>	g/AWh	1 40	1 40	1 40	1 40	1 40	1 40	1 40
<i>Water Consumption</i>	m ³ /MWh	1 07	1 07	1 07	1 07	1 07	1 07	1 07
<i>Consumption of Ca(OH)₂</i>	g/AWh					10 00	10 00	10 00
<i>Dolomite consumption</i>	g/AWh					2 86	30 00	30 00
Norms of Emissions								
<i>SO₂</i>	Mg/MWh	8 03	8 56	8 56	8 56	7 55	8 10	2 02
<i>NO₂</i>	Mg/MWh	1 61	1 71	1 71	1 71	1 71	1 72	1 72
<i>CO</i>	Mg/MWh	0 28	0 28	0 28	0 28	0 28	0 28	0 28
<i>CO₂</i>	Mg/MWh	893 40	893 40	893 40	893 40	893 40	893 40	893 40
<i>Dust</i>	Mg/MWh	1 23	1 23	1 23	1 23	1 23	1 23	1 23
<i>Other emissions</i>	Mg/MWh	0 001	0 001	0 001	0 001	0 001	0 001	0 001
<i>Volume of Solid Waste in it</i>	Mg/MWh	136 32	136 32	136 32	136 32	136 32	136 32	136 32
<i>Stored in Land Fills</i>	kg/MWh	5 82	5 82	5 82	5 82	5 82	5 82	5 82
<i>Utilized by Contractors</i>	kg/MWh	130 50	130 50	130 50	130 50	130 50	130 50	130 50
<i>Volume of sewage</i>	m ³ /MWh	0 07	0 07	0 07	0 07	0 07	0 07	0 07

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Table II A 4 b

Power Plant "Rybnik"

Projection in current prices

Power Unit 4+4G	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	35,370,094	68,170,611	86,590,230	85,435,382	74,324,976	106,011,315	101,974,293
Variable Costs of Generation per MWh	PI N/MWh	46.94	53.54	61.35	68.75	75.66	87.74	91.96
<i>In-use of Variable Cost of Generation</i>	%		14.06%	14.59%	12.07%	10.01%	15.97%	4.81%
1.1 Basic Fuel	PI N/a	31,095,905	59,522,654	75,537,098	74,483,159	65,065,200	88,094,454	87,725,483
<i>Share in Total Variable Costs</i>	%		87.2%	87.2%	87.2%	87.2%	83.1%	86.0%
1.1.1 consumption	t/a	361,286	610,481	676,678	595,771	470,991	582,374	534,508
1.1.2 Price of Basic Fuel	PLN/t	80.04	90.71	103.85	116.31	128.52	140.73	152.69
1.1.3 Transport Price	PI N/t	6.03	6.79	7.78	8.71	9.63	10.54	11.44
2. Supplementary Fuel	PI N/a	294,228	560,207	710,930	701,011	612,373	820,116	825,643
<i>Share in Total Variable Costs</i>	%		0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
2.1 consumption	t/a	1,125	1,901	2,107	1,855	1,466	1,813	1,664
2.2 Price of Supplementary Fuel	PI N/t	238.91	269.20	308.21	345.18	381.42	417.65	451.15
2.3 Transport Price	PI N/t	22.69	25.57	29.27	32.78	36.22	39.67	41.04
3 Sorbent	PI N/a					111,040	5,166,578	5,144,939
<i>Share in Total Variable Costs</i>	%		0.0%	0.0%	0.0%	0.0%	3.4%	3.5%
3.1 € s(OH2)	PI N/a						3,489,474	3,474,440
<i>Share in Total Variable Costs</i>	%		0.0%	0.0%	0.0%	0.0%	3.4%	3.5%
3.1.1 consumption	t/a						12,950	11,886
3.1.2 Price (transport inclusive)	PI N/t	158.56	178.66	204.55	229.09	251.14	277.19	300.74
3.2 Dolomite	PI N/a					111,040	1,577,004	1,570,399
<i>Share in Total Variable Costs</i>	%		0.0%	0.0%	0.0%	0.0%	1.3%	1.5%
3.2.1 consumption	t/a						2,905	35,657
3.2.2 Price (transport inclusive)	PLN/t	23.22	26.16	29.96	33.55	37.07	40.59	44.04
4 Environmental costs	PI N/a	2,194,426	4,688,303	6,028,142	5,997,344	4,820,267	6,889,934	3,268,067
<i>Share in Total Variable Costs</i>	%		6.9%	7.0%	7.0%	6.5%	6.5%	3.2%
4.1 Emission of NO2	PI N/a	1,548,266	3,341,040	4,295,853	4,273,006	3,307,917	4,826,974	1,204,259
<i>Share in Total Variable Costs</i>	%		4.1%	5.0%	5.0%	4.5%	4.6%	1.2%
4.1.1 Volume	t/a	6,451	11,620	12,880	11,340	7,907	10,400	2,401
4.1.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.14	460.17	501.59
4.2 Emission of NO	PI N/a	310,424	667,427	858,167	853,783	749,210	1,024,987	1,025,409
<i>Share in Total Variable Costs</i>	%		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	t/a	1,293	2,321	2,573	2,265	1,791	2,227	2,044
4.2.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.14	460.17	501.59
4.3 Emission of CO	PI N/a	13,497	27,322	35,130	34,950	30,669	41,715	41,732
<i>Share in Total Variable Costs</i>	%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Volume	t/a	225	380	421	371	293	363	333
4.3.2 Unit Price	PI N/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO2	PI N/a	53,236	188,880	242,859	241,618	212,824	288,382	288,500
<i>Share in Total Variable Costs</i>	%		0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	t/a	717,316	1,212,791	1,341,298	1,183,516	935,677	1,156,953	1,061,861
4.4.2 Unit Price	PI N/t	0.13	0.16	0.18	0.20	0.21	0.25	0.27
4.5 Emission of Dust	PI N/a	128,460	260,043	334,359	332,651	291,207	397,033	397,197
<i>Share in Total Variable Costs</i>	%		0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
4.5.1 Volume	t/a	988	1,670	1,851	1,629	1,288	1,593	1,462
4.5.2 Unit Price	PI N/t	130.00	155.74	180.66	204.14	226.60	249.26	271.69
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
<i>Share in Total Variable Costs</i>	%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 Volume	t/a	0.80	1.36	1.50	1.32	1.05	1.30	1.19
4.6.2 Unit Price	PI N/t	0.08	74.72	96.51	0.13	0.14	0.16	0.17
4.7 Waste utilization Fee	PI N/a	36,238	74,773	96,636	96,651	83,836	114,164	114,211
<i>Share in Total Variable Costs</i>	%		0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	t/a	4,676	7,901	8,757	7,710	6,095	7,537	6,917
4.7.2 Unit Price	PI N/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage drop Fees	PI N/a	3,462	7,009	9,012	8,966	7,868	10,701	10,706
<i>Share in Total Variable Costs</i>	%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m³/a	51,023	89,595	99,110	87,436	69,123	85,470	78,445
4.8.2 Unit Price	PI N/m³	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water Consumption Fee	PI N/a	60,173	121,809	156,620	155,819	136,735	185,928	186,054
<i>Share in Total Variable Costs</i>	%		0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m³/a	859,612	1,452,525	1,610,028	1,417,524	1,120,635	1,385,650	1,271,761
4.9.2 Unit Price	PI N/m³	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Waste utilization Costs	PI N/a	1,785,435	3,399,446	4,314,060	4,253,868	3,715,997	5,031,234	5,010,161
<i>Share in Total Variable Costs</i>	%		5.0%	5.0%	5.0%	5.0%	4.7%	4.9%
5.1 Volume	t/a	104,841	177,154	196,363	172,885	136,676	168,998	155,107
5.2 Unit Price of waste utilization Availability factor (in days)	PI N/t	17.03	19.19	21.97	24.61	27.19	29.77	32.10
Generation Variable Costs	PI N/a							
Generation Variable Costs per GJ	PI N/GJ	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II A 5 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 5	Unit	2nd half 96	1997	1998	1999	2000	2001	2002
Sales	PL N/a	30,886,323	98,822,180	72,800,344	125,585,061	128,788,386	153,377,262	150,978,153
Capacity	PL N/a	7 585 046	20 246 065	14 044 980	26 989 038	28 752 438	34 048 294	33 906 196
Share in Total Sales	%	24.6%	20.5%	19.3%	21.5%	22.3%	27.2%	27.5%
Net Zone Available Capacity in t	MW	156	186	116	190	176	189	173
Contracted Capacity	MW	141	168	104	171	158	171	156
Non contracted Capacity	MW	16	19	12	19	18	19	17
Capacity Charge	PL N/MWm-c	8,288	9,284	10,392	12,154	13,963	15,360	16,742
Effective Capacity Charge	PLN/MWm-c	8 081	9 052	10 132	11 850	13 614	14 976	16 323
Availability Factor	PL N/a	22 458 056	75 812 114	55 907 441	91 599 201	94 962 095	113 283 064	111 141 235
Electric Losses	%	72.7%	76.7%	76.9%	74.5%	71.7%	73.9%	73.6%
Share in Total Sales	MWh	442 847	1 295 000	833 767	1 295 000	1 188 852	1 295 000	1 170 822
Own consumption rate	h	7.0	7.5	7.5	6.7	6.7	6.7	6.7
Net Generation	MWh	411 848	1 197 875	771 234	1 208 235	1 109 199	1 208 235	1 092 377
Hours of Unit Working Hours/roczne godzin pracy bloku	h	2 613	6 427	6 677	6 366	6 301	6 377	6 311
Price of the Electric Energy/Cena energii elektrycznej	PLN/MWh	54.53	63.29	72.49	77.47	85.61	93.76	101.74
Gross Profit on Electric Energy Sales	PLN	2 265 369	7 647 303	5 639 446	9 441 456	9 578 932	11 426 989	11 210 940
Profit Margin on Electric Energy Sales	%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%
System Services	PL N/a	515 757	1 690 297	2 056 833	3 008 816	3 660 838	4 366 486	4 283 298
Export Revenue	PL N/a	327 465	1 073 205	791 090	1 388 006	1 408 015	1 679 418	1 647 422
Single tariff price of Electric Energy	PLN/MWh	74.99	82.50	94.39	103.94	116.11	126.94	138.21
Heat Energy	PL N/a							
Share in Total Sales	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Generation of Heat/Produkcja netto	GJ							
Price of Heat	PLN/GJ	5.18	6.21	7.20	8.13	9.03	9.93	10.83
Fuel Consumption Norms								
Average assumed parameters of coal								
Ash Content	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Sulphur Content	%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Caloric Value	LJ/kg	21 409	21 000	21 000	21 000	21 000	21 000	21 000
Consumption of Fuels Chemical Energy per KWh	LJ/kWh	9 979	9 789	9 789	9 389	9 389	9 389	9 389
Basic Fuel Consumption/za wyzej podawanego	g/kWh	466	466	466	447	447	447	447
Supplementary Fuel Consumption	g/kWh	140	140	140	140	140	140	140
Water Consumption	m ³ /kWh	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Consumption of Ca(OH)₂	g/kWh		10.00	10.00	10.00	10.00	10.00	10.00
Deionitic consumption	g/kWh	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Norms of Emissions								
SO₂	Mg/MWh	5.48	2.12	2.12	2.01	2.01	2.01	2.01
NO₂	Mg/MWh	1.66	1.80	1.80	1.71	1.71	1.71	1.71
CO	Mg/MWh	0.29	0.29	0.29	0.28	0.28	0.28	0.28
CrO₂	Mg/MWh	926.01	926.01	926.01	888.17	888.17	888.17	888.17
Dust	Mg/MWh	1.66	1.66	1.66	1.22	1.22	1.22	1.22
Other emissions	Mg/MWh	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volume of Solid Waste in mt	Mg/MWh	136.32	136.32	136.32	136.32	136.32	136.32	136.32
Stored in Land Fills	kg/MWh	5.82	5.82	5.82	5.82	5.82	5.82	5.82
Utilized by Contractors	kg/MWh	110.50	110.50	110.50	110.50	110.50	110.50	110.50
Volume of sewage	m ³ /MWh	0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Table II A 5 b

Power Plant "Rybnik"

Projection in current prices

Power Unit 5	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	20,192,687	68,167,311	50,267,996	84,157,745	85,383,163	101,856,075	99,930,295
Variable Costs of Generation per MWh	PLN/MWh	49 03	56 91	65 18	69 65	76 98	84 30	91 48
Increase of Variable Cost of Generation	%		16 08%	14 54%	6 87%	10 51%	9 31%	8 31%
1 1 Basic Fuel	PI N/a	17,766,937	58,855,456	43,384,028	72,382,544	73,425,971	87,579,259	85,910,747
Share in Total Variable Costs	%	88 0%	86 3%	86 3%	86 0%	86 0%	86 0%	86 0%
1 1 1 consumption	t/a	206 424	603 638	388 644	578 969	531 512	578 969	523 451
1 1 2 Price of Basic Fuel	PI N t	80 04	90 71	103 85	116 31	128 52	140 73	152 69
1 1 3 Transport Price	PI N/t	6 03	6 79	7 78	8 71	9 63	10 54	11 44
2. Supplementary Fuel	PI N/a	162,188	534,415	393,933	685,248	695,126	829,116	813,320
Share in Total Variable Costs	%	0 8 %	0 8 %	0 8 %	0 8 %	0 8 %	0 8 %	0 8 %
2 1 consumption	t/a	620	1 813	1 167	1 813	1 664	1 813	1 639
2 2 Price of Supplementary Fuel	PI N/t	238 91	269 20	308 21	345 18	381 42	417 05	453 15
2 3 Transport Price	t/N/t	22 69	25 57	29 27	32 78	36 22	39 67	43 04
3 Sorbent	PI N/a	308,487	3,330,172	2,454,764	4,270,076	4,331,631	5,166,578	5,068,148
Share in Total Variable Costs	%	3 4%	3 4%	3 4%	3 5%	3 5%	3 5%	3 5%
3 1 Cat(III)2	PI N/a		2,313,698	1,705,492	2,966,713	3,009,479	3,589,574	3,521,188
Share in Total Variable Costs	%	0 0 %	3 4%	3 4%	3 5%	3 5%	3 5%	3 5%
3 1 1 consumption	t/a		12 950	8 338	12 950	11 889	12 950	11 708
3 1 2 Price (transport inclusive)	PI N t		158 56	178 66	204 55	229 09	251 14	277 19
3 2 Dolomite	PI N/a		308,487	1,016,474	749,272	1,303,363	1,322,151	1,577,004
Share in Total Variable Costs	%		1 5 %	1 5 %	1 5%	1 5%	1 5%	1 5%
3 2 1 consumption	t/a		11,285	18 850	25 011	18 850	15 666	18 850
3 2 2 Price (transport inclusive)	PI N/t		23 22	26 16	29 96	33 55	37 07	40 59
4 Environmental Costs	PI N/a	970,884	2,202,334	1,644,811	2,661,662	2,712,276	3,249,889	3,202,699
Share in Total Variable Costs	%	4 8%	3 2 %	3 2%	3 2 %	3 2 %	3 2 %	3 2%
4 1 Emission of SO2	PI N/a	482,432	789,357	589,531	981,003	999,658	1,197,805	1,180,412
Share in Total Variable Costs	%	2 9%	1 2%	1 2%	1 2%	1 2%	1 2%	1 2 %
4 1 1 Volume	t/a	2 427	2 745	1 768	2 601	2 300	2 003	2 353
4 1 2 Unit Price	PI N/t	240 00	287 52	333 52	376 88	418 34	460 17	501 59
4 2 Emission of NO2	PI N/a	176,430	670,289	500,545	834,598	850,455	1,019,028	1,064,231
Share in Total Variable Costs	%	0 9%	1 0%	1 0%	1 0 %	1 0%	1 0%	1 0%
4 2 1 Volume	t/a	735	2 311	1 501	2 214	2 033	2 214	2 002
4 2 2 Unit Price	PI N/t	240 00	287 52	333 52	376 88	418 34	460 17	501 59
4 3 Emission of CO	PI N/a	7,706	26,995	20,161	34,164	34,814	41,715	41,109
Share in Total Variable Costs	%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
4 3 1 Volume	t/a	128	376	242	363	333	363	328
4 3 2 Unit Price	PI N/t	60 00	71 88	83 38	94 22	104 58	115 04	125 40
4 4 Emission of C O2	PI N/a	53,310	186,761	139,482	234,802	239,267	286,694	282,531
Share in Total Variable Costs	%	0 3%	0 3%	0 3%	0 3%	0 3%	0 3%	0 3%
4 4 1 Volume	t/a	410 081	1 199 183	772 077	1 150 180	1 055 903	1 150 180	1 039 889
4 4 2 Unit Price	PI N/t	0 13	0 16	0 18	0 20	0 23	0 25	0 27
4 5 Emission of Dust	PI N/a	95,566	334,794	250,041	322,527	328,660	393,806	388,087
Share in Total Variable Costs	%	0 5%	0 5 %	0 5 %	0 4 %	0 4 %	0 4%	0 4 %
4 5 1 Volume	t/a	715	2 150	1 384	1 580	1 450	1 580	1 428
4 5 2 Unit Price	PLN/t	130 00	155 74	180 66	204 14	226 60	249 26	271 09
4 6 Other Emissions	PI N/a	0	0	0	0	0	0	0
Share in Total Variable Costs	%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0 %
4 6 1 Volume	t/a	0 44	1 30	0 83	1 30	1 19	1 30	1 17
4 6 2 Unit Price	PI N/t	0 08	0 10	0 11	0 13	0 14	0 16	0 17
4 7 Waste utilization Fee	PI N/a	20,361	71,331	53,273	93,590	95,278	114,164	112,506
Share in Total Variable Costs	%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%	0 1%
4 7 1 Volume	t/a	2 577	7 537	4 853	7 537	6 919	7 537	6 814
4 7 2 Unit Price	t/N/t	7 90	9 46	10 98	12 41	13 77	15 15	16 51
4 8 Sewage drop Fees	PI N/a	1,909	6,686	4,994	8,764	8,931	10,701	10,546
Share in Total Variable Costs	%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%
4 8 1 Volume	m³/a	29 228	85 470	55 029	85 470	78 464	85 470	77 274
4 8 2 Unit Price	PI N m3	0 07	0 08	0 09	0 10	0 11	0 13	0 14
4 9 Water Consumption Fee	PI N/a	33,169	116,201	86,984	152,316	155,212	185,978	183,277
Share in Total Variable Costs	%	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%	0 2%
4 9 1 Volume	m³/a	471 846	1 385 650	892 141	1 385 650	1 272 072	1 385 650	1 252 780
4 9 2 Unit Price	t/N/a	0 07	0 08	0 10	0 11	0 12	0 13	0 15
5 Waste utilization Costs	PI N/a	984,190	3,242,934	2,390,459	4,158,216	4,218,159	5,031,234	4,935,381
Share in Total Variable Costs	%	4 9%	4 8%	4 8%	4 9%	4 9%	4 9%	4 9%
5 1 Volume	t/a	57 792	168 998	108 807	168 998	155 145	168 998	152 792
5 2 Unit Price of waste utilization Availability Factor (in days)	PI N t	17 01	19 19	21 97	24 61	27 19	29 77	32 30
Generation Variable Costs	PLN/a							
Generation Variable Costs per GJ	PI N/GJ	2 26	2 57	2 92	3 28	3 62	3 96	4 30

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Table II A 6 a

Power Plant "Rybniak"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 6	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PLN/a	41,065,831	86,377,215	111,556,027	79,988,956	139,731,108	138,896,989	166,355,433
Capacity	PLN/a	9,043,708	17,826,216	21,519,834	16,370,340	30,921,007	31,161,158	37,047,665
Share in Total Sales	%	22.0%	20.6%	19.3%	20.3%	22.3%	22.4%	22.3%
Net Zone Available Capacity in it	MW	187	164	177	115	189	173	189
Contracted Capacity	MW	168	148	159	104	170	156	170
Non contracted Capacity	MW	19	16	18	12	19	17	19
Capacity Charge	PLN/MWm-c	8,288	9,284	10,192	12,154	13,963	15,360	16,742
Effective Capacity Charge	PLN/MWm-c	8,081	9,052	10,132	11,850	13,614	14,976	16,323
Availability Factor								
Electric Energy	PLN/a	30,863,313	66,092,271	85,568,913	60,411,829	101,288,670	102,269,590	122,748,032
Share in Total Sales	%	75.2%	76.5%	76.7%	75.3%	73.9%	73.6%	73.8%
Own consumption rate	MWh	608,589	1,145,986	1,295,000	833,767	1,295,000	1,170,822	1,295,000
Net Generation	MWh	7,09	7,0	7,0	7,0	6,7	6,7	6,7
Power Unit Working Hours/1000h godzin pracy bloku	h	3,034	6,494	6,798	6,736	6,384	6,300	6,388
Price of the Electric Energy/Cena energii elektrycznej	PLN/MWh	54,53	62,01	71,05	77,91	85,49	91,62	101,59
Gross Profit on Electric Energy Sales	PLN	1,072,320	6,579,222	8,518,044	6,013,756	10,281,975	10,180,529	12,219,076
Profit Margin on Electric Energy Sales	%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%
System Services	PLN/a	708,786	1,503,882	1,211,924	2,316,013	3,987,700	3,947,782	4,737,587
Export Bonuses	PLN/a	450,023	954,846	1,235,355	890,774	1,533,731	1,518,378	1,822,149
Single tariff price of Electric Energy	PLN/MWh	72,56	81,05	92,63	103,16	115,65	127,15	137,68
Heat Energy	PLN/a							
Share in Total Sales	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Generation of Heat/Produkcja netto	GJ							
Price of Heat	PLN/GJ	5,18	6,21	7,20	8,13	9,03	9,93	10,83
Fuel Consumption Norms								
Average assumed parameters of coal								
Ash Content	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Sulphur Content	%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Caloric Value	LJ/kg	21,409	21,000	21,000	21,000	21,000	21,000	21,000
Consumption of Fuels Chemical Energy per kWh	LJ/kWh	9,979	9,789	9,789	9,789	9,389	9,389	9,389
Basic Fuel Consumption/zajscie paliwa podstawowego	g/kWh	466	466	466	466	447	447	447
Supplementary Fuel Consumption	g/kWh	1,40	1,40	1,40	1,40	1,40	1,40	1,40
Water Consumption	m ³ /MWh	1,07	1,07	1,07	1,07	1,07	1,07	1,07
Consumption of Ca(OH) ₂	g/kWh	10,00	10,00	10,00	10,00	10,00	10,00	10,00
Dolomite consumption	g/kWh	10,00	10,00	10,00	10,00	10,00	10,00	10,00
Norms of Emissions								
SO ₂	Mg/MWh	5,48	5,89	5,89	2,11	2,01	2,01	2,01
NO ₂	Mg/MWh	1,94	1,79	1,79	1,79	1,71	1,71	1,71
CO	Mg/MWh	0,29	0,29	0,29	0,29	0,28	0,28	0,28
CO ₂	Mg/MWh	926,01	926,01	926,01	926,01	888,17	888,17	888,17
Dust	Mg/MWh	1,66	1,66	1,66	1,66	1,22	1,22	1,22
Other emissions	Mg/MWh	0,001	0,001	0,001	0,001	0,001	0,001	0,001
Volume of Solid Waste in it	Mg/MWh	116,32	116,32	116,32	116,32	116,32	116,32	116,32
Stored in Land Fills	kg/MWh	5,82	5,82	5,82	5,82	5,82	5,82	5,82
Utilized by Contractors	kg/MWh	110,50	110,50	110,50	110,50	110,50	110,50	110,50
Volume of sewage	m ³ /MWh	0,07	0,07	0,07	0,07	0,07	0,07	0,07

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Table II A 6 b

Power Plant "Rybnik"

Projection in current prices

Power Unit 6	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	27,790,294	59,513,049	77,050,869	54,398,073	93,006,695	92,089,061	110,528,955
Variable Costs of Generation per MWh	PI N/a/MWh	49.10	55.84	63.98	70.15	76.98	84.30	91.48
Increase of Variable Cost of Generation	%		13.72%	14.57%	9.66%	9.73%	9.51%	8.51%
1.1 Basic Fuel	PI N/a	24,416,475	52,083,033	67,383,714	48,588,175	79,981,892	79,181,253	95,022,487
Share in Total Variable Costs	%	87.99%	87.53%	87.39%	86.09%	86.09%	86.09%	86.09%
1.1.1 consumption	t/a	283,682	514,178	603,638	388,644	578,909	523,451	578,969
1.1.2 Price of Basic Fuel	PI N/t	80.04	90.71	103.85	116.31	128.52	140.73	152.69
1.1.3 Transport Price	PI N/t	6.03	6.79	7.78	8.71	9.61	10.54	11.44
2. Supplementary Fuel	PI N/a	222,800	472,221	611,853	441,087	757,191	749,611	899,581
Share in Total Variable Costs	%	0.74%	0.78%	0.79%	0.81%	0.81%	0.81%	0.81%
2.1 consumption	t/a	852	1,004	1,813	1,107	1,813	1,639	1,813
2.2 Price of Supplementary Fuel	PI N/t	238.91	269.20	308.21	345.18	381.42	417.65	453.15
2.3 Transport Price	PI N/t	22.69	25.57	29.27	32.78	36.22	39.67	43.04
3 Sorbent	PI N/a	433,943	899,510	1,163,763	839,151	1,718,386	1,671,153	1,605,678
Share in Total Variable Costs	%	0.05%	0.05%	0.05%	0.05%	3.54%	3.54%	3.54%
3.1 Ca(OH)2	PI N/a					3,278,184	3,245,369	3,894,647
Share in Total Variable Costs	%	0.05%	0.05%	0.05%	0.05%	3.54%	3.54%	3.54%
3.1.1 consumption	t/a					12,950	11,708	12,950
3.1.2 Price (transport inclusive)	PI N/t	158.56	178.66	204.55	229.09	253.14	277.19	309.74
3.2 Dolomite	PI N/a	423,943	899,510	1,163,763	839,151	1,440,201	1,425,785	1,711,031
Share in Total Variable Costs	%	1.53%	1.53%	1.53%	1.53%	1.53%	1.53%	1.53%
3.2.1 consumption	t/a	18,258	34,180	38,850	25,013	38,850	35,125	38,850
3.2.2 Price (transport inclusive)	PI N/t	23.22	26.16	29.96	33.55	37.07	40.59	44.04
4 Environmental Costs	PI N/a	1,375,149	3,187,811	4,178,698	1,852,352	2,954,445	2,938,256	3,542,379
Share in Total Variable Costs	%	4.95%	5.43%	5.43%	3.43%	3.2%	3.2%	3.2%
4.1 Emission of SO2	PI N/a	800,416	1,940,719	2,543,965	663,028	1,088,913	1,082,947	1,305,607
Share in Total Variable Costs	%	2.9%	3.3%	3.3%	1.2%	1.2%	1.2%	1.2%
4.1.1 Volume	t/a	3,115	6,750	7,628	1,759	2,603	2,551	2,603
4.1.2 Unit Price	PI N/t	210.00	287.52	333.52	376.88	418.34	418.34	501.59
4.2 Emission of NO2	PI N/a	283,359	489,794	773,123	562,474	926,389	926,313	1,110,740
Share in Total Variable Costs	%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	t/a	1,181	2,051	2,318	1,492	2,214	2,002	2,214
4.2.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.3 Emission of CO	PI N/a	10,589	23,888	31,314	22,782	37,922	37,715	45,469
Share in Total Variable Costs	%	0.05%	0.04%	0.05%	0.05%	0.05%	0.05%	0.05%
4.3.1 Volume	t/a	176	332	376	242	363	328	363
4.3.2 Unit Price	PI N/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO2	PI N/a	73,263	165,270	216,642	157,615	260,631	259,203	312,496
Share in Total Variable Costs	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	t/a	563,559	1,061,194	1,199,183	772,077	1,150,180	1,033,889	1,150,180
4.4.2 Unit Price	PI N/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Emission of Dust	PI N/a	131,334	296,270	388,361	282,546	358,005	356,043	429,248
Share in Total Variable Costs	%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%
4.5.1 Volume	t/a	1,010	1,902	2,150	1,384	1,580	1,428	1,580
4.5.2 Unit Price	PI N/t	130.00	155.74	180.66	204.14	226.60	249.26	271.69
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 Volume	t/a	0.61	1.15	1.30	0.83	1.30	1.17	1.30
4.6.2 Unit Price	PI N/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Waste utilization Fee	PI N/a	27,982	63,123	82,744	60,199	103,785	103,217	124,359
Share in Total Variable Costs	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	t/a	3,542	6,670	7,537	4,853	7,537	6,814	7,537
4.7.2 Unit Price	PI N/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage drop Fee	PI N/a	2,623	5,917	7,756	5,643	9,728	9,675	11,664
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m3/a	40,167	75,635	85,470	55,029	85,470	77,274	85,470
4.8.2 Unit Price	PI N/m3	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water Consumption Fee	PI N/a	45,583	102,830	134,793	98,066	169,070	168,144	202,716
Share in Total Variable Costs	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m3/a	651,190	1,226,205	1,385,650	892,111	1,385,650	1,252,780	1,385,650
4.9.2 Unit Price	PI N/m3	6.97	8.40	9.70	11.10	12.12	13.35	14.55
5 Waste utilization costs	PI N/a	1,312,537	2,869,774	3,712,841	2,677,207	4,594,782	4,548,287	5,458,830
Share in Total Variable Costs	%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
5.1 Volume	t/a	79,421	149,551	168,998	108,807	168,998	152,792	168,998
5.2 Unit Price of waste utilization Availability Factor (in days)	PI N/t	17.03	19.19	21.97	24.61	27.19	29.77	32.10
Generation Variable Costs	PI N/a							
Generation Variable Costs per GJ	PLN/GJ	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II A 7 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 7	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PLN/a	11,455,777	96,313,353	101,090,318	124,115,572	132,968,264	122,900,086	166,342,532
Capacity	PLN/a	2,625,593	21,764,520	21,510,387	26,989,038	30,019,520	27,873,796	37,047,665
Share in Total Sales	%	22.9%	22.6%	21.3%	21.7%	22.6%	22.7%	22.3%
Net Zone Available Capacity in it	MW	54	200	177	190	184	155	189
Contracted Capacity	MW	49	180	159	171	165	140	170
Non contracted Capacity	MW	5	20	18	19	18	16	19
Capacity Charge	PLN/MWm-c	8,288	9,284	10,392	12,154	13,963	15,360	16,742
Effective Capacity Charge	PLN/MWm-c	8,081	9,052	10,132	11,850	13,614	14,976	16,123
Availability Factor								
Electric Energy	PLN/a	8,508,712	71,746,491	75,443,068	92,102,934	97,625,225	90,111,687	122,735,130
Share in Total Sales	%	74.3%	74.3%	74.6%	74.2%	73.4%	73.3%	73.8%
	MWh	167,782	1,295,000	1,188,562	1,295,000	1,241,926	1,046,644	1,295,000
Own consumption rate	%	7.0*	6.2	6.2*	6.2	6.2*	6.2*	6.7*
Net Generation	MWh	156,037	1,214,710	1,114,871	1,214,710	1,164,927	981,752	1,208,215
Power Unit Working Hours/liszenie godzin pracy bloku	h	2,881	6,062	6,296	6,400	6,340	6,329	6,488
Price of the Electric Energy/Cena energii elektrycznej	PLN/MWh	54.53	59.06	67.67	75.82	83.80	91.79	101.58
Gross Profit on Electric Energy Sales	PLN	846,203	7,135,286	7,502,916	9,159,762	9,708,961	8,961,730	12,206,175
Profit Margin on Electric Energy Sales	%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
System Services	PLN/a	195,405	1,714,053	2,973,290	3,628,155	3,844,764	3,547,991	4,737,587
Export Bonuses	PLN/a	124,067	1,088,287	1,143,573	1,395,444	1,478,755	1,364,612	1,822,149
Single tariff price of Electric Energy	PLN/MWh	71.40	79.29	90.67	102.18	114.14	125.18	137.67
Heat Energy	PLN/a							
Share in Total Sales	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Generation of Heat/Produkcja netto	GJ							
Price of Heat	PLN/GJ	5.18	6.21	7.20	8.13	9.01	9.91	10.83
Fuel Consumption Norms								
Average assumed parameters of coal								
Ash Content	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Sulphur Content	%	0.8%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%
Calorific Value	kJ/kg	21,409	21,000	21,000	21,000	21,000	21,000	21,000
Consumption of Fuel & Chemical Energy per kWh	kJ/kWh	9,979	9,389	9,389	9,389	9,389	9,389	9,389
Basic Fuel Consumption/wyciek paliwa podstawowego	g/kWh	466	447	447	447	447	447	447
Supplementary Fuel Consumption	g/kWh	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Water Consumption	m ³ /MWh	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Consumption of Ca(OH) ₂	g/kWh							10.00
Dolomite consumption	g/kWh	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Norms of Emissions								
SO ₂	Mg/MWh	5.48	5.61	5.61	5.61	5.61	5.61	2.01
NO ₂	Mg/MWh	1.96	1.70	1.70	1.70	1.70	1.70	1.71
CO	Mg/MWh	0.29	0.28	0.28	0.28	0.28	0.28	0.28
CO ₂	Mg/MWh	926.01	888.17	888.17	888.17	888.17	888.17	888.17
Dust	Mg/MWh	1.66	1.22	1.22	1.22	1.22	1.22	1.22
Other emissions	Mg/MWh	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volume of Solid Waste in it	Mg/MWh	136.32	136.32	136.32	136.32	136.32	136.32	136.32
Stored in Land Fills	kg/MWh	5.82	5.82	5.82	5.82	5.82	5.82	5.82
Utilized by Contractors	kg/MWh	130.50	130.50	130.50	130.50	130.50	130.50	130.50
Volume of sewage	m ³ /MWh	0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Table II A 7 b
Power Plant "Rybnik"

Power Unit 7	Unit	2nd half 96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	PI N/a	7,662,509	64,611,207	67,940,153	82,943,172	87,916,264	81,149,957	110,528,955
Variable Costs of Generation per MWh	PI N/a/MWh	49 11	53 19	60 94	68 28	75 47	82 66	91 48
Increase of Variable Cost of Generation	%		8 32.4	14 37%	12 05%	10 53%	9 53%	10 67%
1.1 Basic Fuel	PI N/a	6,731,382	56,440,126	59,317,823	72,382,544	76,703,931	70,783,248	95,022,487
Share in Total Variable Costs	%	87.87	87.4%	87.4%	87.3%	87.2%	87.2%	86.0%
1.1.1 consumption	U/a	78,208	578,969	531,382	578,969	555,240	467,934	578,969
1.1.2 Price of Basic Fuel	PI N/a	80.04	90.71	103.85	116.11	128.52	140.73	152.69
1.1.3 Transport Price	PI N/a	6.03	6.79	7.78	8.71	9.61	10.54	11.44
2. Supplementary Fuel	PI N/a	61,448	534,415	461,464	685,248	726,159	670,107	899,581
Share in Total Variable Costs	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.9%
2.1 consumption	U/a	235	1,813	1,664	1,813	1,739	1,465	1,813
2.2 Price of Supplementary Fuel	PI N/a	238.91	269.20	308.21	345.18	381.42	417.65	451.15
2.3 Transport Price	PI N/a	22.69	25.57	29.27	32.78	36.22	39.67	41.04
3. Surbent	PI N/a	116,877	1,016,474	1,068,112	1,303,363	1,381,176	1,274,865	5,605,678
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%
3.1 CaO/D2	PI N/a							3,894,647
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%
3.1.1 consumption	U/a							12,950
3.1.2 Price (transport inclusive)	PI N/a	158.56	178.66	204.55	223.09	253.14	277.19	300.74
3.2 Dolomite	PI N/a	116,877	1,016,474	1,068,112	1,303,363	1,381,176	1,274,865	1,711,031
Share in Total Variable Costs	%	1.5%	1.6%	1.6%	1.6%	1.6%	1.6%	1.3%
3.2.1 consumption	U/a	5,013	38,850	35,657	38,850	37,258	31,312	38,850
3.2.2 Price (transport inclusive)	PI N/a	23.22	26.16	29.96	33.55	37.07	40.50	44.64
4. Environmental Costs	PI N/a	379,920	3,367,258	3,584,977	4,413,902	4,698,527	4,355,697	3,542,379
Share in Total Variable Costs	%	5.0%	5.2%	5.3%	5.3%	5.3%	5.4%	3.2%
4.1 Emission of NO2	PI N/a	220,667	2,088,818	2,223,877	2,738,023	2,914,648	2,701,979	1,305,607
Share in Total Variable Costs	%	2.9%	3.2%	3.3%	3.3%	3.3%	3.3%	1.2%
4.1.1 Volume	U/a	919	7,265	6,668	7,265	6,967	5,872	2,901
4.1.2 Unit Price	PI N/a	240.00	287.52	333.52	376.88	418.34	460.17	501.53
4.2 Emission of NO	PI N/a	78,925	632,975	673,902	829,704	883,227	818,782	1,116,740
Share in Total Variable Costs	%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	U/a	729	2,202	2,021	2,202	2,111	1,779	2,214
4.2.2 Unit Price	PI N/a	240.00	287.52	333.52	376.88	418.34	460.17	501.53
4.3 Emission of CO	PI N/a	2,919	26,064	27,749	34,164	36,368	33,715	45,469
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Volume	U/a	49	363	333	341	348	291	363
4.3.2 Unit Price	PI N/a	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO2	PI N/a	20,198	179,129	190,711	234,802	249,949	231,711	312,496
Share in Total Variable Costs	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	U/a	155,348	1,150,180	1,055,645	1,150,180	1,101,041	929,598	1,150,180
4.4.2 Unit Price	PI N/a	0.11	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Emission of Dust	PI N/a	31,207	246,054	261,963	322,527	343,333	318,281	429,248
Share in Total Variable Costs	%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
4.5.1 Volume	U/a	279	1,580	1,450	1,580	1,515	1,277	1,580
4.5.2 Unit Price	PI N/a	130.00	155.74	180.66	204.14	226.60	249.26	271.69
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 volume	U/a	0.17	1.30	1.19	1.30	1.24	1.05	1.30
4.6.2 Unit Price	PI N/a	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Waste utilization fee	PI N/a	7,714	71,331	75,943	93,500	99,532	92,269	124,439
Share in Total Variable Costs	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	U/a	976	7,537	6,917	7,537	7,228	6,091	7,537
4.7.2 Unit Price	PI N/a	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage dump Fees	PI N/a	723	6,686	7,119	8,764	9,330	8,649	11,664
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m³/a	11,074	85,470	78,445	85,470	81,967	69,079	85,470
4.8.2 Unit Price	PI N/a	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water consumption fee	PI N/a	12,567	116,201	123,714	152,316	162,141	150,311	202,716
Share in Total Variable Costs	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m³/a	179,527	1,385,650	1,271,701	1,385,650	1,328,861	1,119,903	1,385,650
4.9.2 Unit Price	PI N/a	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Waste utilization Costs	PI N/a	372,881	3,242,934	3,407,677	4,158,216	4,406,470	4,066,340	5,458,830
Share in Total Variable Costs	%	4.9%	5.0%	5.0%	5.0%	5.0%	5.0%	4.9%
5.1 Volume	U/a	21,896	168,998	155,107	168,998	162,071	136,587	168,998
5.2 Unit Price of waste utilization Availability Factor (in days)	PI N/a	17.03	19.19	21.97	24.11	27.19	29.77	32.10
Generation Variable Costs	PI N/a							
Generation Variable Costs per GJ	11 N/C1	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II A 8 a

Power Plant "Rybnik"

Forecasted Income Statement for each Power Unit (PLN) - Sales

Projection in current prices

Power Unit No 8	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Sales	PI N/a	41,228,580	63,429,119	107,959,263	112,288,651	95,341,964	149,027,336	148,961,285
Capacity	PI N/a	8,460,241	13,470,489	21,155,122	25,095,070	21,906,136	34,048,294	34,447,829
<i>Hours in Total Sales</i>	%	20.5%	21.2%	21.4%	22.3%	23.0%	22.8%	23.1%
Net 7 zone Available Capacity in it	MW	174	124	190	176	134	189	176
Contracted Capacity	MW	157	112	171	159	121	171	158
Non contracted Capacity	MW	17	12	19	18	13	19	18
Capacity Charge	PI N/MWm-c	8,288	9,284	10,392	12,154	13,963	15,360	16,742
Inflexible Capacity Charge	PI N/MWm-c	8,081	9,052	10,132	11,850	13,614	14,976	16,323
Availability Factor	PI N/a	31,582,523	48,169,771	80,342,316	82,607,455	69,573,844	108,933,138	108,492,874
<i>Hours in Total Sales</i>	%	76.6%	73.9%	74.4%	73.6%	73.0%	73.1%	72.8%
Own consumption rate	MWh	622,771	833,767	1,295,000	1,188,562	905,792	1,295,000	1,188,562
Net Generation	MWh	579,177	775,403	1,208,215	1,108,928	845,104	1,208,215	1,108,928
Power Unit Working Hours/losses godzin pracy bloku	h	3,319	6,252	6,344	6,284	6,303	6,377	6,366
Price of the Electric Energy/Cena energii elektrycznej	PI N/MWWh	54.53	62.12	66.59	74.49	82.33	90.16	97.84
Gross Profit on Electric Energy Sales	PI N	2,051,823	3,129,447	5,219,602	5,367,761	4,520,006	7,077,063	7,048,460
<i>Profit Margin on Electric Energy Sales</i>	%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
System Services	PI N/a	725,303	1,094,156	3,222,285	3,112,202	2,789,210	4,366,486	4,348,198
Support Biomass	PI N/a	460,510	694,702	1,239,340	1,273,924	1,072,771	1,679,418	1,672,384
Single tariff price of Electric Energy	PI N/MWWh	71.18	81.80	89.35	101.26	112.82	123.34	134.33
Heat Energy	PI N/a							
<i>Share in Total Sales</i>	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Generation of Heat/Produkcja netto	GJ							
Price of Heat	PI N/GJ	5.18	6.21	7.20	8.13	9.03	9.91	10.81
Fuel Consumption Norms								
Average assumed parameters of coal								
Ash Content	%	22.8%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Sulphur Content	%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Calorific Value	kJ/kg	21,409	21,000	21,000	21,000	21,000	21,000	21,000
Consumption of Fuel's Chemical Energy per kWh	LJ/kWh	9,979	9,789	9,389	9,389	9,389	9,389	9,389
Base Fuel Consumption/Zuzycie paliwa podstawowego	g/kWh	466	466	447	447	447	447	447
Supplementary Fuel Consumption	g/kWh	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Water Consumption	m ³ /MWh	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Consumption of Ca(OH)₂	g/kWh	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Dolomite consumption	g/kWh	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Norms of Emissions								
SO₂	Mg/MWh	5.48	5.89	2.01	2.01	2.01	2.01	2.01
NO₂	Mg/MWh	2.64	2.84	1.71	1.71	1.71	1.71	1.71
CO	Mg/MWh	0.29	0.29	0.28	0.28	0.28	0.28	0.28
CO₂	Mg/MWh	926.01	926.01	888.17	888.17	888.17	888.17	888.17
Dust	Mg/MWh	1.66	1.66	1.22	1.22	1.22	1.22	1.22
Other emissions	Mg/MWh	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volume of Solid Waste in t	Mg/MWh	136.32	136.32	136.32	136.32	136.32	136.32	136.32
Stored in Land Fills	kg/MWh	5.82	5.82	5.82	5.82	5.82	5.82	5.82
Utilized by Contractors	kg/MWh	130.50	130.50	130.50	130.50	130.50	130.50	130.50
Volume of sewage	m ³ /MWh	0.07	0.07	0.07	0.07	0.07	0.07	0.07

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Table II A 8 b

Power Plant "Rybnik"

Power Unit 8	Unit	2nd half '96	1997	1998	1999	2000	2001	2002
Variable Costs of Generation	11 N/a	29,530,701	45,040,324	75,122,714	77,240,694	65,053,838	101,856,075	101,444,414
Variable Costs of Generation per MWh	PI N/MWh	50.99	58.09	62.18	69.65	76.98	84.30	91.48
Increase of Variable Cost of Generation	%		13.92%	7.04%	12.03%	10.31%	9.51%	8.51%
1.1 Basic Fuel	PI N/a	24,985,454	37,893,233	64,629,847	66,433,313	55,943,597	87,579,259	87,212,445
Share in Total Variable Costs	%	84.6%	84.1%	86.0%	86.0%	86.0%	86.0%	86.0%
1.1.1 consumption	t/a	290,292	388,644	578,969	511,182	404,961	578,961	531,382
1.1.2 Price of Basic Fuel	PI N/t	80.04	90.71	103.85	116.31	128.52	140.73	152.69
1.1.3 Transport Price	PI N/a	6.03	6.79	7.78	8.71	9.63	10.54	11.44
2. Supplementary Fuel	PI N/a	228,084	344,075	611,853	628,926	529,620	829,116	825,643
Share in Total Variable Costs	%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
2.1 consumption	t/a	872	1,167	1,813	1,664	1,268	1,813	1,664
2.2 Price of Supplementary Fuel	PI N/t	238.91	269.20	308.21	345.18	381.42	417.65	453.15
2.3 Transport Price	PI N/a	22.69	25.57	29.27	32.78	36.22	39.67	43.04
2.4 Sorbent	PI N/a	1,421,288	2,144,083	3,812,220	3,919,112	3,300,290	5,166,578	5,144,939
Share in Total Variable Costs	%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
3.1 Ca(OH)2	PI N/a	987,466	1,489,641	2,648,956	2,722,874	2,292,937	3,589,574	3,574,540
Share in Total Variable Costs	%	3.3%	3.3%	3.5%	3.5%	3.5%	3.5%	3.5%
3.1.1 consumption	t/a	6,228	8,338	12,950	11,886	9,058	12,950	11,886
3.1.2 Price (transport inclusive)	PI N/a	158.56	178.66	204.55	229.09	251.14	277.19	300.74
3.2 Dolomite	PI N/a	433,442	654,442	1,163,763	1,196,238	1,007,354	1,577,004	1,570,399
Share in Total Variable Costs	%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%
3.2.1 consumption	t/a	18,683	25,013	38,850	35,657	27,174	38,850	35,657
3.2.2 Price (transport inclusive)	PI N/t	23.22	26.16	29.95	33.55	37.07	40.59	44.04
4. Environmental Costs	PI N/a	1,511,820	2,571,016	2,355,453	2,442,896	2,066,496	3,249,889	3,251,226
Share in Total Variable Costs	%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
4.1 Emission of SO2	PI N/a	819,068	1,411,978	868,144	900,373	761,644	1,197,805	1,198,297
Share in Total Variable Costs	%	2.8%	3.1%	1.2%	1.2%	1.2%	1.2%	1.2%
4.1.1 Volume	t/a	3,413	4,911	2,603	2,389	1,821	2,603	2,389
4.1.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.2 Emission of NO2	PI N/a	394,588	680,818	738,978	765,989	647,966	1,019,028	1,019,447
Share in Total Variable Costs	%	1.3%	1.5%	1.0%	1.0%	1.0%	1.0%	1.0%
4.2.1 Volume	t/a	1,644	2,368	2,214	2,032	1,549	2,214	2,032
4.2.2 Unit Price	PI N/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
4.3 Emission of CO	PI N/a	10,836	17,380	30,234	31,356	26,525	41,715	41,732
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.3.1 Volume	t/a	181	242	363	333	254	363	333
4.3.2 Unit Price	PI N/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
4.4 Emission of CO2	PI N/a	74,970	120,243	207,790	215,504	182,299	286,694	286,812
Share in Total Variable Costs	%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
4.4.1 Volume	t/a	576,692	772,077	1,150,180	1,055,645	804,497	1,150,180	1,055,645
4.4.2 Unit Price	PI N/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
4.5 Emission of Dust	PI N/a	134,394	215,552	285,422	296,018	250,408	393,806	393,968
Share in Total Variable Costs	%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%
4.5.1 Volume	t/a	1,034	1,384	1,580	1,450	1,105	1,580	1,450
4.5.2 Unit Price	PI N/t	130.00	155.74	180.66	204.14	226.60	249.26	271.69
4.6 Other Emissions	PI N/a	0	0	0	0	0	0	0
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.6.1 Volume	t/a	0.62	0.83	1.30	1.19	0.91	1.30	1.19
4.6.2 Unit Price	PI N/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
4.7 Waste Utilization Fee	PI N/a	28,634	45,925	82,744	85,815	72,593	114,164	114,211
Share in Total Variable Costs	%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
4.7.1 Volume	t/a	3,625	4,853	7,537	6,917	5,272	7,537	6,917
4.7.2 Unit Price	PI N/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
4.8 Sewage drop Fees	PI N/a	2,684	4,305	7,756	8,044	6,805	10,701	10,706
Share in Total Variable Costs	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4.8.1 Volume	m3/a	41,103	55,029	85,470	78,445	59,782	85,470	78,445
4.8.2 Unit Price	PLN/m3	0.07	0.08	0.09	0.10	0.11	0.13	0.14
4.9 Water Consumption Fee	PI N/a	46,646	74,414	124,793	139,297	118,267	185,978	186,054
Share in Total Variable Costs	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
4.9.1 Volume	m3/a	666,365	892,131	1,385,650	1,271,761	969,197	1,385,650	1,271,761
4.9.2 Unit Price	PI N/t	0.07	0.08	0.10	0.11	0.12	0.13	0.15
5. Waste Utilization Costs	PI N/a	1,384,056	2,087,916	3,712,841	3,816,446	3,213,835	5,031,234	5,010,161
Share in Total Variable Costs	%	4.7%	4.6%	4.9%	4.9%	4.9%	4.9%	4.9%
5.1 Volume	t/a	81,272	108,807	168,998	155,107	118,206	168,998	155,107
5.2 Unit Price of waste utilization (Availability Factor) (in Gz)	PI N/t	17.01	19.19	21.97	24.61	27.19	29.77	32.70
Generation Variable Costs	PLN/a	-	-	-	-	-	-	-
Generation Variable Costs per GJ	PI N/GJ	2.26	2.57	2.92	3.28	3.62	3.96	4.30

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Table II B 1

Power Plant "Rybnik"

Generation Parameters

	2nd half '96	1997	1998	1999	2000	2001	2002
Installed Capacity (MW)							
Power Unit 1	200	200	225	225	225	225	225
Power Unit 2	200	200	200	225	225	225	225
Power Unit 3	200	200	200	200	225	225	225
Power Unit 4	225	225	225	225	225	225	225
Power Unit 5	200	200	200	215	215	215	215
Power Unit 6	200	200	200	200	215	215	215
Power Unit 7	200	215	215	215	215	215	215
Power Unit 8	200	200	215	215	215	215	215
Availability Factor							
Power Unit 1	98 00%	65 20%	93 70%	87 12%	93 72%	85 75%	93 70%
Power Unit 2	89 31%	98 00%	61 10%	93 70%	87 16%	93 70%	85 75%
Power Unit 3	98 00%	98 00%	90 96%	61 10%	93 72%	87 12%	93 70%
Power Unit 4	98 00%	92 53%	93 70%	90 96%	76 78%	93 70%	87 12%
Power Unit 5	82 19%	98 00%	61 10%	93 70%	87 16%	93 70%	85 75%
Power Unit 6	98 00%	86 29%	93 70%	61 10%	93 72%	85 75%	93 70%
Power Unit 7	28 45%	98 00%	87 12%	93 70%	90 98%	76 71%	93 70%
Power Unit 8	91 68%	65 20%	93 70%	87 12%	66 39%	93 70%	87 12%
Peaking Gross Available Capacity (MW)							
Power Unit 1	196	130	211	196	211	193	211
Power Unit 2	179	196	122	211	196	211	193
Power Unit 3	196	196	182	122	211	196	211
Power Unit 4	221	208	211	205	173	211	196
Power Unit 5	164	196	122	201	187	201	184
Power Unit 6	196	173	187	122	201	184	201
Power Unit 7	57	211	187	201	196	165	201
Power Unit 8	183	130	201	187	143	201	187
Calculation Ratio of Available to Nominal Capacity							
Power Unit 1	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 2	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 3	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 4	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 5	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 6	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 7	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Power Unit 8	0 952	0 951	0 945	0 942	0 939	0 941	0 939
Net Available Capacity (MW)							
Power Unit 1	187	124	199	185	198	181	198
Power Unit 2	170	186	116	199	184	198	181
Power Unit 3	187	186	172	115	198	184	198
Power Unit 4	210	198	199	193	162	198	184
Power Unit 5	156	186	116	190	176	189	173
Power Unit 6	187	164	177	115	189	173	189
Power Unit 7	54	200	177	190	184	155	189
Power Unit 8	174	124	190	176	134	189	176

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Table II B 2

Power Plant "Rybnik"

Generation Parameters

	2nd half '96	1997	1998	1999	2000	2001	2002
Gross generation (MWh)							
Power Unit 1	663 536	648 000	1 153 376	1 112 669	1 221 222	1 112 669	1 295 000
Power Unit 2	596 768	1 295 000	833 767	1 295 000	1 188 852	1 295 000	1 170 822
Power Unit 3	690 023	1 295 000	1 241 781	833 767	1 295 000	1 188 562	1 295 000
Power Unit 4	803 376	1 357 500	1 504 699	1 324 789	1 047 322	1 295 000	1 188 562
Power Unit 5	442 847	1 295 000	833 767	1 295 000	1 188 852	1 295 000	1 170 822
Power Unit 6	608 589	1 145 986	1 295 000	833 767	1 295 000	1 170 822	1 295 000
Power Unit 7	167 782	1 295 000	1 188 562	1 295 000	1 241 926	1 046 644	1 295 000
Power Unit 8	622 771	833 767	1 295 000	1 188 562	905 792	1 295 000	1 188 562
Own Use Index							
Power Unit 1	7 0%	7 0%	6 7%	6 7%	6 7%	6 7%	6 7%
Power Unit 2	7 0%	7 0%	7 0%	6 7%	6 7%	6 7%	6 7%
Power Unit 3	7 0%	7 0%	7 0%	7 0%	6 7%	6 7%	6 7%
Power Unit 4	6 2%	6 2%	6 2%	6 2%	6 2%	6 7%	6 7%
Power Unit 5	7 0%	7 5%	7 5%	6 7%	6 7%	6 7%	6 7%
Power Unit 6	7 0%	7 0%	7 0%	7 0%	6 7%	6 7%	6 7%
Power Unit 7	7 0%	6 2%	6 2%	6 2%	6 2%	6 2%	6 7%
Power Unit 8	7 0%	7 0%	6 7%	6 7%	6 7%	6 7%	6 7%
Net generation (MWh)							
Power Unit 1	617 088	602 640	1 076 100	1 038 120	1 139 400	1 038 120	1 208 235
Power Unit 2	554 994	1 204 350	775 403	1 208 235	1 109 199	1 208 235	1 092 377
Power Unit 3	641 721	1 204 350	1 154 856	775 403	1 208 235	1 108 928	1 208 235
Power Unit 4	753 567	1 273 335	1 411 408	1 242 652	982 388	1 208 235	1 108 928
Power Unit 5	411 848	1 197 875	771 234	1 208 235	1 109 199	1 208 235	1 092 377
Power Unit 6	565 988	1 065 767	1 204 350	775 403	1 208 235	1 092 377	1 208 235
Power Unit 7	156 037	1 214 710	1 114 871	1 214 710	1 164 927	981 752	1 208 235
Power Unit 8	579 177	775 403	1 208 235	1 108 928	845 104	1 208 235	1 108 928

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Table II B 3

Power Plant "Rybnik"

Calculation of Availability Factor

	2nd half '96*	1997*	1998	1999	2000	2001	2002
Number of days in the period	124	251	365	365	366	365	365
Overhauls (in days)							
Power Unit 1	0	84	0	30	0	35	0
Power Unit 2	11	0	130	0	30	0	35
Power Unit 3	0	0	15	130	0	30	0
Power Unit 4	0	14	0	15	70	0	30
Power Unit 5	20	0	130	0	30	0	35
Power Unit 6	0	30	0	130	0	35	0
Power Unit 7	88	0	30	0	15	70	0
Power Unit 8	8	84	0	70	110	0	30
Maintenance (in days)							
Power Unit 1	-		17	11	17	11	17
Power Unit 2	-		8	17	11	17	11
Power Unit 3			12	8	17	11	17
Power Unit 4		-	17	12	10	17	11
Power Unit 5	-	-	8	17	11	17	11
Power Unit 6	-		17	8	17	11	17
Power Unit 7	-	-	11	17	12	10	17
Power Unit 8		-	17	11	9	17	11
Emergency maintenance (in days)							
Power Unit 1			6	6	6	6	6
Power Unit 2	-		4	6	6	6	6
Power Unit 3		-	6	4	6	6	6
Power Unit 4		-	6	6	5	6	6
Power Unit 5	-	-	4	6	6	6	6
Power Unit 6	-	-	6	4	6	6	6
Power Unit 7	-		6	6	6	5	6
Power Unit 8	-		6	6	4	6	6
Unavailability Total (in days)							
Power Unit 1	0	84	23	47	23	52	23
Power Unit 2	11	0	142	23	47	23	52
Power Unit 3	0	0	33	142	23	47	23
Power Unit 4	0	14	23	33	85	23	47
Power Unit 5	20	0	142	23	47	23	52
Power Unit 6	0	30	23	142	23	52	23
Power Unit 7	88	0	47	23	33	85	23
Power Unit 8	8	84	23	47	123	23	47
Availability Factor (in days)							
Power Unit 1	98 00%	65 20%	93 70%	87 12%	93 72%	85 75%	93 70%
Power Unit 2	89 31%	98 00%	61 10%	93 70%	87 16%	93 70%	85 75%
Power Unit 3	98 00%	98 00%	90 96%	61 10%	93 72%	87 12%	93 70%
Power Unit 4	98 00%	92 53%	93 70%	90 96%	76 78%	93 70%	87 12%
Power Unit 5	82 19%	98 00%	61 10%	93 70%	87 16%	93 70%	85 75%
Power Unit 6	98 00%	86 29%	93 70%	61 10%	93 72%	85 75%	93 70%
Power Unit 7	28 45%	98 00%	87 12%	93 70%	90 98%	76 71%	93 70%
Power Unit 8	91 68%	65 20%	93 70%	87 12%	66 39%	93 70%	87 12%

* Availability Factor according to schedule delivered to PPGC was calculated according to number of accounting days
For overhauls and maintenance 2% drop of availability has been assumed

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Table II C

Power Plant "Rybnik"

Projection of Fixed Costs (PLN)

Projection in current prices

		1997	1998	1999	2000	2001	2002
	PLN/a	113,672	228,508	319,279	346,333	370,457	403,851
Depreciation	PLN/a	33 640	76 856	146 873	146 732	152 133	142 809
Salaries	PLN/a	15 980	34 333	39 308	44 024	48 645	57 793
Social Security Tax	PLN/a	7 702	16 549	18 947	21 219	23 447	27 836
Contracted Overhauls	PLN/a	23 694	31 443	33 693	43 152	47 504	62 750
Materials for Overhauls	PLN/a	4 700	6 810	7 296	9 344	10 287	15 897
Other Contracted Services	PLN/a	6 556	15 218	17 945	20 701	23 561	29 696
Other Costs	PLN/a	13 220	25 233	29 467	33 662	37 940	42 375
Financial Costs	PLN/a	8 179	22 065	25 750	27 499	26 940	11 304

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Table II B 3

Calculation of Availability Factor

Number of days in the period
Overhauls (in days)

Maintenance (in days)

Emergency maintenance (in days)

Unavailability Total (in days)

Availability Factor (in days)

* Availability Factor according to schedule delivered to PPGC was calculated according to number of accounting days
For overhauls and maintenance 2% drop of availability has been assumed

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Table II C 1+A7

Power Plant "Rybnik"

Forecast of the Costs of Labor (PLN)

Projection in Current Prices

		2nd half '96	1997	1998	1999	2000	2001	2002
Salaries in Fixed Prices								
Average Yearly Number of Employees		1 575	1 575	1 540	1 480	1 420	1 360	1 300
Gross Salary	PLN/mies	1 714	1 612	1 649	1 716	1 788	1 867	1 953
Real rate of salary increase	%	-	-	2 27%	4 05%	4 23%	4 41%	4 62%
Salaries	PLN/a	15 980 000	30 470 000	30 470 000	30 470 000	30 470 000	30 470 000	30 470 000
Surcharges to Salaries (Social Security)	PLN/a	7 702 360	14 686 540	14 686 540	14 686 540	14 686 540	14 686 540	14 686 540
Salaries Total	PLN/a	23 682 360	45 156 540					
Salaries in current prices	PLN/a	15 980 000	34 333 308	39 308 265	44 023 501	48 845 471	53 266 235	57 793 252
Surcharges to Salaries in current prices	PLN/a	7 702 360	16 548 655	18 946 583	21 219 328	23 447 117	25 674 325	27 856 347
Salaries Total in current prices	PLN/a	23 682 360	50 881 963	58 254 848	65 242 829	72 092 588	78 940 561	85 649 599

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Table II D

Power Plant "Rybnik"

Prices of Raw Materials and Environmental Charges

Projection in Current Prices

Prices		2nd half '96	1997	1998	1999	2000	2001	2002
<i>Cumulated Index of Fuel Price Increase</i>	%	0	112.7%	129.0%	144.5%	159.7%	174.8%	189.7%
Basic Fuel Price	PLN/t	80.04	90.71	103.85	116.31	128.52	140.73	152.69
Basic Fuel Transport Price	PLN/t	6.03	6.79	7.78	8.71	9.63	10.54	11.44
Supplementary Fuel Price	PLN/t	238.91	269.20	308.21	345.18	381.42	417.65	453.15
Supplementary Fuel Transport Price	PLN/t	22.69	25.57	29.27	32.78	36.22	39.67	43.04
Price of Sorbent Ca(OH) ₂ transport inclusive	PLN/t	158.56	178.66	204.55	229.09	253.14	277.19	300.74
Dolomite Price Transport Inclusive	PLN/t	23.22	26.16	29.96	33.55	37.07	40.59	44.04
Furnace waste utilization Costs	PLN/t	17.03	19.19	21.97	24.61	27.19	29.77	32.30
<i>Yearly Index of Environmental Costs Increase</i>	%	0	19.8%	16.0%	13.0%	11.0%	10.0%	9.0%
<i>Environmental Charges</i>								
SO ₂ Fee	PLN/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
NO ₂ Fee	PLN/t	240.00	287.52	333.52	376.88	418.34	460.17	501.59
Emission of CO	PLN/t	60.00	71.88	83.38	94.22	104.58	115.04	125.40
Emission of CO ₂	PLN/t	0.13	0.16	0.18	0.20	0.23	0.25	0.27
Dust Emission	PLN/t	130.00	155.74	180.66	204.14	226.60	249.26	271.69
Other Emissions	PLN/t	0.08	0.10	0.11	0.13	0.14	0.16	0.17
Solid Waste Fee	PLN/t	7.90	9.46	10.98	12.41	13.77	15.15	16.51
Sewage Fee	PLN/m ³	0.07	0.08	0.09	0.10	0.11	0.13	0.14
Water Use Fee	PLN/m ³	0.07	0.08	0.10	0.11	0.12	0.13	0.15

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Tabela II E

Elektrownia "Rybnik"

Corporate Income tax Calculation (thousands PLN)

Projection in current prices

	30/06/96	II po' 1996	1997	1998	1999	2000	2001	2002
EARNINGS BEFORE TAX	10,502	10,276	18 138	(872)	8,855	4,486	14,416	14 218
Depreciation non-chargeable to costs		1,186	1 248	1,317	1,395	1,482	0	0
Outlays subject to Investment Allowance		0	0	0	0	0	0	0
Additional Investment Allowance (50%)		0	0	0	0	0	0	0
Profit modification		1,186	1 248	1,317	1,395	1,482	0	0
Modified Profit		11,461	19,386	445	10 249	5,968	14,416	14,218
Account of previous years Tax Loss		0	0	0	0	0	0	0
			0	0	0	0	0	0
			0	0	0	0	0	0
Unaccounted tax Losses from previous years		0	0	0	0	0	0	0
INCOMES FOR TAXATION		11,461	19,386	445	10,249	5,968	14,416	14 218
INCOME TAX								
Paid		4 585	7 367	160	3 485	1 910	4 613	4 550
Deferred Tax		(474)	(474)	(474)	(474)	(474)	0	0
Charged to Income Statement		4 110	6 893	(314)	3 011	1 435	4 613	4 550

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Table III A

Power Plant "Rybnik"

Fixed Assets - Depreciation Calculation (thousands PLN)

Collective Statement

Projection in Current Prices

End of Year Result	1993	30/6/96	2nd half '96	1997	1998	1999	2000	2001	2002
Gross Value	362,858	2,193,041	2,233,840	2,407,093	2,959,413	3,150,096	3,288,574	3,387,613	3,437,222
Buildings	128 897	487 926	489 946	495 159	584 522	596 129	602 175	608 856	616 172
Machinery and equipment	190 719	1 654 485	1 699 914	1 860 670	2 313 516	2 495 131	2 623 587	2 711 653	2 755 309
Vehicles	9 333	23 202	23 202	23 202	26 914	26 914	26 914	26 914	26 914
Other	2 917	6 484	11 579	13 937	18 866	21 889	25 230	28 887	30 872
Investments in progress	28 586	16 956	5 212	10 138	11 607	6 046	6 681	7 316	3 969
Investment downpayments	2 405	3 987	3 987	3 987	3 987	3 987	3 987	3 987	3 987
Depreciation	15,304	37,834	33,450	75,603	143,990	142,154	146,942	154,025	137,437
Buildings	3 036	4 200	4 561	8 886	17 208	16 968	16 667	16 292	15 936
Machinery and equipment	10 506	32 474	27 462	63 795	123 077	120 989	125 560	132 705	117 166
Vehicles	706	643	660	1 267	1 706	1 626	1 507	1 416	1 319
Other	1 056	517	767	1 656	1 999	2 571	3 208	3 612	3 016
Depreciation	179,605	1,499,986	1,533,436	1,609,039	2,010,476	2,152,630	2,299,572	2,453,597	2,591,034
Buildings	41 962	179 452	184 013	192 899	240 970	257 939	274 606	290 898	306 834
Machinery and Equipment	132 558	1 300 464	1 327 926	1 391 721	1 737 473	1 858 462	1 984 022	2 116 727	2 233 893
Vehicles	3 037	14 499	15 159	16 426	20 761	22 386	23 894	25 309	26 628
Other	2 048	5 571	6 338	7 993	11 271	13 843	17 050	20 662	23 678
Nett Value	183,253	693,055	700,404	798,053	948,936	997,467	989,002	934,017	846,189
Buildings	86 935	308 475	305 934	302 260	343 552	338 190	327 570	317 959	309 338
Machinery and equipment	58 161	354 021	371 987	468 949	576 043	636 669	639 565	594 925	521 415
Vehicles	6 296	8 702	8 042	6 775	6 153	4 527	3 020	1 604	286
Other	869	913	5 241	5 943	7 595	8 046	8 179	8 225	7 194
Investments in progress	28 586	16 956	5 212	10 138	11 607	6 046	6 681	7 316	3 969
Investment downpayments	2 405	3 987	3 987	3 987	3 987	3 987	3 987	3 987	3 987
Changes in Revaluation Reserve	6,809	0	0	0	125,428	0	0	0	0

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Table III B

Power Plant "Rybnik"

Planned Investments (thousands PLN)

Projection in Current Prices

	30/06/1996	2nd half '96	1997	1998	2000	2001	2002	
Planned investments in fixed prices of 30/06/96 by major projects								
Ecologic Investments (IOS and burners)	4 643	15 357	39 050	25 525	55 050	35 000	20 000	0
Other modernization investments in the power units	3 787	12 523	82 918	76 421	63 100	34 908	17 152	20 000
Modernization Investments outside units	464	1 536	25 000	23 600	8 000	13 000	17 000	5 000
Non-productive fixed assets outlays	2 898	9 582						
N Total Investments	11 792	38 998	146 968	125 546	126 150	82 908	54 152	25 000
Planned investments in fixed prices of 30/06/96								
Buildings	498	4 982	8 600	8 600	4 000	4 000	4 000	2 000
Machinery and Equipment	10 709	29 601	136 368	114 946	120 150	76 908	48 152	22 000
Vehicles	0	0	0	0	0	0	0	0
Other	585	4 415	2 000	2 000	2 000	2 000	2 000	1 000
Investments Total	11 792	38 998	146 968	125 546	126 150	82 908	54 152	25 000
Planned overhauls in fixed prices of 30/06/96								
Contracted overhauls		22 648	28 673	24 964	28 548	28 441	34 310	36 989
Overhaul Materials		4 492	5 777	5 406	6 182	6 159	7 430	8 011
N Overhaul s Materials		27 140	32 450	30,370	34 730	34 600	41 740	45 000
Investments and Overhauls		66 138	179 418	155 916	160 880	117 508	95 892	70 000
Cumulative Index of Investment Costs Increase	0 0 %	4 6 %	17 9 %	35 0 %	51 2 %	67 0 %	82 9 %	98 4 %
Planned investments in current prices by major projects								
Ecological investments (IOS and burners)	4 643	16 066	46 034	34 450	83,212	58 459	36 578	0
Other modernization investments in the power units	3 787	13 102	97 747	103 343	95 380	58,305	31 370	39 687
Modernization Investments outside power units	464	1 607	29 471	31 852	12 093	21 713	31 092	9 922
Non-productive Fixed Assets outlays	2 898	10 025	0	0	0	0	0	0
N TOTAL Investments	11 792	40 800	173 252	169 445	190 684	138 477	99 039	49 609
Planned investments in current prices								
Buildings	498	5,212	10 138	11 607	6 046	6 681	7 316	3 969
Machinery and Equipment	10 709	30 968	160 757	155 139	181 615	128 456	88 066	43 656
Vehicles	0	0	0	0	0	0	0	0
Other	585	4 619	2 358	2 699	3 023	3 341	3 658	1 984
N Investments Total	11 792	40 800	173 252	169 445	190 684	138 477	99 039	49 609
Planned Overhauls in current prices								
Contracted Overhauls		23 694	31 443	33 693	41 152	47 504	62 750	71 199
Overhaul Materials		4 700	6 810	7,296	9 344	10,287	13 589	15 897
N Total Overhauls		28 394	38 254	40 989	52 497	57 791	76 339	89 296
Investments and Overhauls Total		69 194	211 506	210 435	243 181	196 268	175,378	138 905
Investment Accounting								
Opening Balance	52 184	16 956	5,212	10 138	11 607	6 046	6 681	7 316
Over the year outlays	11 792	40 800	173 252	169 445	190 684	138 477	99 039	49 609
Changes in Fixed Assets in it	(46 878)	(52 544)	(168 326)	(167 976)	(196 245)	(137 843)	(98 405)	(52 956)
Buildings	(408)	(2 020)	(5,212)	(10 138)	(11 607)	(6 046)	(6 681)	(7 316)
Machinery and Equipment	(46 028)	(45 428)	(160 757)	(155 139)	(181 615)	(128 456)	(88 066)	(43 656)
Vehicles	0	0	0	0	0	0	0	0
Other	(443)	(5 095)	(2 358)	(2 699)	(3 023)	(3 341)	(3 658)	(1 984)
Closing Balance	17 098	5,212	10 138	11 607	6 046	6 681	7 316	3 969

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Table III C

Power Plant "Rybnik"

Financing (tys PLN)

Projection in Current Prices

	2nd half '96	1997	1999	2000	2001	2002	
Sum of Loans							
Capital (Opening Balance)	66 181	101 138	165 156	201 039	251 703	241 115	182 019
New premiums of loan repayment	34 957	64 018	35 883	50 664	(10 588)	(59 096)	(81 221)
Capital (Closing Balance)	101 138	165 156	201 039	251 703	241 115	182 019	100 798
Interests payable	8 179	22 065	25 750	27 499	26 940	20 349	11 304
Revolving Credit BEN							
Capital (Opening Balance)	9 998	9 998	9 998	9 998	9 998	9 998	9 998
New Loan							
Loan Repayment							
Capital (Closing balance)	9 998	9 998	9 998	9 998	9 998	9 998	9 998
Interest Rate	20.5%	16.4%	13.9%	12.3%	11.5%	10.7%	9.8%
Interest amount	977	1 640	1 394	1 230	1 148	1 066	984
Revolving Credit BSK							
Capital (Opening Balance)	0	15 000	15 000	15 000	15 000	15 000	15 000
New Loan	15 000						
Loan Repayment							
Capital (Closing Balance)	15 000	15 000	15 000	15 000	15 000	15 000	15 000
Interest Rate	23.5%	18.8%	16.0%	14.1%	13.2%	12.2%	11.3%
Interest amount	835	2 820	2 397	2 115	1 974	1 833	1 692
Swiss Government Loan							
Capital (Opening Balance)	183	183	0	0	0	0	0
New Loan							
Loan Repayment		(183)					
Capital (Closing Balance)	183	0	0	0	0	0	0
Interest Rate							
Interest amount	19	14	0	0	0	0	0
Long Term Credit PBK							
Capital (Opening Balance)	39 000	31 200	15 600	0	0	0	0
New Loan	0	0	0	0	0	0	0
Loan Repayment	(7 800)	(15 600)	(15 600)				
Capital (Closing Balance)	31 200	15 600	0	0	0	0	0
Interest Rate	23.5%	18.8%	16.0%	14.1%	13.2%	12.2%	11.3%
Interest amount	3 907	4 399	1 246	0	0	0	0
Long Term Commercial Credit							
Capital (Opening Balance)	0	19 724	81 515	124 381	143 771	120 541	62 271
New Loan	19 724	61 791	42,866	19 390	(23 231)	(58 270)	(62 271)
Capital (Closing Balance)	19 724	81,515	124,381	143 771	120 541	62 271	0
Interest rate	23.5%	18.8%	16.0%	14.1%	13.2%	12.2%	11.3%
Interests amount	1 098	9 516	16 451	18,905	17 392	11 170	3 512
National Fund of Environmental Protection loans for ecological investments							
Capital (Opening Balance)	17 000	25,033	43 043	51 660	82 934	95 576	94 750
New Loan	8 033	23 017	17 225	41 606	29 230	18 289	0
Loan repayment		(5 007)	(8 609)	(10 332)	(16 587)	(19 115)	(18 950)
Capital (Closing Balance)	25 033	43 043	51,660	82 934	95 576	94 750	75 800
Interest Rate	13.2%	10.8%	9.0%	7.8%	7.2%	6.6%	6.0%
Interest amount	1 344	3 676	4 262	5 249	6 426	6 281	5 117
Cash surplus	0	(0)	0	(0)	0	0	14 441

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