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CONSULTANTS

DECEMBER 2008

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DIGGING DEEPER

THE UK COAL INDUSTRY - PAST AND FUTURE?

Alyn Evans

It may be difficult to comprehend, especially for the younger element, that in the not so distant past, the UK boasted a massive coal industry. For example, in 1947 when the coal mines were nationalised by the new post-war Labour government there were over 1,000 working coal mines employing in excess of 700,000 people. Even up to 1979 when Margaret Thatcher came into power there were 180,000 miners employed at 170 mines. Following the bitter miners' strike of the 1980s there are now only 19 working coal mines left in the UK with some 3,600 employees.

The UK literally is an island of coal. By 1976 over 25 billion tonnes had been recovered from the huge reserves of the country. In situ reserves, counting seams over 0.6 metres in thickness and at depths up to 1200 metres have been calculated at 190 billion tonnes. Recoverable reserves are estimated to be 45 billion tonnes which will satisfy the annual needs for power generation for the country for hundreds of years.

Presently the existing mines produce about 20 Mt annually, which is about a third of the 60 Mt needed annually to satisfy power consumption demands. The 40 Mt shortfall is currently being met by imports from various parts of the world including Russia, Eastern Europe, Columbia, South Africa and others.

The rapid rise in world coal prices, in 2007 alone prices doubled, has brought about a spate of activity in the UK coal industry, especially since there is a ready made home market for the product with consumers desperate to reduce their dependency on imports.

UK Coal PLC which inherited most of the remnants of the former British Coal Corporation produces about 7 Mt annually from its four underground mines and about 1.5 Mt annually from its opencast mines. It has recently, however, announced it is considering re-opening its recently closed Harworth Colliery and also its intention to invest £100M at Thorsby and Kellingley Collieries to extend their working lives by up to 20 years.

Richard Budge, the ex head of UK Coal, recently announced that his company, Powerfuel (which is 51% owned thanks to an investment by Kuzbassrazugol, one of the largest Russian coal

producers) will restart production at Harworth colliery, another ex British Coal mine. The total investment at the mine will be around £110M.

The Company has obtained consent for the development of a 900 MW clean coal power plant, and has signed a license agreement with Shell Gas and Power International BV, which entitles it to use Shell's proprietary gasification technology in the proposed power station at Hatfield. It is also planned to capture carbon dioxide emissions for sale to North Sea oil companies, whose rigs use the gas to push out oil.

"A new zero emissions power station is our intention," Mr Budge says. Coal is becoming

more attractive as an energy source because of the soaring price of gas and oil and worries over security of their supply. But greenhouse gas emissions are a factor and if coal is to make a comeback, it is likely to rely on clean coal technology.



Longwall at Thoresby Mine

In South Wales, where there was once a huge coal industry with hundreds of mines and which contains the rich and much sought after anthracite, there are also stirrings of a revival in coal mining with the reopening of two anthracite mines, with one of the companies involved already announcing its intention to reopen another four anthracite mines in the area. Here, the biggest problem seems to be the lack of skilled miners left to man these operations, since most of the former miners are now in retirement and no new miners have been trained for more than a generation.

Scotland, too, is experiencing something of a revival with Scottish Coal, which already has seven operating sites producing some 4.5 Mt of coal and actively seeking permission for other sites.

ATH Resources, which currently produces 2 Mt annually from four sites, is also seeking permission to start coal production from new sites in the area.

In May 2006 ATH acquired a successful coal recovery, land remediation and regeneration business with a particular focus on colliery spoil heap reclamation projects. ATH paid net £9.5M for the business. The acquisition, recently

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renamed ATH Regeneration Ltd allows ATH to build on its skills as a regenerator of land, whilst developing strong relationships with key English planning authorities. This arm of the group is also poised to start its first overseas operation in Australia.

In October 2006, following a successful planning application, the Group commenced work on its new Laigh Glenmuir opencast coal mine in East Ayrshire.

In addition to its operating mines, the Group also has a number of other coal mining projects in Scotland and two through its French subsidiary, SRMMC including a series of six existing coal concessions in south-central France, covering



Hatfield Miners with Richard Budge

an area of 36km, two with an estimated resource of approximately 4.5 Mt of recoverable coal.

Clearly, as long as world coal prices remain at current levels, which seems likely, countries with large coal reserves that retain at least part of the tradition of coal mining, will seek to expand wherever possible if for no other reason than to reduce their dependency on imports. This obviously bodes well for AMC's recently formed Coal & Energy Group.



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HERBERT HOOVER AND THE GREAT DEPRESSION

Herbert Hoover's outstanding mining career

ended with World War One and he found his way into politics. After a period as Secretary of Commerce he was elected President of the United States on 6 November 1928, at the age of 54. Less than a year later he had to deal with the stock market crash of October 1929, which came during a period of declining real estate values.

Hoover had begun his career working as a vacation student for the United States Geological Survey and after graduation as a geologist from Stamford University he worked as an underground miner for two years. He went to Kalgoorlie in 1897 as an employee of London-based mining consultants Bewick Moreing and Company, working on the Sons of Gwalia and Big Bell mines and projects at Menzies and Coolgardie.

In 1902 Hoover bought a French Panhard car which he found to be ideal for Australian desert mining work. This was one of the earliest cars on the goldfields and it ran "most of the time". He found that the car would travel 125 miles per day, compared with 40 miles per day using horses. Eventually four cars replaced relays of horses which were costing the consultancy US\$5,000 to 10,000 per month. The main operating problems were caused by the poor roads. Hoover settled on a "fee" of three bottles of beer to get an Afghan camel team to move

off the road and allow the cars through. Even so, breakdowns due to dust in the carburetors and punctures were frequent.

Later Hoover worked on gold projects in Victoria and was instrumental in development of the Zinc Corporation at Broken Hill. When W.S. Robinson, a mining entrepreneur, was invited to lunch with Hoover at Mount Martha near Melbourne, he found a "slender, boyish figure" lying on his back covered with grease under a Porthos car. Robinson stayed all lunch time and most of the afternoon but had to eat alone while Hoover tinkered. Much later, at the height of the Great Depression, Hoover was again accused of tinkering instead of acting.

A month after the stock market crash of 1929 The Economist asked: "Can a very serious Stock Exchange collapse produce a serious setback to industry when industrial production is for the most part in a healthy and balanced condition? ...

Experts are agreed that there must be some setback, but there is not yet sufficient evidence to prove that it will be long or that it need go to the length of producing a general industrial depression." But The Economist cautioned: "Some bank failures, no doubt, are also to be expected. In the circumstances will the banks have any margin left for financing commercial and industrial enterprises or will they not? The position of the banks is without doubt the key to the situation, and what this is going to be cannot be properly assessed until the dust has cleared away."

As the economy quickly deteriorated in the early years of the Great Depression, Hoover declined to pursue legislative relief, believing that it would make people dependent on the federal government. Instead, he organized a number of voluntary measures with businesses, encouraged state and local government responses, and accelerated federal building projects. These measures had little effect. Later, in his Memoirs, Hoover explained the causes of the Great Depression;

"Our reconstruction from the war had proceeded with such steady success, and the other impulses to progress were so very great that, with the growing optimism, they gave birth to a foolish idea called the new economic era. That notion spread over the whole country. We were assured that we were in a new period where the old laws of economics no longer applied".

"The Federal reserve board had deliberately created credit inflation. The government contended that by the control of discount rates, open market operations and currency issues, business crises could be eliminated.

A contribution to optimism and the belief in a new era was the illusion that the economic system was thus completely immune from financial crises. Bankers, accepting this illusion, neglected many of their own responsibilities".

"One trouble with every inflationary creation of credit is that it acts like a delayed time bomb.

MESSAGE FROM THE MANAGING DIRECTOR

In our response to the global economic crisis and falling commodity prices we must not forget the importance of retaining apprentices, graduates and young professionals. Just a few months ago managers despaired of recruiting the skilled and experienced people they needed, and vowed to support apprenticeships, graduate recruitment and training throughout the economic cycle. Can we keep to this resolution when put to the test?

In an economic downturn the Chief Executive Officer must act quickly and decisively to minimise the impact of falling revenue on the enterprise. This action usually takes the form of a freeze on new hiring and on capital expenditure, and the introduction of a project to reduce overall operating costs by 5%, 10% or even 20%. A mining company may also reduce its production or close down sections, laying off part of its workforce.

These predictable actions are essential in order to address short-term cashflow and profitability requirements, but skilled people cannot be turned

on and off like a tap. Some companies who have claimed that "our best asset is our people" will show their true colours in the coming weeks and months.

The decision made by the CEO to freeze recruiting or lay off staff is then interpreted by line managers and put into effect. The line manager's personal priorities and prejudices may guide his actions, to the detriment of the same people he worked so hard to recruit just a few months ago. If he doesn't have access to the big picture, he may make decisions that go against the best interests of the corporation. If new apprenticeships and graduate employment contracts are cancelled, or young professionals terminated because they have poorly developed skills or simply were "last on, first off", then we have learned nothing from the recent past.

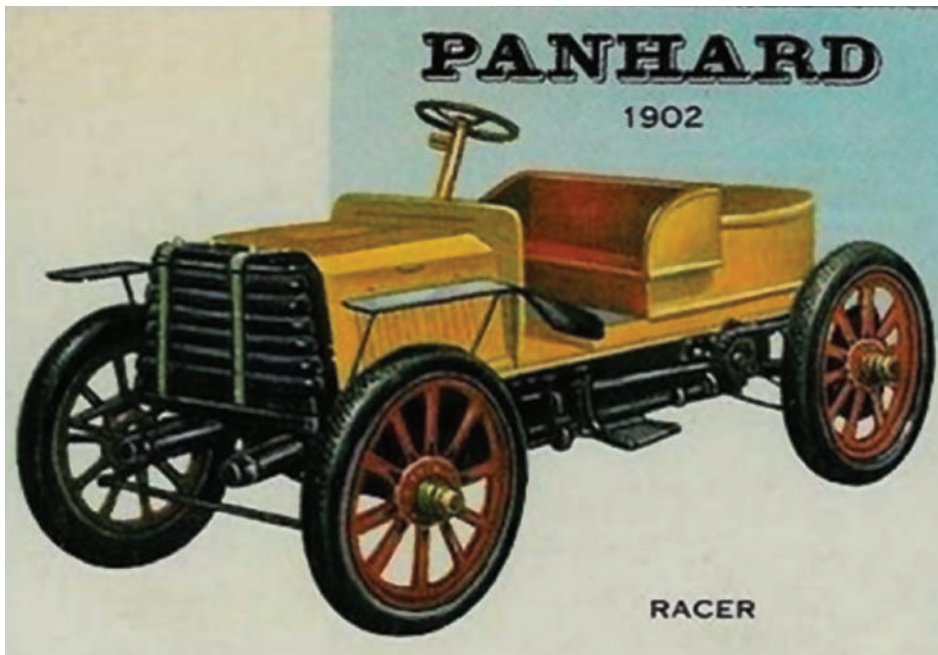
When things settle down again we will be able to look back and see who took their professional responsibilities seriously, and who took fright. One thing is for sure – not one mining company will



survive because it saved the cost of its graduate programme. On the other hand, managers may come to regret hasty action that damages the reputation of the corporation with young technologists and professionals, a group who will be in short supply for the next two decades.

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There is an interval of indefinite and sometimes considerable length between the injection of stimulant, and the resulting speculation".

"Our overpriced stocks and real estate were bound to come down, and the degree of down is influenced by the degree of up, which means they descend from overvalued to undervalued. The boom had lifted securities and real estate far up and to this degree was to deepen further the slump by the downward swing".

Campaigning for re-election in 1932, Hoover was faced with perhaps the most hostile crowds any sitting president had ever faced. In addition to having his train and motorcades pelted with eggs and rotten fruit, he was often heckled while speaking, and on several occasions, the Secret Service halted attempts to kill Hoover by disgruntled citizens, including capturing one man nearing Hoover carrying sticks of dynamite, and another actually already having removed several spikes from the rails in front of the

SENIOR STAFF MOVES



Martin Staples has been appointed Regional Manager of the UK office effective 12 December 2008. Andy Robb will be returning to AMC's Perth office in January 2009 then moving to AMC's Melbourne office in mid 2009 as Principal Mining Engineer.

President's train. He lost the election to Franklin Roosevelt by a huge margin, winning only six out of 48 states.

Further Reading:
http://en.wikipedia.org/wiki/Herbert_Hoover

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Merry Christmas



from AMC's Senior Management Team.



Paul Harper, General Manager

Paul has extensive underground mining experience covering a variety of mining methods both in Australia and South Africa. His experience includes broad operational and technical skills in production, development, contracting, and project evaluation.



Andrew Hall, Regional Manager Melbourne

Andrew's primary expertise is in business and operational analysis, strategic and operational planning, and technical assessment. He has experience in mine operations, mine planning, economic and financial evaluation, benchmarking studies and project management.



Peter Reynolds, Regional Manager Adelaide

Peter's primary expertise is in technical expert reporting, developing and managing feasibility studies and infrastructure projects, business improvement strategies, operations planning optimisation, change management, underground mine planning and evaluation and review of management systems and procedures. He has broad experience in most aspects of the mining industry.



Peter Cunningham, Regional Manager Perth

Peter's expertise in mine planning, technical evaluations, due diligence reviews and feasibility studies developed whilst working for major resource companies at operating mines in Broken Hill, in the corporate environment in Melbourne and in an in-house consulting role based in Perth. His exposure covers a wide range of mining methods, mine planning, capital projects and underground materials handling systems and infrastructure.



Tim McManus, Regional Manager Brisbane

Tim's primary expertise is in audit, due diligence and valuation studies gained from extensive experience in both operational and technical roles. His broad experience in the mining industry also includes resource and reserve estimation, strategic and economic analysis and project management.



Ron Willis, Regional Manager Coal & Energy

Ron's primary area of expertise is in coal mining, focussing on management and operations. His vast experience includes strategic planning, business development and change management, while his operational experience encompasses prefeasibility studies, contract management and technical evaluation.



Pat Stephenson, Regional Manager Vancouver

Pat's primary areas of expertise are Mineral Resource/Ore Reserve auditing and review, Resource/Reserve classification and reporting, metalliferous mining geology due diligence reviews, prospect evaluation, expert witness activities, valuation of exploration properties and preparation of Independent Consulting Geologists reports.



Martin Staples, Regional Manager UK

Martin's primary expertise is in the management of feasibility studies and in computer assisted mine planning for open pit and underground mines. His experience includes numerous feasibility studies, pit optimisation, mine design, scheduling, mine planning support to established operations as well as technical reviews of operations for corporate purposes.



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