

Managerial Finance

Report on British Energy

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Introduction to British Energy

British energy is a company which, through nuclear power, generates one third of Britain's electricity. The company has had a traumatic few years due to drastic disruptions in the equilibrium of power prices and increased fixed costs of running the stations, it is these variations which have resulted in the companies poor financial state

British Energy have chosen to specialise solely in meeting the power needs of large industrial and commercial customers. At present, British Energy serves 300 large customers and this direct business accounts for over 20% of output however the main company British Energy work with is Scottish Power.

The electrical power is supplied to the main grid which is owned by Scottish Power who then distribute it throughout the country, British Energy charge a set fee per unit of power supplied.

It was agreed that restructuring would be the solution to regaining a positive financial position and the principals of the restructuring plan were announced on 28th November 2002. There has been some progress over the last year however it is acknowledged it will be a long and complicated process, unable to be executed without government intervention and support

British energy share prices dropped in connection with deteriorating future prospects, therefore the directors have acknowledged a permanent reduction in share value resulting in an exceptional charge of £102m which is recognised within operating costs. Due to a combination of factors such as dramatic reductions in electricity prices in the UK market, a high fixed cost base, and failure to renegotiate its fuel contracts with BNFL, resulted in a financial crisis for the Group, making the financial year to March 2003 the most difficult for British Energy and resulted in the board seeking assistance from the Government on 5 September 2002, and since then consummated in a restructuring process.

The restructuring program is not supposed to be completed by 2004, so the Group's financial statements have been drawn up on a non-restructured

basis.¹, this portrays the current legal position of the Group. These figures have led to the Directors reviewing the economic values and net realisable values of the Group's fixed assets and compared them to their book value, resulting in the value of fixed assets being reduced by £3,738m.

¹ On the basis of contracts and agreements in place at 31st March 2003 [pg 34 Annual Report and Accounts]

The Profit and Loss Account

The profit and loss account shows the profitability of a company, namely, how a company is doing financially. The following ratios will show how well British Energy is doing as a group company.

The evaluation of the profit and loss account includes:

- Showing the expenses incurred at the end of the financial period
- The amount of depreciation incurred
- The amount of bad and doubtful debts incurred.

This year, the Group has made a loss of £3941m compared to that of the previous year, which was £577m this is a huge difference of £3364m, which can only be explained through deeper analysis of the financial report.

Profitability ratios for the Profit and Loss Account

Return on Shareholders Funds (R.O.S.F.)

$$\text{R.O.S.F.} = \frac{\text{Net Profit After Tax and Pref. Divid.}}{\text{Ordinary Share Capital + Reserves}} \times 100$$

<u>2003</u>	<u>2002</u>
$\frac{-3924}{227+350} \times 100$	$\frac{(518)}{227+350} \times 100$
-625.80%	-82.60%

What does this ratio show us?

This figure represents the amount of profit available to the owners and the return the shareholders are getting from their investment, the higher the better. The company's main objective is to look out for its' shareholders and to maintain a positive reputation.

What would we expect to see?

As the company has shares we would expect the return on shareholders funds to be of fair value, if shareholders see the company they have invested in is declining profitability wise they will sell their shares therefore the share value will decrease resulting in a decline of company value.

What does the ratio say?

The 2003 ratio is poor by any standards, the reason for this is not enough sales were generated, sales in fact dropped by £3406 million.

The trend shows the return on shareholders funds is decreasing, it would be interesting to see the accounts for the previous four or five years as two years it too narrow a time span to make a sound trend statement, however the following ratios will give clues as to why the return on shareholders funds has decreased so drastically.

Why is the figure so?

The figure of this ratio is the result of, profit after tax and the share capital and reserves figures. The profit figure is highly influenced by a number of things, these are as follows:

The company has embarked on a joint venture with Amergen² in the USA, the investment in the venture has decreased by £185m from 2002 to 2003.

Turnover is at a loss but there is an exceptional charge of £3947m in 2003, this is the result of an investigation of fixed assets where it was found their current value compared to their book value was dramatically less, this created the huge write-down figure³ which heavily influenced this ratio. In Addition there is an exceptional charge of £57m, this is for stock absolence, that is stock is moving too slow and lying too long therefore it had to be written-off.

If the exceptional values were removed from the figures in the ratio, and a true figure was deduced it would show a much lower difference than that of 2002.

Has the company improved?

This is clearly not an improvement for the company as there has been an overall reduction in ROSF by **%

² Amergen is an American company which owns three nuclear stations, however British Energy require government assistance so they must dispose of Amergen which has resulted in yet another exceptional value.

³ Written-down value is the value of the asset at a point in time according to the depreciation method.

Return On Capital Employed (R.O.C.E.)

$$\text{R.O.C.E.} = \frac{\text{net profit before interest and tax}}{\text{Share capital + reserves + long term loans}} \times 100$$

<u>2003</u>	<u>2002</u>
$\frac{-4292}{227+350+731} \times 100$	$\frac{-493}{227+350+298} \times 100$
-316.00%	-53.20%

What does this ratio show us?

This ratio shows the how much return the suppliers of the company will get before deductions such as interest or dividends have been paid. It shows us how well the company uses its funds i.e. how effective investments have been.

What would we expect to see?

This is a large company with most of its money tied up in assets and also has a high capital value therefore we would expect to see a rise in profit from the ROCE ratio.

What does the ratio say?

This ratio tells a similar story to that of ROSF, mainly that the company is not performing well and that the return on the assets is less than what the business has to repay for most of its loans and borrowed funds, therefore heading towards needing even more financial assistance.

Why is the ratio so?

This ratio expresses the relationship between the net profit, generated by the business and the long-term capital invested, that is it compares the value of the capital invested with profit.

The company made a provision⁴ of £5909m for bad and doubtful inter-company debtors this amount is integrated into the consolidation figure. This is perhaps why the company did not have any distributable reserves in 2003. Again the exceptional charges are the main influence over this ration but the provision could be the reason the figure is so drastic.

Has the company improved?

As this ratio shows a similar outlook to that of the R.O.S.F. the same conclusion can be made, that the company is not performing well, and will soon need additional government assistance.

⁴ This provision could be seen as an investment.

Net Profit Margin

$$\text{N.P.M.} = \frac{\text{net profit before interest and tax}}{\text{Sales}} \times 100$$

<u>2003</u>		<u>2002</u>	
<u>-4292</u>	x100	<u>-493</u>	x100
1903		2049	
-222.50%		-24.00%	

What does this ratio show us?

This ratio relates the net profit to the sales during a set period. Factors influencing this include, competition, economic climate and industry characteristics.

What would we expect to see?

We would expect to see a low margin as this company is generating power constantly and it is being used quickly therefore there is no need to allocate a high value on price of electricity.

What does this ratio say?

A week but improved performance compared to that of previous year this again explains the poor ROSF and ROCE figures. Again two years is too small a time span to base a solid assumption that the company is improving overall.

Why is the ratio so?

The outcome of this ratio is due to high expenses and increased running costs. Sales are not an issue with this company as everyone wants and needs power so the problem lies with decreased consumer price. The market price of electricity dropped suddenly last September therefore giving inadequate profits to cover the running costs of the stations. The director stated that he

did not foresee the prices dropping so much and so suddenly, subsequently they did not have time to prepare, as a company for this crisis..⁵

Has the company improved

From this ratio we can see that the company has slightly improved in this area however this is mainly due to government intervention and reduced competition.⁶

⁵ They could have prepared by starting something like an 'eventuality' fund.

⁶ Coal power stations have now been closed reducing competition.

Gross Profit Margin

$$\text{G.P.M.} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

<u>2003</u>	<u>2002</u>
$\frac{-3924}{227+350} \times 100$	$\frac{-518}{227+350} \times 100$
-625.80%	-82.60%

What does this ratio show us?

It shows how much profit is earned on the products without consideration of selling and administration costs. In addition it informs us of the company's ability to control its production costs, and manage the margins it makes.

What does this ratio say?

Gross profit was lower relative to sales, therefore the cost of sales was higher than the actual sales themselves this reflects the outcome of the net profit margin. We would expect these two results to reflect each other.

Why is the ratio so?

Much the same answer as the net profit margin and also the same reasons, the huge reduction in capital employed has been the result of the poor return.

Has the company improved?

The company has not improved it has in fact declined, but as said before this is due to the sudden market crash last September.

Summary of the profit and loss account

Turnover has decreased by 40% from 2002 to 2003. Gross profit is 88% of turnover. Company loss is due to exceptional items and the fact that the costs are not fixed.

Overall the company is declining with respect to financial profitability however this does not mean the performance of the company is deteriorating in coincidence with profitability.

The Balance Sheet

The Balance Sheet is a statement which shows the financial position of the company at a specific moment of time. It also shows how much wealth there is in the business and how much resources is in each form, therefore showing how efficient the company is with its investments and returns.

Efficiency ratios for the Balance sheet

Average stock turnover period

Average stock turnover period = $\frac{\text{average stock held}}{\text{Cost of sales}}$ x365

2003

$\frac{360}{5705}$

23 Days

There was no stock held in 2002.

What does the ratio show us?

This ratio shows how long stocks are being held.

What would we expect to see?

Stock within this company accounts for a large portion of the total assets held, we would expect to see a low figure.

What does the ratio say?

The ratio shows us that stock is only held for 23 days. This shows signs of good stock control and reasonable efficiency.

Why is the ratio so?

The stock turnover for British Energy is low as the group value for stock held in stores was £162m in 2002 however is only £75m in 2003 this is a drop of £87m which means the company has almost halved the stock it holds this is perhaps a movement towards increased stock rotation. Again it would be interesting to review previous year accounts to see if this is an improving trend

Has the company improved?

The company itself did not show a figure for stock held in 2002 therefore it is unclear if the company has improved in the past year

Average settlement period for debtors (Debtor Days)

$$\text{Average settlement period for debtors} = \frac{\text{trade debtors} \times 365}{\text{Credit sales}}$$

<u>2003</u>	<u>2002</u>
$\frac{226}{1903} \times 365$	$\frac{294}{2049} \times 365$
43.3 Days	52.4 Days

What does the ratio show us?

This ratio shows us how long it takes the company to get back the money it is owed from its debtors.

What would we expect to see?

As this company financial state is poor we would expect to see a low figure meaning the company was improving credit control. The aim of this company is to shorten debtor days and lengthen creditor days.

What does the ratio say?

The ratio tells us British Energy is taking 43.3 days to receive payment from its debtors. This is an decrease of 9.1 days from 2002, credit control has improved

Why is the ratio so?

In 2002 British energy as a company had 5 means of debtors and received a total of £732m from its debtors however the company itself received £2,517m. In 2003 the company has only 3 forms of debtors giving only £387m (53% less from last year) to the group and just £85m of that to the company. The reason for these figures is the subsidiary undertakings which accounts for £81m⁷. There is also a provision for bad debts of £6209 owed from UK companies.

⁷ This was denominated in foreign currency and exchanged at the end of the year.

Has the company improved?

We can see there has been an improvement since 2002 but again an analysis of previous years accounts would give a fairer statement.

British energy need to allow credit to achieve satisfactory sales (or increased market value of power) however this results in an interest cost of funds tied up in debtors and the possibility of bad debt.

Average settlement period for creditors (Creditor Days)

$$\text{Average settlement period for creditors} = \frac{\text{trade creditors}}{\text{Credit purchases}} \times 365$$

<u>2003</u>	<u>2002</u>
$\frac{-198}{-152} \times 365$	$\frac{-285}{-153} \times 365$
475.5 Days	679.9 Days

What does the ratio show us?

This ratio shows us how long (average) it take British Energy to pay its creditors

What would we expect to see?

We would expect to see a slightly bigger figure than that of the debtor days this is to give the company a temporary boost for increasing efficiency

What does the ratio say?

It can be seen that British Energy has decreased its creditor days, again this is evidence that the company is gaining power over credit control and backs up evidence that debtor days are decreasing steadily.

Why is the ratio so?

In 2002 British Energy paid £1,858m to its creditors and in 2003 paid £1909m. British Energy terminated contracts with two companies through the year which gave rise for amounts of money which became payable to creditors.

Has the company improved?

This is an improvement and is evidence that the company does indeed have some sort of strategy for retaining profit.⁸

⁸ It does not appear that the company holds cash at bank, however it may be held in a group account.

Sales to Capital Employed (asset turnover ratio)

Sales to capital employed = $\frac{\text{sales}}{\text{Long-term capital employed}}$

<u>2003</u>	<u>2002</u>
$\frac{1903}{88652}$	$\frac{2049}{87783}$
21.4	23.3

What does the ratio show us?

This ratio shows us how effectively British Energy assets are generating sales revenue. As this is a nuclear power company the assets of the company should be very efficient.

What would we expect to see?

We would expect to see a high figure, this would mean assets were being used more productively in relation to generating profit.

What does the ratio say?

The ratio shows a high ratio which would suggest that British Energy is using its assets productively.

Why is the ratio so?

The outcome of the ratio suggests the company has invested in its capital and holds less stock and had adopted a J.I.T. (Just In Time) method of stock rotation this would mean improved condition and 'younger' assets.

Has the company improved?

The company has improved since 2002 this could be due to the control over stock.

Sales per employee

$$\text{Sales per employee} = \frac{\text{Sales}}{\text{Number of employees}}$$

<u>2003</u>	<u>2002</u>
$\frac{1903}{7653}$	$\frac{2049}{7902}$
0.25p	0.26p

What does the ratio show us?

This ratio aims to give a value of the productivity of the workforce.

What would we expect to see?

We would expect to see a high figure this would mean staff are working effectively and optimising efficiency.

What does the ratio say?

The ratio shows the employees are not working effectively however it can be seen that there is an improvement from 2002 to 2003 of 1 pence

Why is the ratio so?

The number of employees has increased by 249 over the past year this would explain why the sales per employee has increased however the figure has not increased as much as could have been predicted. Further analysis would be required to show why this has not increased to a satisfactory value.

Has the company improved?

The company has improved slightly however the figure is still not acceptable in relation to the size of the company.

Review of the Balance Sheet

Overall the balance sheet shows the financial position and efficiency of the company. It can be clearly seen that the company is in a poor state and is declining at a steady rate. Many issues need to be addressed and investigated, however as stated in the Profit and Loss section there are other influences on the figures which means calculations are not always like with like.

Factors contributing to the stated financial position are:

Fixed Assets

The market value of shares held by employees was £2m compared to a book value of £104m, as the long term prospects of the company have deteriorated the directors consider it appropriate to recognize a permanent diminution in the value of the shares held in employee trust. This has resulted in an exceptional charge of £102m

Long-term resources of the business resources with a lifespan more than one year are called fixed assets. In the balance sheet fixed assets are divided into tangible, intangible or financial assets. In 2002 the balance sheet value for fixed assets was £4,714m in 2003 there has been a severe drop in the value, fixed assets are now worth £686m.

The charge for depreciation of fixed assets is based on the straight-line method, this writes-off the cost of assets, after taking into account provisions for the depreciation in value, over their estimated useful lives. The asset lives adopted are subject to regular review

Current Assets

Decommissioning fund

The group makes contributions into an interdependently administered fund to cover all the costs of decommissioning its UK nuclear power stations.

The decommissioning fund is in the balance sheet under current assets, in 2002 the fund was £411m and decreased to £344m in 2003.

The market value of the UK Decommissioning Fund was £344m on the last review date which was 31st March 2003. this figure was in fact £124m lower than the cost of the investment, which resulted in an exceptional charge of £124m. this exceptional charge has been recognized, £111m has been represented as revalorisation⁹ credit and has been treated as an exceptional financing charge with the remaining £13m being categorised as an exceptional operating cost. These write-offs mean the company can restate the Decommissioning Fund receivable to market value.

Nuclear decommissioning fund

A large part of power-generated capacity in Britain is nuclear and the decommissioning cost of nuclear power plants is a large part of the depreciation of fixed assets.

The estimated cost for decommissioning the groups nuclear power stations are capitalised as part of the cost of construction and are depreciated over the same lives as the stations. These estimated costs are discounted having regarded to the time scale whereby work will take place over many years after station closure. The estimated costs include the demolition and site clearance of the stations, radioactive facilities and the movement of waste.

What is the depreciation policy

The value of an asset falls over time, a machine bought in one year will be worth less the next therefore allowances must be made for depreciation when showing the value of assets. An estimate is predicted by the amount which the asset will depreciate each year, this way the cost of the asset can be filtered through the balance sheet and profit and loss and over a number of years instead of in one lump sum which would have a detrimental effect on any company especially one such as British Energy.

⁹ Revalorisation is a charge which results from restating liabilities to take into account inflation for the year.

Sources of long-term finance

External long-term finance can be in the form of share capital or loan capital. Share capital involves the sale of shares to raise money and is often the most important source of funds for a limited company.

As British Energy is in such a weak state external finance is required regularly, the company has used its loan capital i.e. debentures, loans and government assistance in other words money that has been borrowed for a lengthy period of time.

Intangible assets are not mentioned in the balance sheet, however the company's goodwill is, goodwill is the difference between the value of a company they have bought over versus the value of the net assets within the company. Goodwill is capitalised as an intangible asset and amortised (depreciated) on a straight-line basis over its estimated useful life. British Energy has managed to generate income in the past from goodwill- with the purchase of Bruce power and Amergen.

Brand names are often included as an intangible asset as they generate income for a lengthy period. If British Energy was still in the financial position to buy over another company it would be wise to acquire one with a brand name.

Patents, copyrights and trademarks prevent others from copying more efficient machinery, ideas, products and methods adopted through acquisition of other companies (Bruce power, Amergen).

Research and development can be included as capital expenditure and can sometimes yield success in the future.

The Cash Flow Statement

The Cash flow statement shows the sources and uses of cash for a period

Liquidity Ratios for the Cash Flow Statement

Current Ratio

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

<u>2003</u>	<u>2002</u>
$\frac{1414}{1185}$	$\frac{1866}{975}$
1.2:1	1.9:1

What does this ratio show us?

This ratio compares the 'liquid' assets of the company (i.e. cash and assets most easily turn into cash) with the short term liabilities.

What would we expect to see?

The ideal ratio is 2 times or 2:1 times.

What does this ratio say?

The current ratio is reasonable however there is a decline from 2002 to 2003.

Why is the ratio so?

This is mainly due to the type of company it is, as seen earlier the company is now holding stock for a shorter period of time¹⁰ which would explain the

¹⁰ This means stock is moving faster.

decrease. The company holds stocks of finished goods, raw materials and work in progress. As the ratio is low¹¹ the company can be seen as having low liquidity however most of this companies funds are tied up in assets this related back to, and explains poor efficiency

Has the company improved?

The company has not improved with respect to liquidity, the company should aim to have the ideal ratio of 2:1 as liquidity is vital to a company's success. Referral to previous years accounts would be more insightful however the acid test ratio will provide a more in depth perspective.

Acid test ratio

$$\text{Acid Test Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

<u>2003</u>	<u>2002</u>
$\frac{334}{1185}$	$\frac{411}{975}$
0.3	0.4

What does this ratio show us?

This ratio is simply a more rigorous test of liquidity.

What would we expect to see?

Results similar to that of the current ratio.

What does this ratio say?

This ratio shows a decline from 2002 to 2003

¹¹ The ideal ratio is 2:1

Why is the ratio so?

As the ratio is below 1.0 this is cause for concern however it is not a surprise, the previous calculations have shown British Energy is declining as a company.

Gearing

Gearing = $\frac{\text{long term liabilities}}{\text{Share capital} + \text{reserves} + \text{long term liabilities}}$

<u>2003</u>	<u>2002</u>
$\frac{-4375}{-7758} \times 100$	$\frac{-5217}{-4634} \times 100$
775.80%	521.70%

What does this ratio show us?

The gearing ratio shows the extent to which the company is financed from sources that require a fixed return.

What would we expect to see?

As this company is not doing very well we would expect to see a high gearing ratio as it is highly financed from external sources.

What does this ratio say?

This ratio shows British Energy is highly geared.

Why is the ratio so?

This is because the company borrows heavily in order to survive, the result of this is the company is committed to paying interest charges and making capital repayments.

Has the company improved?

This is not a good thing for British Energy to do in its current financial state as it is just another financial burden. The effect of this gearing is reflected in the R.O.S.F ratio as less funds are available.

Summary of the Cash Flow Statement

Even though the company makes losses the cash flow statement is still positive, this is because depreciation is not included. The negative figures are a result of the company having more finance to service than they have investments generating returns. As seen in 2001 the companies taxation section is negative this could be due to the company sustaining losses after a taxation of profits period, the positive figures in the past two years could be mainly due to tax refunds

As the cash flow is a summary of the profit and loss and the balance sheets it would therefore reflect the negative position and performance discovered earlier.

Although there are obvious financial problems within British Energy, there have been crucial advancements since the restructuring program was announced on 28 November 2002. For example, investments in Bruce Power and Huron Wind have been wiped out, and standstill agreements are now in place with their most significant creditors and BNFL, in addition they are controlling their cash and collateral requirements within the limits of the credit facility provided by the UK Government.

Cash flow can be improved by shortening stock turnover, shorter period of credit for debtors and by lengthening credit taken from creditors.

Accounting Policies of British Energy

The financial statements are prepared under the historical cost convention¹² and in accordance with applicable accounting standards.

The basis of consolidation

The financial statements are a consolidation of all the groups with British Energy and all its subsidiary undertakings however inter-company transaction and balances are not shown on consolidation.

British energy depreciation policy

The charge for depreciation of fixed assets is based on the straight-line method, this writes-off the cost of assets, after taking into account provisions for the depreciation in value, over their estimated useful lives. The asset lives adopted are subject to regular review.

¹² Results in assets being recorded at their outlay cost rather than their current value

Conclusion

To conclude, British Energy has a bleak outlook for the future and very little positive prospects. The declining future of the company is evident from this report, as a company it has exhausted most of its profit making resources and government buy-out seems inevitable.

Evaluation

Unfortunately, we do not feel that this has been our best effort and feel disappointed that we could not produce a higher standard of work which was due to a number of factors. Although this is supposed to have been a group report it has resulted in certain members of the group not contributing equally and adding more onto the other members workloads which, has also contributed to the poor result of this report.