RIO TINTO ENERGY

SUBMISSION TO THE INDUSTRY COMMISSION

THE AUSTRALIAN BLACK COAL INDUSTRY

"Killing the Goose"

The Urgent Need for Reform in Australia's Black Coal Industry

24 October 1997

PREFACE

Rio Tinto is the world's largest mining company and the second biggest black coal mining producer in Australia. In addition to coal, Rio Tinto owns and operates mines in Australia and internationally, producing copper, gold, iron ore, bauxite, diamonds and other minerals.

Rio Tinto Energy is the majority owner and manager of two black coal mines in Queensland (Blair Athol and Tarong) and four mines in the Hunter Valley region of New South Wales (Hunter Valley No. 1, Mount Thorley, Howick and Vickery). Rio Tinto Energy also has substantial coal mining interests outside Australia, primarily Indonesia and the United States.

In its mining operations, Rio Tinto has been very successful at improving performance by maximising the potential of its employees and capital assets. Hamersley Iron, for example, has recorded massive productivity and cost improvements since the early nineties. Commitment of Hamersley's management and workforce has brought about this success. Similar improvements have been made in Comalco's bauxite mining and smelting operations. These improvements have put Hamersley and Comalco in a strong position to deal with the competitive forces of the international marketplace.

Rio Tinto Energy's Australian coal operations have generally not performed to their potential.

Australia is fortunate to have world class black coal deposits, which are relatively close to ports, and to the growing Asian market. At Rio Tinto, we believe that the Australian coal industry is not performing to its full potential, and in danger of losing its pre-eminent position amongst world coal producers.

That a wide ranging inquiry into Australian black coal is being undertaken is, therefore, a timely and valuable opportunity to consider the fundamental performance of the industry and to evaluate what needs to be done to assure its future.

EXECUTIVE SUMMARY

Coal mining today is one of the bastions against modern work practices, a legacy of the heavy dependence of Australian industrial development on the uninterrupted supply of coal.

It has high cost structures. This is because coal mining has developed separately to the general mining sector, where restrictive work practices have been largely rooted out. The high costs in coal are a consequence of:

- poor work practices resulting in poor labour productivity and low utilisation of expensive equipment,
- over staffing and over capitalisation of mines,
- high employee benefits in terms of wages and leave entitlements compared to Australian hard rock mines, and
- the lack of competitiveness and absence of competition in rail and port services and infrastructure managed by State governments and their authorities.

Coal has a poor safety record, with the basis for its regulation firmly in the underground past. Little has been done to modernise safety regulation in line with the realities of safe open cut mining.

Notwithstanding its record, Australia is today the world's largest single source of seaborne traded coal.

There is a paradox in this: how can an industry be the world's pre-eminent coal trader with:

- 45 times Australia's average level of strikes,
- work practices which require up to an 80% improvement in labour productivity to match comparable hard rock mining, and
- cost structures 60% higher than US coal mines?

If despite these deficiencies we continue to sell coal overseas, why should coal simply not continue on the paths it is on?

The paradox is not easy to explain. In the past, success, despite crippling inefficiency, was related to the absence of competitors and in any case, one way or another, we always got the coal to customers. The plentiful and well located coal resources in Australia and the ease with which they could be won is another explanation. But, that was before the competition became as fierce as it is now.

Of much greater importance is the fact that market conditions are undergoing dramatic change as a result of:

- pricing arrangements based on the spot market,

- continual pressure on coal prices,
- an emergence of new, low cost, highly competitive producers, and
- electricity industry deregulation in Australia and overseas.

The consequences of each of these developments is the same: Australian coal producers will have to reduce their costs and become more productive.

That requirement will have to be met all the way along the coal supply chain. The policies and practices of suppliers of inputs to the coal industry, the behaviour of coal producers themselves and of their employees and their unions, the competitiveness of government providers of rail and port services and the policy as well as the provisions of governing legislation will need to be aligned with and responsive to the demands of customers and cognisant of the activities of competitors.

In the past, the interests vested in Australian coal wasted resources and coal still prospered. In the future, those involved will have to change their ways dramatically for coal to prosper. A key requirement will be to ensure coal producers have sufficient discretion to realise every cost saving and make every productivity improvement. This will require amendments to industrial laws to ensure coal producers are not prevented from implementing work practice and other changes in accordance with the awards and agreements which apply to them.

A facilitative legislative path will have to be found to overcome the discriminatory practices, such as seniority, which are at the heart of many poor work practices.

The Federal and State governments will need to continue and accelerate the spread of competition and competitive principles to rail and ports services.

Safety laws need modernising on a duty of care model, distinguishing open cut and underground coal mining with the aim of mainstreaming the regulation of safety in open cut coal mining. All industry stakeholders should work cooperatively to improve mine safety. Coal should be broadly mainstreamed by removing institutional arrangements which give it special treatment.

These reform requirements will be facilitated if a Federal government minister were to have political responsibility for coal reform; and if, in NSW where the coal industry performs worst, reform were led, sponsored and nurtured at head of government level.

CONTENTS

Table of Appendices

PUBLIC DOCUMENTS
Available from: Ian Head, Manager, Media and Communications
Rio Tinto Services Ltd.
36th Floor, 55 Collins Street,
Melbourne 3000
phone (03) 9283 3620

1. "The Scope of Productivity Improvement In Australia's Black Coal Industry",*Tasman Asia Pacific*, October 1997

2. Wooden, M, Robertson F and Cernaz R, "Coal Industry Awards and Agreements and the Implications for Work Practices and Working Conditions", Working Paper Series 141,*National Institute of Labour Studies,* November 1996

3. Wooden, M and Robertson F, "Employee Relations Indicators: Coal Mining and other Industries Compared", Working Paper Series 143,*National Institute of Labour Studies,* June 1997

4. Easson M, Creighton B, Rogers V, Sharad T, Whittaker B, "Regulation of Occupational Health and Safety in the Australian Black Coal Industry - Examination of Open Cut Regulation",*Coors, Chambers, Westgarth,* April 1997

5. "Economics Monitor, 'Mining Blues' "*Access Economics,* August 1997

6. Statement by Neil Turvey, Manager Vickery Mine to AIRC re: Vickery Dispute, October 1995

7. Decision 217/96 by the AIRC disallowing an application by the CFMEU to obstruct movement of employees by management between production, engineering and servicing duties at Hunter Valley No. 1 mine.

8. Decision 3/1991 by the Newcastle Local Coal Authority, and decision 2/1991 of the Coal Industry Tribunal, preventing management at Hunter Valley No.1 mine from staggering meal breaks in all but exigent circumstances.

9. Proposal for the second phase report - "Regulation of Occupational Health and Safety in the Black Coal Industry", Sections 1,2,3,4 - Corrs, Chambers, Westgarth, May 1997

10. "Assessment of the Occupational Health and Safety Impact of 8.5 and 12 Hour Shifts at the Vickery Coal Mine", Section - "Summary of key findings from other 12 hour shift sites", Australian Centre for Industrial Relations Research and Training, 1997

FORTHCOMING REPORTS AND CONFIDENTIAL INFORMATION
"IN CONFIDENCE" COPY SUPPLIED TO INDUSTRY COMMISSION

11. Easson M, Creighton B, Sharad T, "Regulation of Occupational Health and Safety in the Australian Black Coal Industry - Examination of Work Related Injury Data",*Coors, Chambers, Westgarth, October 1997*

12. Wooden, M, Robertson F," Determinants of Work-Related Injuries: An Inter-Industry Approach",*National Institute of Labour Studies,* August 1997

13. 1997 "A Profile of Mining Employees", *Australian Centre for Industrial Relations Research and Training,* September 1997

14. Watson G, "The Impact Of The Workplace Relations Act 1996 On The Rio Tinto Hunter Valley No. 1 Coal Mine Dispute - Speaking Notes"*Freehill Hollingdale & Page, Sept* 1997

Chapter 1 How the industry performs

Introduction

The starting point for any reform agenda for Australian black coal mining is to understand the productivity performance of the industry, and the major factors affecting that performance.

To do that, Rio Tinto commissioned Tasman Asia Pacific to undertake an exhaustive benchmarking study to document the productivity performance in Australian open cut black coal mines.

Performance of mines

Tasman Asia Pacific are specialists in such performance measurement studies. They were asked to compare the performance of Australian black coal mines against international counterparts and, importantly, against domestic hard rock (metalliferous) mines.

An analysis was undertaken of 27 open cut mine operations in Australia, the United States and Asia. A number of measures of mine performance was developed, the principal one being mine total factor productivity. This measures total mine output per unit of mine inputs used. Total factor productivity is explained further in section 2.3 of the benchmarking report (Appendix 1: "The Scope of Productivity Improvement In Australia's Black Coal Industry"). The study examined the performance of truck and shovel operations and dragline operations in the 1995 - 1996 year.

The study found that performance of open cut black coal mines in Australia is very poor by comparison with hard rock open cut mining in Australia and by international best practice standards. This poor performance is attributed to poor labour productivity, high costs, and equipment overcapitalisation. Queensland coal mining performance is generally poor with the exception of some dragline operations. NSW open cut coal mining, however, performs significantly worse than each mine sector examined on nearly all measures.

Differing geological factors are often claimed to be a major reason for differing performances of mines. Past benchmarking studies have been criticised on the basis that they failed to adequately account for such differences. The benchmarking analysis reported here sought information about geological characteristics of mines. The effect of factors like rock hardness and seam thickness on the digging and loading components of the mining cycle were considered. However, the analysis showed that geological factors had a relatively minor impact on overall mine productivity. Of much greater significance were the operational factors associated with the labour force and truck fleet.

1.1 Truck and Shovel operations

Tasman Asia Pacific studied 17 open cut truck and shovel operations in NSW, Queensland, the USA and Asia in order to rank performance. Their work revealed the following:

- NSW black coal mines needed to increase productivity by 48 per cent on average to match performance achieved in Australian hard rock mines and 37 per cent to match performance in US black coal mines.

- Queensland coal mines needed to increase productivity by 34 per cent on average to match Australian hard rock mines and 24 per cent to match US black coal mines.

- The poor productivity performance of the truck and shovel operations in Australian black coal mines can be traced to poor labour productivity and poor performance of the truck fleets.

- The high cost of production in Australia is a result of poor productivity combined with high labour costs.

These results are shown graphically in figure 1.1a and 1.1b

Fig 1.1a Productivity of truck and shovel mine operations, 1996

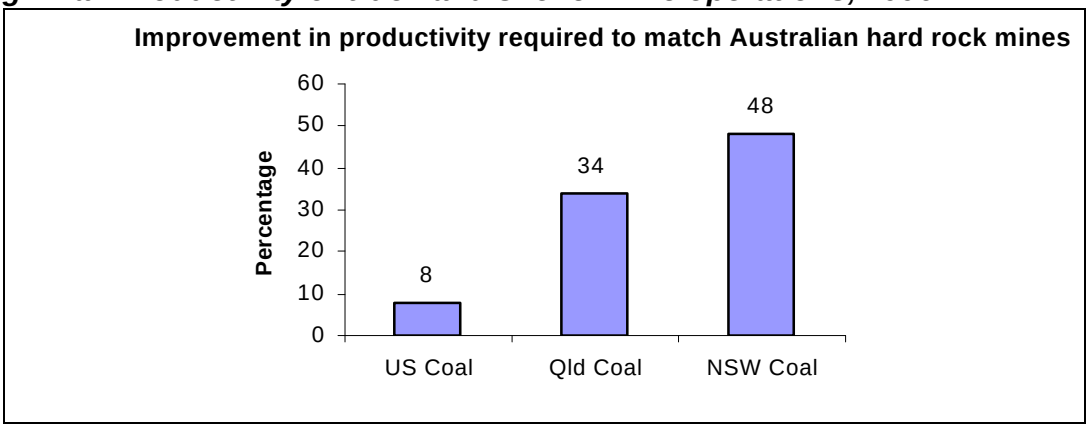
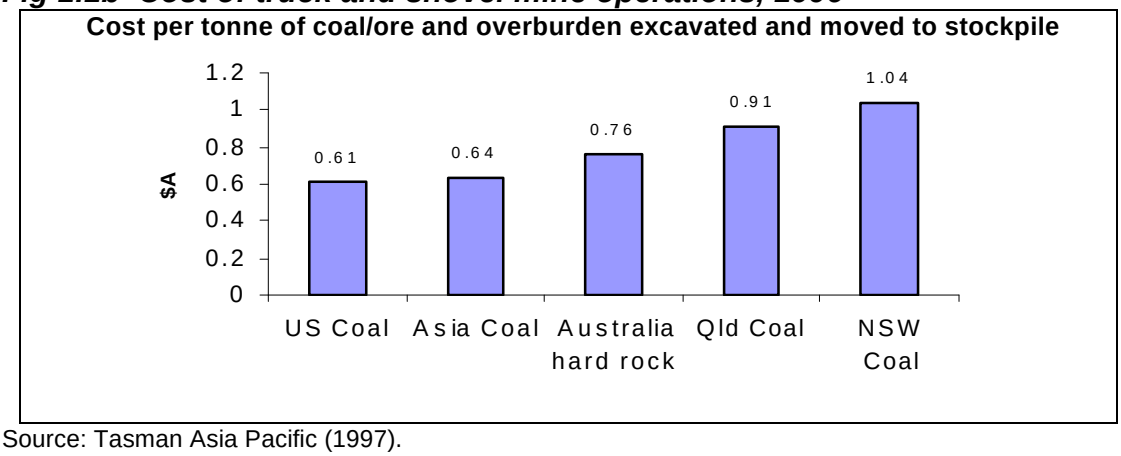


Fig 1.1b Cost of truck and shovel mine operations, 1996



Source: Tasman Asia Pacific (1997).

Poor labour productivity

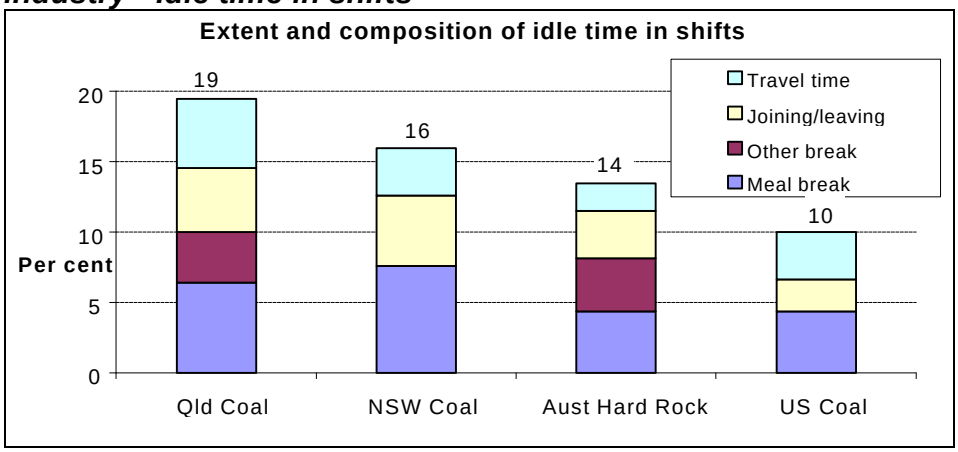
Average labour productivity in NSW coal needed to increase by around 80 and 70 per cent to match the performance of domestic hard rock mines and US coal mines, respectively. Queensland mines needed a corresponding 40 and 30 per cent increase.

Australian coal mines studied had 35 percent more idle time recorded than Australian hard rock mines and almost double the level of idle time in the United States coal mines. In addition many Australian open cut coal mines studied were overstaffed as indicated by very high hours worked per hour of machine operation. As labour costs account for around 35 per cent of estimated mine operating costs (excluding materials and overheads), poor labour productivity is a major contributor to the overall poor productivity performance of the Australian truck and shovel mines studied.

A major cause of labour productivity is the limitation of work-at-face time in an average shift. All shifts schedule time for travel time to and from the work area, meal breaks and other breaks. The greater the extent of this idle time, the lower the amount of actual work time and the lower the productivity of labour.

Figure 1.2a shows that Queensland and NSW black coal mines had the highest amount of idle time, or lowest amount of work time, per average shift of all mine categories examined. This explains a large portion of the difference in labour productivity performance compared to the US black coal mines.

Figure 1.2a : Causes of poor labour productivity in Australia's black coal industry - Idle time in shifts



Source: Tasman Asia Pacific (1997).

For a hypothetical 8 hour shift, the Australian black coal mine employee works approximately 6.5 hours compared to their counterparts in the Australian hard rock industry who work 6.9 hours.

This represents 24 minutes additional idle time per employee, per shift, every working day of the year.

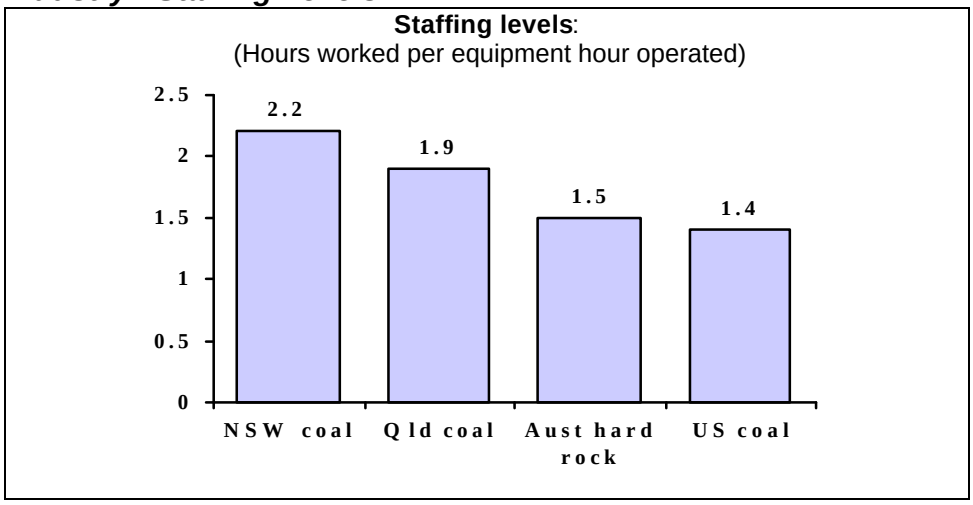
Applying this to 1995/96 coal industry production and employment (194 million tonnes from around 25,000 employees), over 11 million tonnes of lost production is due to idle time, amounting to more product coal than Australia's largest mine (Pacific Coal's Blair Athol Mine) produced in the same year.

The main reasons for the additional idle time in shifts for Queensland and NSW black coal mines were the time taken in joining and leaving shifts together with the travel to and from the mine face. Meal breaks were also longer, on average, in Australian coal mines compared with US coal mines and domestic hard rock mines.

Shift arrangements also cause an increase in idle time in the Australian black coal mines. NSW and Queensland coal mines operate more shifts than Australian hard rock mines and US coal mines surveyed. These latter mines operate almost entirely on 12 hour shifts, twice daily, year round. In contrast, NSW and Queensland coal mines have higher proportions of 8 hour shifts, 3 per day, either 5 or 7 days per week. The higher the number of shifts, the greater the number of shift changes and the more time lost in leaving and joining (including travel time). Of course, it may be that, in some cases, shorter shifts are more business effective overall than longer shifts.

Overstaffing also contributes to poor labour productivity and is especially apparent in comparisons of hours worked per hours equipment is operated. The results (figure 1.2b) show that NSW and Queensland black coal mines employ the equivalent of 2.2 and 1.9 employees per item of core production equipment. This compares unfavourably with the corresponding figures of 1.5 and 1.4 employees in Australian hard rock and US black coal open cut mines.

Figure 1.2b : Causes of poor labour productivity in Australia's black coal industry - Staffing Levels



Source: Tasman Asia Pacific (1997).

In other words, Australian open cut black coal mines employ about 3 people for every 2 employed in Australian hard rock mines and US black coal mines.

Poor performance of truck fleets

The benchmarking study showed significant deficiencies in the performance of Australian coal mines' truck fleets when compared with Australian hard rock and US coal mines. The under-performance was observed in the following ways:

- poor utilisation of truck fleets
- excessive numbers of trucks
- low rates of work (through low average truck speeds)

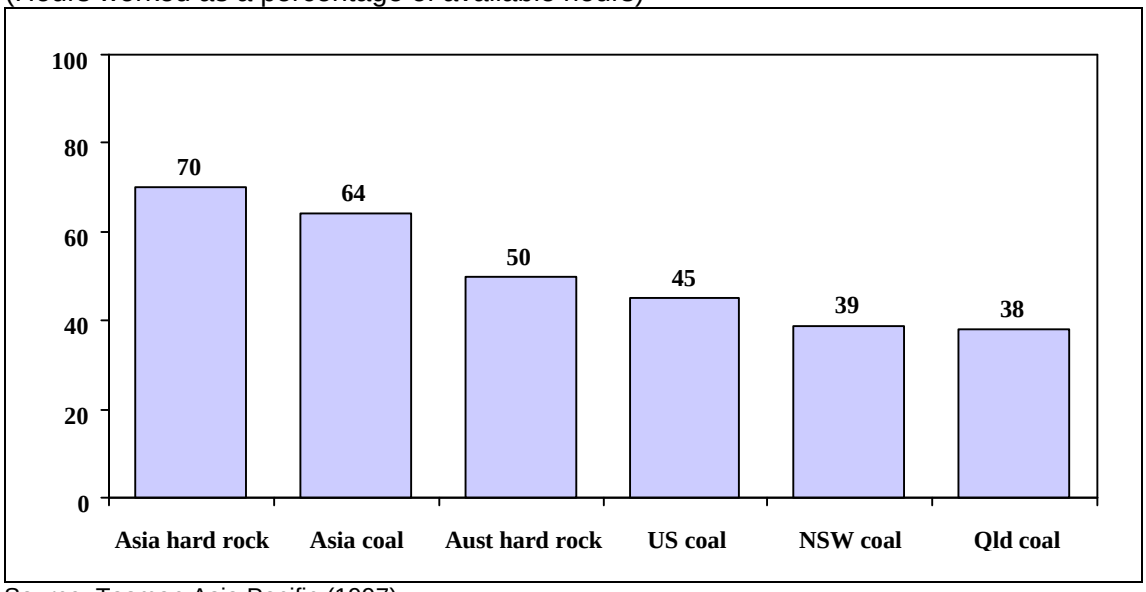
Poor truck utilisation

The number of hours trucks are hauling materials as a percentage of available hours is an important factor influencing productivity. As shown in Figure 1.3, average truck utilisation was very low in the participating Queensland and NSW coal mines.

The utilisation of trucks in Australian hard rock mines was 34 and 28 per cent greater, on average, than in Queensland and NSW coal mines, respectively.

The primary reason for low truck utilisation is the high degree of idle time in Australian black coal mines' truck fleets. Fleet size and rates of work, together with effectiveness of truck maintenance, are also important factors related to truck utilisation.

Figure 1.3: Truck utilisation in truck and shovel operations: 1996,
(Hours worked as a percentage of available hours)



Source: Tasman Asia Pacific (1997).

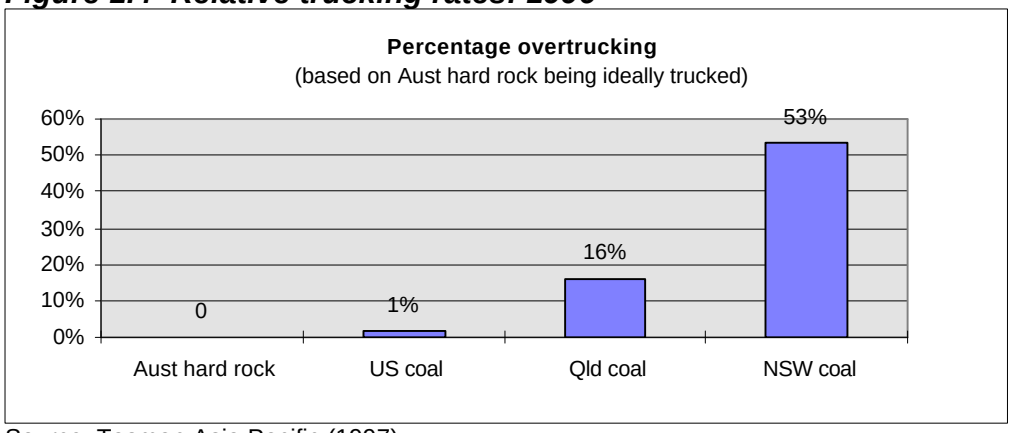
Too much equipment

Excessive numbers of trucks are required for Australian coal mines to achieve a similar output compared to Australian hard rock and US coal mines.

Australian black coal mines are over-capitalised to the extent that NSW mines have 53 per cent more installed truck capacity to do the same work as Australian hard rock mines. Queensland black coal mines are over-capitalised to a lesser

extent having 16 per cent more installed truck capacity. US coal mine trucking rates were similar to Australian hard rock mine rates as shown in figure 1.4.

Figure 1.4 Relative trucking rates: 1996



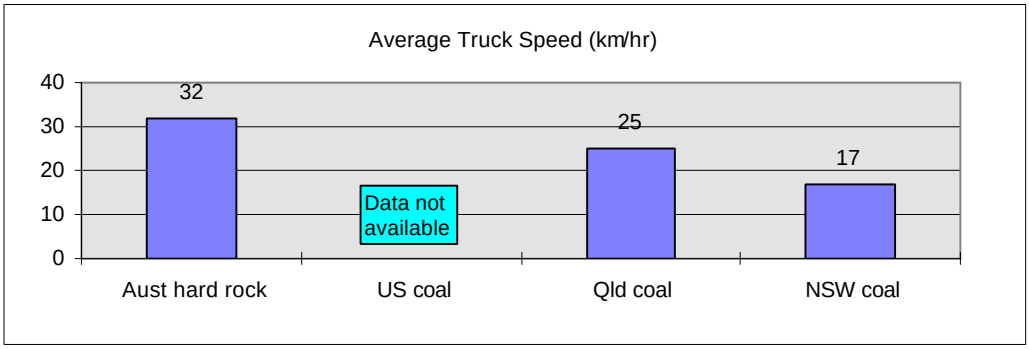
Source: Tasman Asia Pacific (1997).

The extent of overcapitalisation suggests that the Australian black coal industry has focussed on achieving production because it has not been able to achieve productivity. Unable to overcome the barriers to productivity, mines have misallocated further resources by buying extra equipment to achieve tonnage.

Low rates of work

Average truck speed is calculated by dividing the number of kilometres travelled by trucks by the reported number of hours they were operated. The latter includes many systemic delays, some due to potentially inefficient work practices, such as queuing for loaders, waiting for graders to complete road maintenance, waiting for loaders to be fuelled, travelling to and from crib huts and so on. While truck speeds reported may not be an accurate measure of the speed when the truck is moving, they give an excellent relative measure of how well the different categories of mines keep their trucks utilised. It is also an indirect measure of the level of over-trucking, as the correlation between figures 1.4 and 1.5 show.

Figure 1.5 Average truck travel speed in open cut mines



Source: Tasman Asia Pacific (1997).

Again NSW mines show up as the worst performer. A plausible explanation for apparent over trucking and the low average truck speeds is:

- **poor labour productivity, and**
- **the traditionally strong focus on production, not productivity.**

The consequences are:

- efforts to maintain production levels which result in high accumulated costs, and
- capital wastage, when management opts to purchase increased equipment, which fails to meet production expectations because it is poorly utilised.

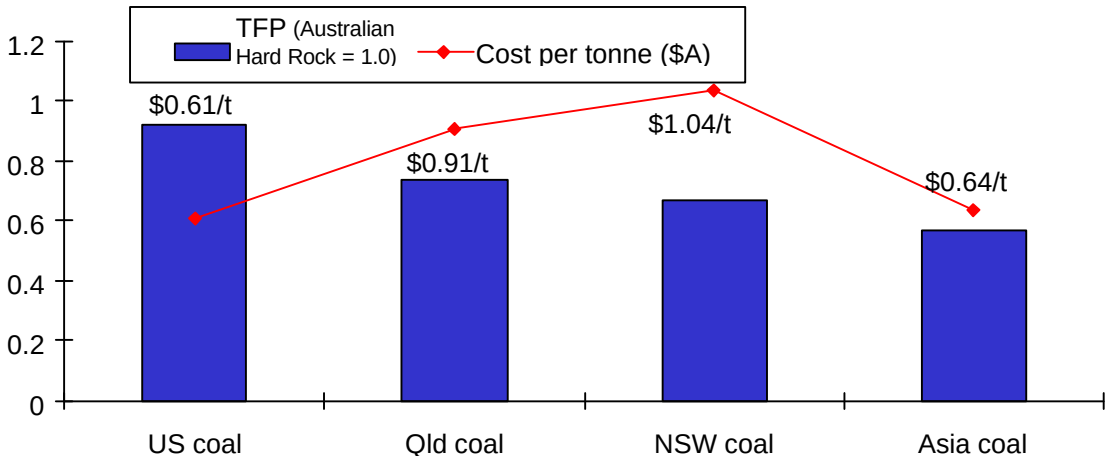
The link between productivity and costs

Improved productivity is important for the coal industry because it leads to lower costs, improved competitiveness and hence a basis for increased exports. As shown in Figure 1.6, the productivity advantages enjoyed by US mines (37 and 24 percent higher than NSW and Queensland respectively), contribute significantly to their much lower costs per tonne ($0.61 in US coal, verses $0.91 in Queensland and $1.04 in NSW).

Figure 1.6 also shows the substantial cost advantage held by the Asian coal mines over the NSW and Queensland coal mines (63 percent and 41 percent respectively). This is primarily a result of lower wage structures in Asia mines.

The Asian coal producers were marginally higher cost than the average US coal producers.

Figure 1.6: Total factor productivity and cost per tonne, truck and shovel operations: Australian and US coal operations, 1996



Source: Tasman Asia Pacific (1997).

These data highlight the urgent need for NSW and Queensland black coal mines to improve their productivity to compete against the emerging, low cost Asian coal producers.

High wage costs despite poor labour productivity

Despite significantly lower productivity, workers in NSW and Queensland black coal mines are paid significantly more than their counterparts in domestic hard rock mines and US coal mines. As shown in Figure 1.7, the cost per face hour worked was 64 and 66 per cent higher, on average, in NSW black coal mines than US black coal mines and Australian hard rock mines, respectively. Conversely, the labour productivity of US coal mines and Australian hard rock mines was 68 and 80 per cent higher than the average for NSW coal mines.

Recently, the National Institute of Labour Studies[1] (NILS 2) (Appendix 3) found that average hourly earnings for full time non-managerial males in the coal mining industry are the highest in the nation. For example in May 1995 the average in coal was $30.25 per hour compared with a metalliferous mining sector rate of $22.77 per hour and an all industry average of $17.06 per hour.

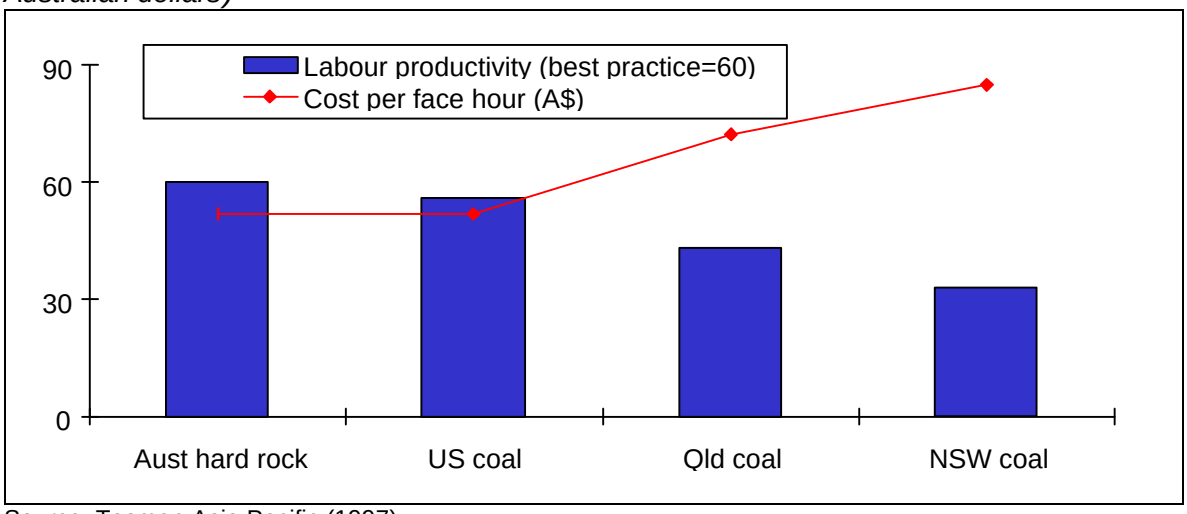
In efficient enterprises such wage rates can be sustained. But in enterprises with already poor labour productivity, over-capitalisation and over-staffing, such high rates lead inexorably to the very poor cost performance evident in the Australian open cut black coal industry.

Furthermore, NSW cost structures are significantly higher than Queensland cost structures. In addition to the greater level of overstaffing in NSW, a proportion of the difference is related to the employee rosters worked in NSW. The 5 panel roster which is generally worked in NSW requires 29% more employees to do the same amount of work as the 4 panel roster in Queensland. This has a further effect on costs.

[1] Wooden, M and Robertson, F (June 1997), 'Employee Relations Indicators: Coal Mining and other Industries Compared' *National Institute of Labour Studies - Working Paper Series No. 143*

Figure 1.7: Labour productivity and costs in truck and shovel operations 1996

(Indexed labour productivity with Australian hard rock set at 60 and cost per face hour in Australian dollars)



Source: Tasman Asia Pacific (1997).

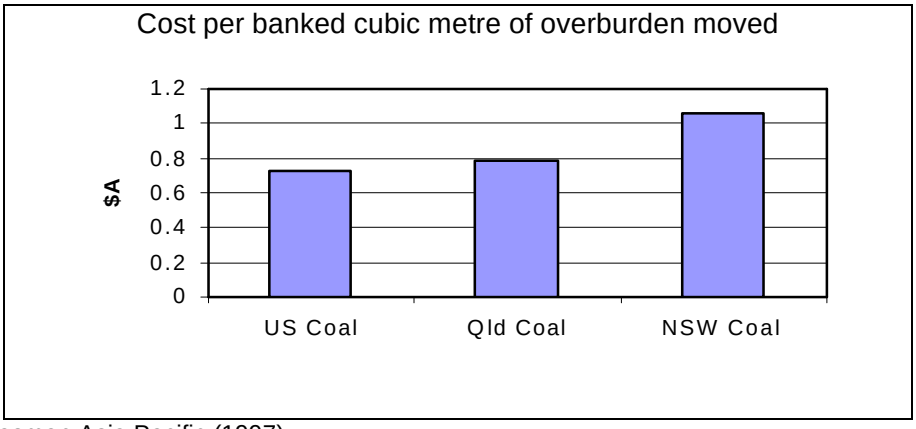
1.2 Dragline Operations

Queensland mines achieved best practice dragline mine productivity. Despite this good productivity, performance of Queensland dragline operations is more costly than their US counterparts due to the high relative cost of Australian labour. Total costs of removing overburden in Queensland mines were 8 per cent higher than in participating US mines (Figure 1.8a), even though productivity was 20 per cent higher in Queensland (Figure 1.8b).

Productivity in NSW dragline operations is very poor when compared to their Queensland and US counterparts. This poor productivity, combined with higher costs make NSW dragline operations the least competitive on a $ per cubic metre basis.

The benchmarking study showed NSW and US producers needed to improve total productivity by 36 and 20 per cent respectively to match Queensland performance (Figure 1.8b).

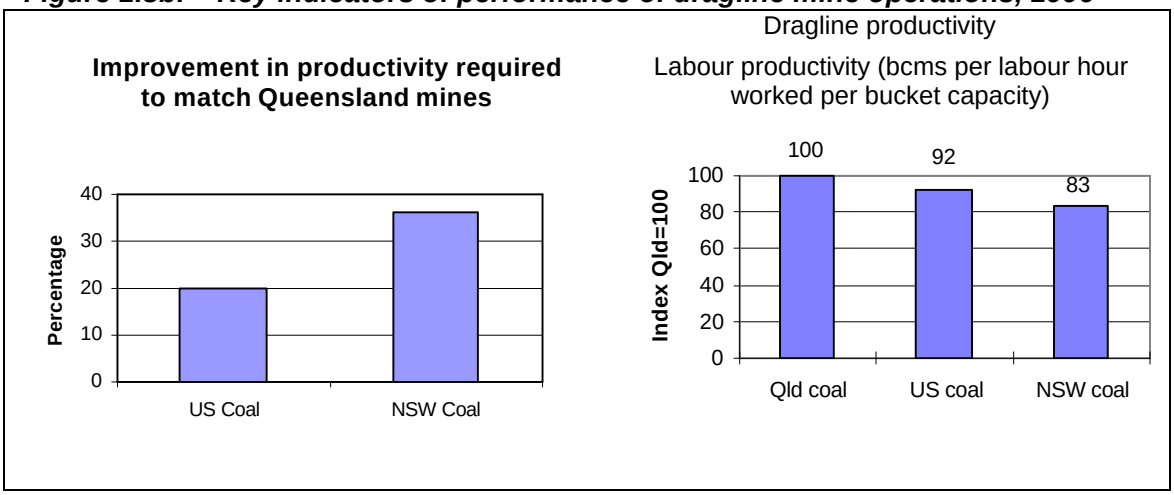
Figure 1.8a: Key indicators of performance of dragline mine operations, 1996 - Cost per bank cubic metre



Source: Tasman Asia Pacific (1997).

The good performance of Queensland dragline operations stemmed largely from high dragline and labour productivity. High dragline productivity resulted from both relatively high utilisation – operating the dragline more hours per year than the NSW and US mines, on average – and effective operation.

Figure 1.8b: Key indicators of performance of dragline mine operations, 1996



Source: Tasman Asia Pacific (1997).

The very poor performance of NSW draglines was primarily related to the draglines working fewer hours per year and less effectively when they were being used. However, the operating conditions of the NSW mines also limited their productivity. In particular, significantly harder materials, such as a prevalence of sandstone conglomerates, required greater blasting and thus more explosives inputs than dragline operations in Queensland and the US. To a large extent the use of additional explosives, although increasing the cost to the operation, offsets the effect of geology on digging performance by ensuring that adequate fragmentation of rock is achieved in most types of material. Less than five of the 26 percentage points that NSW draglines lagged the performance of Queensland draglines were attributable to the geology.

1.3 Conclusions

With the exception of dragline performance in Queensland, productivity performance benchmarking of Australian open-cut coal mines identified endemic

poor performance. In the more labour intensive truck and shovel mines productivity was, on average, well below US practices and the performance of Australian hard rock mines. The main causes of the poor productivity were:

- low labour productivity,
- low efficiency of truck fleets, and
- over-staffing.

Low productivity and higher relative wages in Australian coal mines resulted in the cost-per-tonne of moving coal or overburden being significantly higher than US coal, Asian coal and Australian metalliferous mines. NSW costs exceeded these by 71, 63, and 37 percent respectively, and Queensland exceeded by 49, 41 and 19 percent respectively.

In Australian truck and shovel coal operations, improvements in productivity and cost reduction require the elimination of over-staffing and a substantial reduction in the amount of idle time in shifts.

In dragline operations, Queensland mines were found to be operating at best practice – with productivity around 20 per cent above selected US mines and 36 per cent above NSW mines. However, the cost-per-cubic metre of Queensland dragline operations was approximately 25% higher than US mines.

For Queensland dragline mines the improvement must focus on:

- containing and where possible reducing costs, and
- maintaining high and improving productivity.

For NSW dragline operations, improvement requires action to:

- improve operational productivity, through improved labour productivity,
- drastically reduce operational delays
- improved machine availability
- achieve major cost reductions.

In both truck and shovel and dragline operations, average productivity performance in NSW was well below that in Queensland.

The cost structures in all participating Australian coal mines were high relative to US levels and domestic hard rock mines. Reducing benefits to employees is not the most desirable way of reducing the cost of coal mining in Australia. If benefits are to be sustained and the Australian black coal industry is to improve its competitiveness, maintain its market share and provide a basis for expansion through new mine development, dramatic improvements in productivity are essential.

Chapter 2 Performance in the Market

2.1 Overview

Steaming coal has high growth prospects. Significant new supplies are likely to be required in the Asian region over the next 10 years. However, there is no shortage of additional capacity. Large reserves of coal close to the coast or existing infrastructure are relatively common in many regions of the world. Fierce competition to supply is expected to put pressure on coal price. The pressure upon coal mines to lower costs will be relentless and on-going. Only the most efficient will be profitable. High cost mines will continue to struggle.

In Australia, few companies are making adequate returns. This is due to Australia being a high cost location in which to produce coal when compared with the world cost curve. Many of the mines are in quartiles three and four from which it is extremely difficult to earn an adequate return. Productivity increases and cost reductions are not occurring at a fast enough pace to overcome this disadvantage.

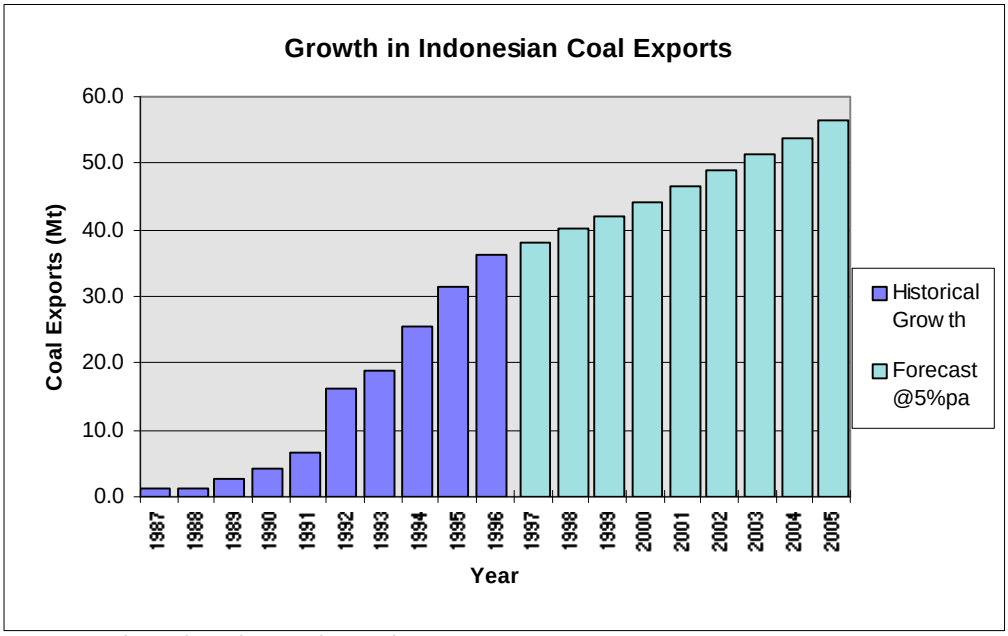
The coal market is changing. Customers have been increasing the quantities purchased under spot pricing and tender arrangements. The regulations governing electricity utilities in Australian and overseas are being dismantled, and pressure is being applied by governments for utilities to lower costs. Their main variable cost is the cost of coal. This situation will continue to put pressure on the benchmark pricing system.

The Japanese dominance in the market, however, is declining. KEPCO in South Korea and Taipower in Taiwan are the largest thermal coal buyers in the Asian region. Taipower initiated a system of tenders for long term Japanese parity pricing contracts incorporating a discount in the first year. KEPCO is now following this system. The quantities purchased by Independent Power Producers (IPPs) will increase significantly over the next ten years. The various changes in the market are leading to more competition and hence pressure on prices.

With large resources, a natural freight advantage to Asian markets, and proactive policies for development, volumes exported from Indonesia have grown strongly in the last decade.

Indonesia is forecast to increase its output by 5 percent per annum over the next 9 years from a current level of around 35Mtpa to more than 55Mtpa.

Figure 2.1 Growth in Indonesian Coal Exports



Source: Coal Supply Series - Barlow Jonker,

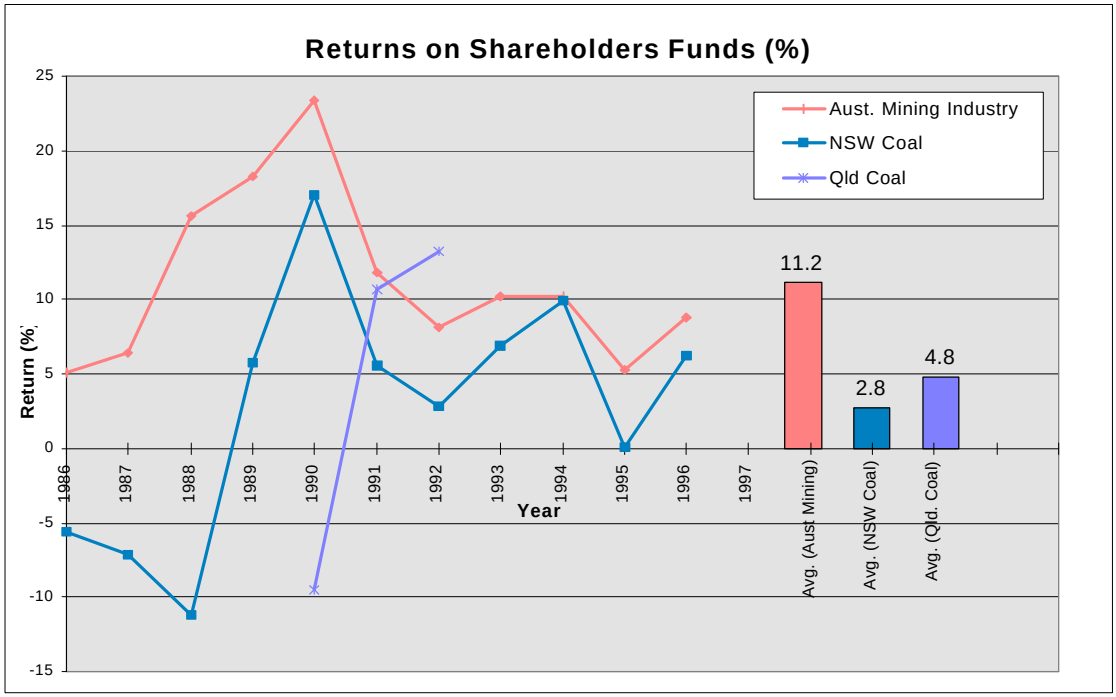
The strong growth of Indonesian supply is at the expense of Australian growth. Australian coal mines must lower their costs to survive in this environment, and to do this productivity must be increased.

2.2 Investment Performance

The market outlook represents a challenging environment for an industry where the returns on investment in Australia's black coal sector over the last ten years have been very poor. In NSW the average return on shareholders' funds has been 2.8 percent (figure 2.2). Queensland mines (though the figures are only available up until 1993) returned 4.8 percent. This compares with 11.2 percent for the whole Australian mining industry. Many shareholders in the Australian black coal industry would have been better off leaving their money in a bank.

The outlook for the world market in which Australian producers will have to compete, and the implications of that for Australian performance, are changing rapidly. Unless the coal producers respond adequately to those changes, the returns for the $11 billion worth of coal projects currently under construction or planning in Australia may not be sufficient to justify their realisation.

Figure 2.2: Return on Shareholders Funds: Australian mining industry



source: NSW Minerals Council - Coal Industry Survey 1995/96
Qld Mining Council - Coal Industry Survey 1992/93

2.3 Global Energy Perspective

World primary energy demand is forecast to grow at a rate of 1.5 per cent per annum between 1998 and 2000 and 1.9 per cent per annum between 2000 and 2010. In Asia, total primary energy demand is forecast to grow 4.4 per cent from 1998 to 2000 and 4.3 per cent from 2000 to 2010 [2].

Although some change in the composition of the global and Asian energy markets is forecast, with gas, oil and nuclear fuels increasing their market shares, black coal will retain a market share of around 50 per cent. Coal is positioned to maintain a steady share of the growing primary energy market, particularly in Asia.

2.4 Thermal Coal Demand

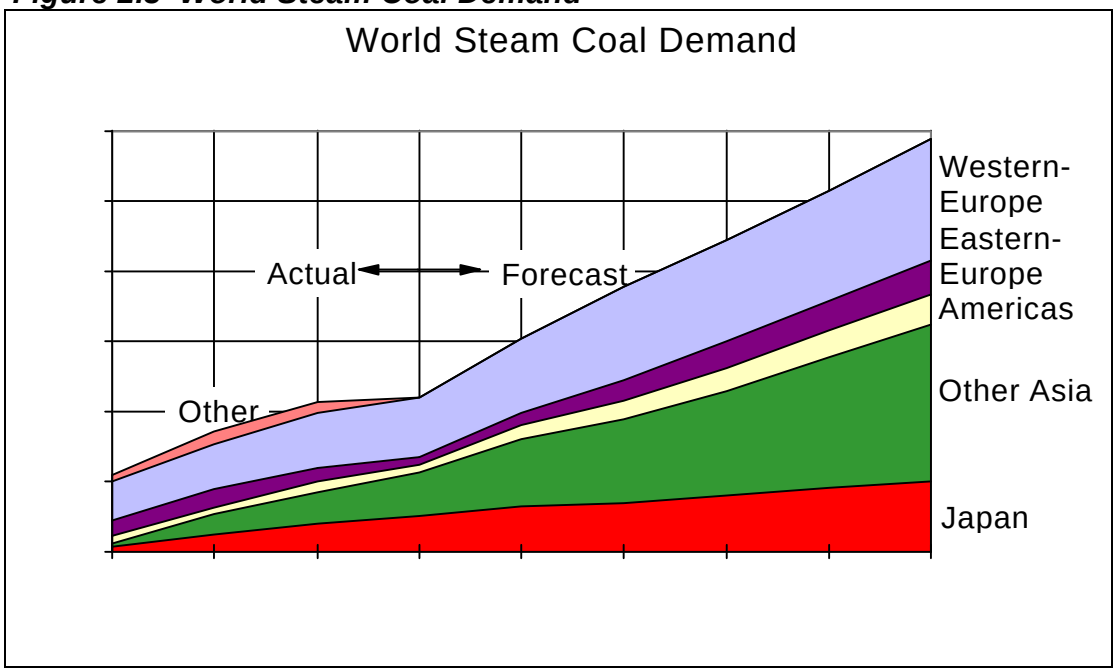
The world consumes over 3.5 billion tonnes of various types of coal each year. Historically, demand has grown at around 2 per cent per annum. Of this, approximately 54 per cent is used to supply power stations, 26 per cent for cement and industrial uses, 17 per cent in the steel industry and 3 per cent for household purposes. The traded market in 1995 comprised 260 mt of steaming coal and 200 mt of metallurgical coal, which is only 13 per cent of the total world demand for coal.

Steaming coal is a growth industry. Demand will grow significantly, particularly in Asia, in both the traded and domestic markets. Growth will be a function of the demand for power created by general economic growth and industry deregulation, such as that presently taking place in Germany and India. Moves to increasing

[2] Source: Rio Tinto Estimate

efficiency and better combustion technology may change the demand for coal. However, these developments are long-term in nature, and unlikely to affect the steaming coal market before 2010.

Figure 2.3 World Steam Coal Demand



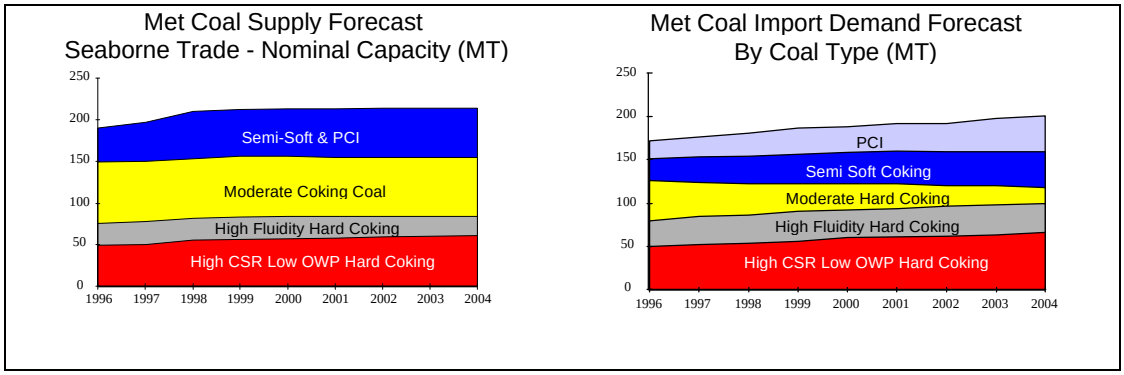
Australia and Indonesia, as the largest coal suppliers to Asia, will be uniquely placed to meet much of the growing demand for traded steaming coal. However in recent years Indonesian mines have captured most of this growth. The Indonesian advantage can only partially be explained by lower labour costs. In Indonesia equipment working time is typically 5600 hours per annum. In Australia equipment is typically working only 3400 hours per annum - an effective penalty on productivity of 39%[3]. If Australian mines are to capture their share of the growing market, they will need to compete more vigorously in an already competitive market.

2.5 Metallurgical Coal Demand

Segments of the high quality traded metallurgical coal market will also experience significant growth in demand. However, due to the small size of the market segments, the supply demand balance is much more volatile than in the steaming coal market.

Figure 2.4 World Metallurgical Supply and Demand Forecasts

[3] Rio Tinto Estimate



Source: BHP Australia Coal, Sept 1996

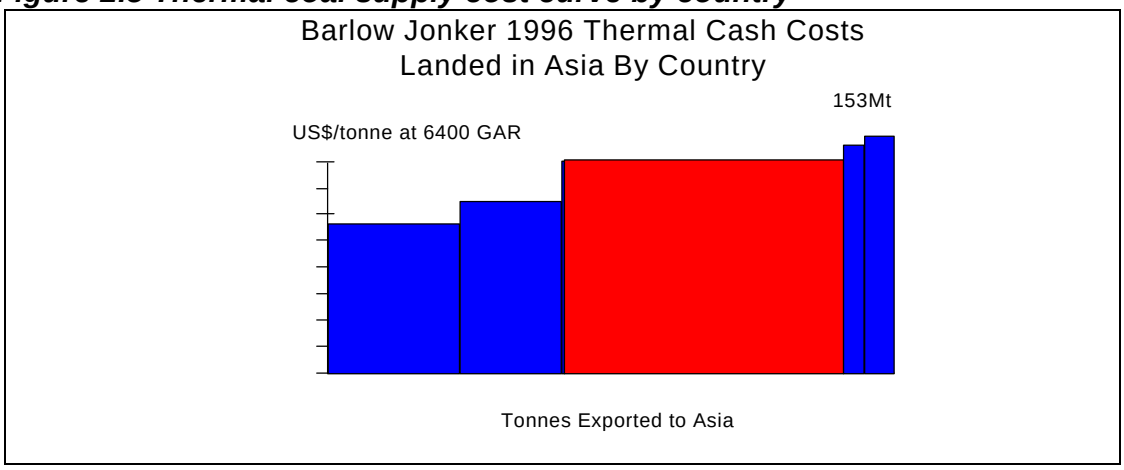
The demand for high quality coking coals with specific coking properties (high CSR, low oven wall temperature) will grow, as will the demand for semi-soft and PCI coals. Some existing and yet to be developed Australian mines will benefit from this. The demand for high fluidity hard coking coals will be relatively constant. However, the demand for moderate quality coking coals will decline. This in turn will force some lower quality semi-soft coals, such as those from the Hunter Valley, back into the steaming coal market. These changes will put pressure on the prices in each market segment.

2.6 Supply and Price Setting

Coal is common in the geological record and there will be no physical shortage in the foreseeable future. Its price will therefore be determined by the cost of production of marginal producers.

A feature of the current market is the strong growth in supply which is pushing marginal producers up the cost curve. Additionally a number of producers have additional low cost incremental capacity which can be developed. In particular the United States, with relatively low forecast increases in domestic demand, and huge production capacity, may swing more production into exports.

Figure 2.5 Thermal coal supply cost curve by country



Currently, the Hunter Valley, as the region of marginal production into Asia, is influential in setting prices. This is likely to continue even after significant productivity improvements are achieved thereby lowering and flattening the

industry cost curve. Thus, third and fourth quartile Hunter Valley cost curve producers are likely to remain fourth quartile Asian producers. These operations will be continual loss makers.

The steaming coal industry, particularly in Australia, is entering a period of substantial rationalisation. Exxon and Arco have announced their intention to exit Australian coal. Smaller operators have to date shown interest in purchasing these operations, and have been more successful than larger owners in introducing reforms which have ensured survival of the mines. Of course, this does not create the environment for growth, which will require additional investment in rail and port infrastructure. It is only by a step change in productivity that a positive investment environment can be created which will allow Australia to capture its share of the growth in the market.

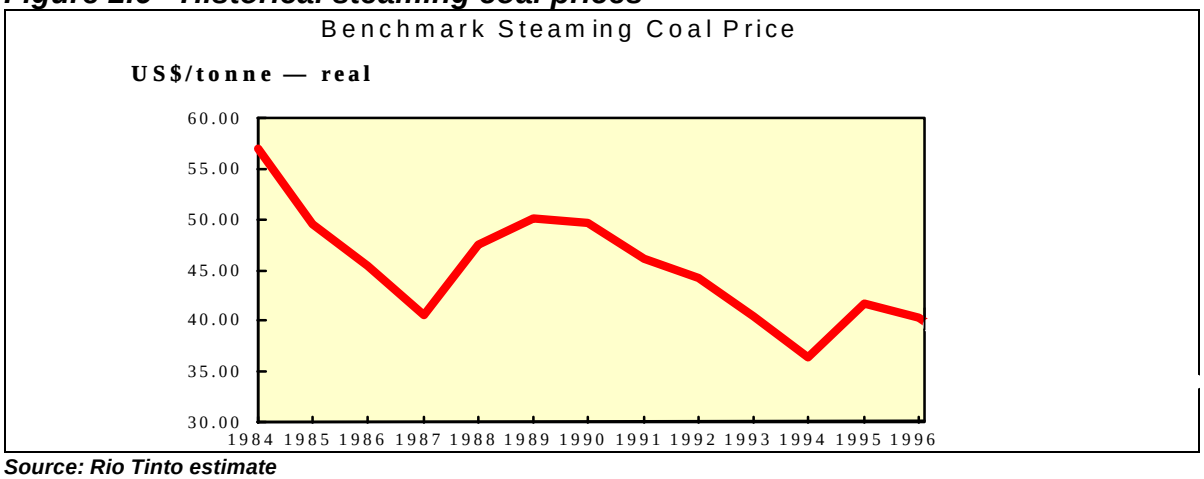
Achieving higher volume has been a key strategy of established producers to lower unit costs. This is a legitimate response but has fuelled past price declines. However new projects remain available for development despite this pressure, and there is no alternative but to compete on this basis.

2.7 Export Markets Pricing Mechanisms

The Japanese benchmark price system is the dominant process for price setting in steaming coal and involves long-term contracts for volume with annual price negotiations between key participants. The aim of benchmark pricing is to encourage economically realistic stable prices and certainty of supply.

There has been a marked increase in spot buying activity from the Japanese power utilities. This is in response to low spot prices, and has been to some extent underwritten by higher priced contract sales. This is currently driving changes in the price setting process.

Figure 2.6 - Historical steaming coal prices



Source: Rio Tinto estimate

The deregulation of the Japanese power utility industry has been announced by the Japanese Government, which has commenced cost audits of Japanese utilities. Similar developments are occurring elsewhere in Asia. Given this pressure upon utilities to lower power charges, and the high proportion of their

variable costs made up of coal, a strong commitment to reducing coal prices has been evident among buyers of Australian coal (Figure 2.6).

The benchmark price, while probably continuing to be for set some years to come, is becoming less relevant. In its place spot price sales are increasing, and futures trading is being planned by the Sydney Futures exchange. This may serve to improve the transparency of the market, and may moderate the extent to which producers are prepared to sell marginal tonnes at spot prices.

The unintended consequences of Japanese benchmark pricing for steaming coal, particularly in Australia, are an inefficient coal industry, a higher and flatter industry cost curve and probably reduced security of supply. The pricing system has produced inefficiencies because:

- it has reduced the incentive and ability of coal management to take measure to improve productivity and reduce costs.
- relatively high and stable prices have bolstered union opposition to change and increased union ability to extract concessions from coal producers.
- State governments have been able to charge above market rail freight and other infrastructure charges.

The competitive environment will be increasingly translated into pressure on prices. These pressures already explain attempts by coal producers to improve productivity and reduce costs, and have some important implications for employee relations (see chapter 4).

2.8 Domestic Markets Pricing Mechanisms

Mines which supply domestic power stations are also being subjected to new forces of competition. As a result of the Hilmer reforms in Australia, competition has been introduced to the power utility system. This has led to lower power prices. The most efficient power generators achieve full utilisation, and the higher cost producers will struggle. With coal forming a large part of the variable cost of producing power, this has placed extreme pressure upon the supplying coal mine to lower the cost of the fuel.

Impact of Deregulation on Domestic Coal Supply

The electricity industry in Victoria, New South Wales and Queensland commenced a process of deregulation some years ago.

In Victoria, the State Electricity Commission was disaggregated into a number of generating organisations, a transmission organisation and a number of distribution organisations. Most of the generating and distribution organisations have been corporatised and sold. A competitive market for power has been created and all power generated is sold either to distributors or to customers through a pool. In New South Wales and Queensland, comparable processes are being explored.

In New South Wales, Pacific Power has been disaggregated and the resulting organisations have been corporatised and power is sold competitively through a pool. The final step of privatising these organisations has not yet been accepted by the New South Wales Government.

In Queensland, the Queensland Electricity Commission (now called AUSTA Electric) has been disaggregated and the resulting organisations corporatised (Three generators: Tarong Energy Corporation, CS Energy, Stanwell Energy Corp, an engineering arm: Austa Engineering, and a distribution organisation called Powerlink). Power will shortly be sold competitively through a pool. There are no plans at this stage to privatise the various organisations.

The Victorian and New South Wales pools have been linked through the National Electricity Market and Queensland will participate when a physical connection is established between Queensland and New South Wales.

Prior to these changes, the electricity industry was highly regulated. Electricity tariffs were set at levels necessary to cover costs and produce a profit. Industry costs included the cost of coal, which in New South Wales and Queensland was mainly purchased under long term contracts with a base price and escalation provisions.

Following the establishment of a competitive electricity market, electricity prices are set through a competitive bidding process and have reduced significantly. This is having an impact in New South Wales where generators are responding by seeking to change the terms upon which they purchase coal to provide lower prices, more flexibility, fewer long term contracts and more short term purchases. For the coal producers, this is directing more pressure on prices. A similar impact is expected in Queensland.

In both New South Wales and Queensland, the amount of power sold by a power station will depend directly on its marginal cost of generation, a large part of which is the cost of fuel. The price of coal will have a direct short term impact on the amount of power sold and, therefore, coal consumed.

Therefore all Australian coal mines will be subjected to increasing competitive pressure, and that pressure to reduce costs will be universal across the coal industry. For the first time, the interests of Australian coal exporters and domestic producers will be aligned through productivity improvement, cost reduction and new investment on the basis of competitiveness.

2.9 Employment implications of market change

Australian coal output has almost doubled during the period 1983-84 to 1995-96, yet coal mining employment using labour force survey data has fallen by 27% from 33,280 to around 24,000[4] during the same period. Output per worker has risen from 3,889 tonnes per year in 1983-84 to slightly over 10,000 tonnes per year in

[4] The mining census data which is based on company returns also shows falls in employment, but at a slightly slower rate than the decline in the labour force survey data which uses the industry of work nominated by individuals.

1995-96. This reflects the switch to more capital intensive open cut mines, closure of underground mines, as well as trend improvements in productivity. Despite rapidly rising output and exports, coal industry employment has been falling given the need to remain competitive with alternative suppliers and fuels.

ABARE has predicted[5] world trade in steaming coal will rise by 106 million tonnes from 1996 to 2002 and world trade in coking coal will rise by 47 million tonnes.

An ABARE survey[6] identifies 16 million tonnes of coal that could be produced from committed new projects in Australia and another 16 million tonnes from committed expansions. A further 48 million tonnes is identified as still in planning stages. The September 1997 Delta Electricity and Access Economics *Investment Monitor*[7] identifies Australian coal projects with capacity of 26 million tonnes that are committed or under construction and coal projects with a further 79 million tonnes of capacity that are in planning. The total cost of these projects would be $10.6 billion. The *Investment Monitor* data on these new projects suggests around 400 new jobs will be created in operations for every 10 million tonnes of coal produced annually by open cut mines; and 850 new operating jobs for every 10 million tonnes of output produced annually from underground mines. Previous experience shows that not all of these projects will proceed and some will replace declining output from existing mines (which often have higher employment).

The ABARE study identifies definite coal projects with 25 million tonnes of capacity outside Australia and projects in planning outside Australia with 106.8 million tonnes of capacity. Given these possible increases in world capacity exceed the estimated growth in world demand, there will be competition between coal projects within Australia and against overseas coal projects as to which projects proceed.

The ABARE study estimates Australian coal exports will rise by 5% per year from 1997 to 2002 or from 150 million tonnes to 192 million tonnes. Whether that forecast proves accurate will depend on the competitiveness of the Australian industry as well as the actual growth in world demand.

The history of the coal industry suggests that quite rapid growth in coal exports is not likely to prevent continued declines in overall employment. Even though new jobs will be created in new mines, some mines will close and there will be improvements in efficiency at existing mines as they attempt to become more competitive.

The question, therefore, is; can Australian black coal respond to market changes so that growth in exports support increases in employment to even partially offset the employment declines which are expected to occur?

2.10 Conclusions and implications

[5] ABARE "Outlook for Australian coal supply" by Simon Middleton and Paul Graham, ABARE Conference Paper 97.8, March 1997.
[6] ABARE "Australian Coal Supply" by Simon Middleton and Paul Graham, "Australian Commodities", June quarter 1997.
[7] "Economics Monitor, 'Mining Blues' "*Access Economics,* August 1997. Appendix 5

Several features of the future market for coal stand out:

- continuing growth in demand for coal, especially in Asia, combined with the emergence of new, low cost producers to meet that demand
- the high possibility of continuing pressure on export and domestic prices for coal.

Even as this submission is being prepared, the face of the Asian market is dramatically changing. The economic upheaval occurring in Asia is likely to lower the growth forecasts and energy requirements in the region, and increase the need for these countries to earn hard currency through exports like coal. The affect on the Australian black coal industry will be:

- forecast growth in coal exports to Asia may not be realised, and
- increasing competition in the coal markets is likely to accelerate.

The speed at which these changes have occurred has sent shock waves through regional and global economies. The only producers likely to succeed in these dynamic markets are those which are quick to change, and those who can supply the required coal competitively and continue to do so over time.

This implies either lower cost structures, higher productivity or both. The benchmarking study in Chapter 1 has shown that either or both of these requirements are lacking for most Australian coal producers. Employment in coal is likely to continue to fall under any scenario but will be more at risk if Australian producers do not address those issues.

Chapter 3 The Performance of Governments

Governments influence the performance of the coal industry in many ways. Two of the most important influences are:

- government enterprises providing services to the industry,
- government regulations, especially in relation to safety and industrial relations.

This chapter is mainly concerned with government enterprises (primarily rail and ports) and safety, which are largely State Government responsibilities. Industrial relations is dealt with in Chapter 4.

3.1 Government services and charges are not responsive to competitive forces.

State government charges are not generally responsive to competitive forces. They tend to be based on a fee-for-service for use of the various government owned infrastructure monopolies, or royalties calculated on a dollars-per-tonne basis or as a percentage of the $/tonne "mine-gate" selling price.

Accordingly, coal producers are squeezed between price pressures emanating from their markets and governments charges which are not responding to these market developments. Government policy and practice with respect to coal is already arguably out of alignment with the industry's competitive needs. The changing nature of the market is exacerbating that lack of alignment.

Some of the ways in which lack of responsiveness in government charges affect coal producers are examined in this chapter.

3.2 NSW Rail

NSW has an extensive network of railways transporting coal from mines to ports or to domestic customers. This network has been developed as a multi-service system, providing freight services to coal mines, grain producers and general freight, as well as passenger services. The network services the Hunter, Lithgow and Illawarra regions and several more isolated mines in the Mudgee, Gloucester and Gunnedah regions. The Hunter railway network (which includes the Gunnedah and Mudgee sectors) is by far the largest, in terms of tonnage, with 51Mt of the total NSW production of 88.6Mt being transported via the Hunter rail service.

On 1 July 1996, the NSW government corporatised the NSW rail industry by dividing the State Rail Authority into discrete entities. The entities included Rail Access Corporation (RAC), which owns the tracks, land, signalling equipment and other fixed infrastructure, and Freightcorp, which owns and operates the freight rolling stock. The government established the "NSW Rail Access Regime" [8] that

[8] NSW Government Gazette No. 97,*NSW Rail Access Regime,* August 1996

allows private companies to compete with Freightcorp, and places an upper limit on the rate of return on assets of the Rail Access Corporation.

Problems with Rail Access charges

(i) Cross subsidisation

The maximum rate of return on the RAC assets is 14 percent per annum over the entire NSW rail system. This broad rate of return is used to permit profitable parts of the network to cross-subsidise other, less profitable parts of the network. The pricing mechanism also discriminates between individual coal producing companies. The RAC effectively charges a rail access fee (between floor and ceiling limits) based on its estimates of producer's ability to pay.

This is neither a competitive nor a transparent approach because it subjects coal mine performance at least partly to government estimates of a mine's ability to pay rather than allowing mines to succeed on their own merit.

Such an approach discourages relatively high cost producers from addressing the real issues behind their high costs. As Chapter 1 shows, these issues are, in the main, about poor labour productivity, low truck efficiency and overstaffing. Cross subsidisation removes a potential catalyst for change in the industry - action by high transport cost producers to find other efficiencies to compensate for relatively high transport costs - leaving the industry less well encouraged overall to respond to changes in the market.

A transparent pricing system that passed on the cost of rail access on a "Full Distributed Costs" basis would be preferable. The gains from such an approach would be in the removal of higher costs from "subsidising" producers and potential efficiency gains from "subsidised" producers. The transparency, together with pricing based on competitive costs, would help ensure the monopolistic nature of rail access was not exploited.

(ii) Rate of return too high

The cap on rates of return should remain while rail access remains a natural monopoly. However, the 14 percent (nominal, post tax) defined by the NSW government is a very high rate of return for such a low-risk enterprise with high barriers to entry, and should be considered un-commercial. Comparable rates of return used in the gas and electricity regimes (also natural monopolies) are 7.5 and 9.5 percent (real, before tax) respectively. [9]

The rates of return should also be based on definable sectors of the rail network, not the whole network, because this encourages inefficient sectors to remain so, at the expense of efficient sectors that is, an argument similar to that above. The Hunter rail network, for example, should exist as a sector in its own right.

(iii) Coordination protocol needed for private rail providers

[9] "Application to National Competition Council for Declaration Recommendation: Hunter Railway Line Service" NSW Minerals Council, April 1997

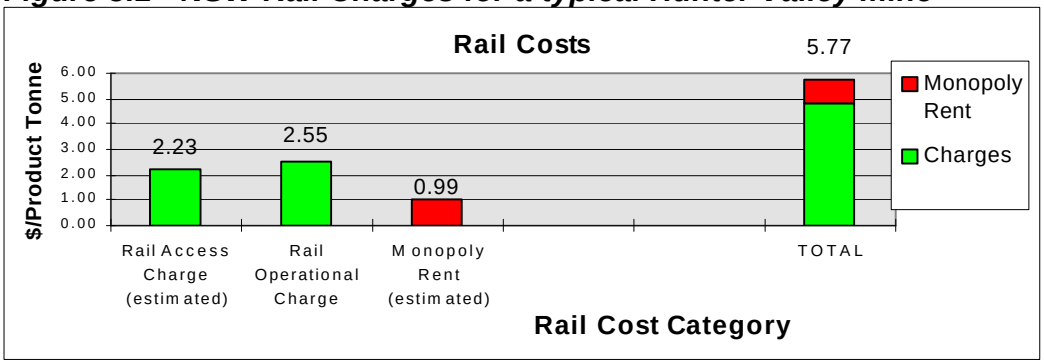
With the introduction of competing rail freight companies, there is a need for a comprehensive coordination protocol to ensure the smooth running of the rail system. Issues such as access for loading and unloading facilities, incentives for rail freight companies to maintain up-to-date rolling stock, and use of common facilities need to be addressed.

(iv) Monopoly rent in the rail access system

Rail access charges for many mines currently provide RAC a rate of return on assets above the 14 percent level. This excess is the "monopoly rent" which the NSW government has indicated will be phased out by the year 2000.

The representative rail costs for a mine in the Hunter Valley based on Rio Tinto estimates (figure 3.1) show that almost 20 percent of the cost of rail is monopoly rent.

Figure 3.1 - NSW Rail Charges for a typical Hunter Valley mine



Source: Rio Tinto estimate, 1996 charges

The most appropriate basis for comparison with other rail systems is to calculate the cost in cents per net tonne-kilometre (c/ntk) as shown in figure 3.2. The data shows that NSW costs are 40 percent higher than Queensland and 2.2 to 2.8 times best practice.

Figure 3.2 - Costs per Tonne-Kilometre - Coal Rail Freight

	NSW	QLD	Best Practice USA
Cost (cents per Tonne.kilometre)	**5.5**	**4**	**2.0-2.5**

Source: Rio Tinto estimate

Even with all monopoly rent removed the NSW rate of approximately 4.6 c/ntk is still an unfavourable comparison.

Conclusion

The introduction of private competition to Freightcorp represents the most promising means of encouraging competitive pricing. Rio Tinto believes the NSW Government should make the introduction of competition a priority. Rio Tinto also

recommends that the pricing policies of Rail Access Corporation be reviewed with the aim of implementing a transparent, fully distributed costs system.

Recommendation - NSW Rail

In relation to rail, the NSW State Government should:

Continue its work in rail reform, particularly through encouraging the introduction of competition and the elimination of monopoly rent.

Review the Rail Access Regime with a view to making charges more transparent, and returns more in line with commercial rates.

Undertake rigorous price and customer service benchmarking with other rail freight providers interstate and overseas, and subsequently, implement required changes to Freightcorp and the Rail Access Corporation to ensure they provide competitive pricing and customer service levels.

3.3 NSW Ports

The main coal port in NSW is the privately owned and run Port Waratah Coal Services (PWCS) at the Port of Newcastle. It is also the largest single coal port facility in Australia handling more than 55 Mtpa. PWCS is owned by a consortium of coal mining companies, including Coal and Allied, a Rio Tinto subsidiary.

In terms of cost per tonne PWCS is one of the least cost coal ports in the country at $3.65 per tonne. The average price in Australia is $4.13 per tonne. The PWCS price also compares favourably with indicative port costs from international competitors: for example: Indonesia $3.98, USA $3.90, South Africa $3.85.

In terms of its productivity PWCS also ranks as the best in Australia with a throughput of 169,800 tonnes/employee/year compared to the all Australian average of 138,700 tonnes/employee/year.

Problems with the Port Waratah facility

PWCS has a significant capacity problem. This has been particularly apparent throughout 1997 with large numbers of ships (sometimes 45 to 50) waiting outside the port of Newcastle for access to a loading terminal. This results in a demurrage bill to coal producers of over $US 2.00 per tonne. At current coal prices, this additional cost places enormous pressure on producers' margins.

The problem has three solutions which need to be applied:

1. Restructuring the system which allocates capacity from the "Common user - turn of arrival" system to one which guarantees users capacity.
2. Restructure the pricing mechanism for coal handling and loading from a flat rate for all services, to a "user-pays" system where producers who require more service, or induce operational inefficiencies at PWCS through slow coal delivery etc., pay a higher price.
3. Additional capacity through capital expansion, which is currently proceeding, and efficiency measures.

Government influence in implementing these reforms is limited. However in the case of the additional capacity, government can ensure that the legislative framework for statutory approvals and appeals is conducive to allowing properly planned projects to proceed in a timely manner. This has not been the case with the current $700 million stage 3 capacity expansion at PWCS which has been held up for almost 12 months.

In the capacity allocation and price restructure cases, the lease conditions on the state government land occupied by PWCS require unrestricted access to any party wishing to ship coal (common-user status). This lease condition would have to be altered to allocate port capacity to individual producers and charge different prices. As a natural monopoly, any changes to the access regime at PWCS would need to comply with the National Competition Policy.

Recommendation - Approvals Processes

In relation to ports, mines and other developments requiring extensive approvals processes all governments should:

Ensure that the legislative framework for statutory approvals and appeals is conducive to allowing properly planned projects to proceed in a timely manner to avoid loss of investment and market opportunities. Especially by ensuring that the guidelines for Environmental Impact Studies and other pre-construction approvals are sufficiently specific to allow all of the issues to be resolved during, not after the planning phase.

3.4 Queensland Rail

The Queensland coal rail network, like NSW, is a multi-service facility, providing freight services for industries other than coal. Queensland rail reform has not, however, been as substantial as that of NSW. The Queensland government corporatised Queensland Rail in July 1995. This brought about some slow change, but the system is still a long way from being commercially competitive.

zThe rail system has been, and to a large extent still is, a means of raising revenue for the state. Rail freight contracts signed in the 1980's have included a significant defacto royalty and have lacked transparency. All new contracts since 1992 have been on a 'strictly commercial' basis. This led to a lowering in rail freights, although the rates being applied to freight are still well above what is considered best practice. Queensland Rail freight charges are currently set well above best practice which is around 2.0 to 2.5 c/ntk. (Figure 3.2)

The Queensland Government also places uncommercial responsibilities on business enterprises like Queensland Rail. This results in the enterprises' charges being well above that which would give a fair commercial return to the owners. In many cases, customers of Queensland Rail have been required to make capital contributions to rolling stock and other infrastructure. This has not been fairly and adequately acknowledged by the government when determining the capital value of "their" asset.

Queensland Rail - A Natural Monopoly

Queensland Rail, being a state government monopoly, has sought to exploit this position while it can. During the implementation of the National Competition Policy, specific exclusion clauses for coal carrying rail facilities were inserted:

> *Section 78 of the Commonwealth Competition Policy Reform Act 1995 provides that, for the first 5 years of the operation of Part IIIA of the Trade Practice Act, a government coal-carrying service is* ***not*** *a service for the purposes of that Part IIIA.*

Being declared "not a service" for 5 years, the Queensland Government ensures that coal transport by rail can continue to engage in uncompetitive, monopolistic pricing until at least the year 2000. It should be noted that the NSW government has not followed the same path, but has allowed competition to proceed earlier.

Beyond the year 2000, the National Competition Policy offers the first real opportunity to create a competitive environment within the rail freight industry. However, an effective and transparent access regime needs to be formulated by the Queensland Government to allow private operators and Queensland Rail to compete for business fairly. Unlike NSW, Queensland has not set up a rail access authority (like RAC). The responsibility for producing the access framework remains with Queensland Rail - the same organisation that will be operating in competition to any independent rail company.

There is potential for the Queensland Government and Queensland Rail to do the minimum possible to comply with the NCP agreements. For instance, if a private company is interested in setting up in competition to Queensland Rail, it will need to know how much it is going to pay for access to the rail network. It is conceivable that the Queensland Government will not have a rail access regime in place until the year 2000. Then, subject to the regime being competitively priced and guaranteeing fair access, the private company has approximately two years lead time for the delivery of rolling stock. Thus it will be 2002 before any significant competition is seen in Queensland. In the meantime the global market for coal will be reshaping itself. Reforms to coal infrastructure in Queensland which could assist coal producers respond to that will not have taken place.

In summary, the Queensland Government must accelerate reforms in the rail industry and ensure that the spirit of the National Competition Policy is transferred into the industry. The natural monopolistic elements of the rail sector (primarily the "below-rail" components) need to be separated from the elements which can, and should be subject to private industry competition. A fair and competitive framework for rail access, and private rail operators need to be implemented as soon as possible.

Recommendation - Queensland Rail

The State Government should urgently introduce reforms to Queensland rail by:

separating the natural monopolistic elements of track ownership and access from the rail operation
creating an effective, fair and transparent Rail Access Regime that provides reasonable, commercial returns on investment to the government.
provide the opportunity for private access to the rail system thereby creating a competitive market.

3.5 Queensland Ports

Queensland ports unfortunately suffer a similar problem to Queensland Rail. The Ports Corporation of Queensland (PCQ) owns the main common user coal port at Hay Point and the coal handling facility of Dalrymple Bay Coal Terminal (DBCT). DBCT is operated privately by a consortium of mining companies.

In commercial terms the port is a natural monopoly for while other ports do exist, they are further away and would cause higher freight charges to make use of them. The state government has been using the port monopoly to raise revenue far above the cost of supplying the service. This excessive charging is not limited to DBCT as the table in Figure 3.4 shows.

Figure 3.4 Comparative Australian Coal Port Costs

	Queensland Ports			NSW Ports	
	Abbot Point Terminal	Dalrymple Bay Coal Terminal	Gladstone RG Tanna Terminal	Newcastle Port Waratah	Port Kembla Terminal
Port Authority Charges - State Charges(harbour dues)	$2.695	$2.404	$0.6298	$0.064	nil
Terminal Operator Charge (Coal Handling)	$1.25	$0.83	$2.00	$2.90	$4.10
User Capital Charge	$0.85	$0.85	nil	nil	nil
TOTAL USER CHARGES	**$4.75**	**$4.084**	**$2.629**	**$2.964**	**$4.10**
Total Other Charges eg. Towage, Pilotage, Navigation Service etc.	$1.67	$0.87	$0.8582	$0.69	$0.753
Total Cost / tonne	**$6.42**	**$4.95**	**$3.49**	**$3.65**	**$4.85**

Source: Pacific Coal

With the charges levied by PCQ on the users of DBCT, **the government has made a return on its investment of 46 percent per annum**[10]. This covers all its investments at the port and includes the expenditure on the stage 3 expansion. Given an asset base of around $500 million and with 32 million tonnes per year throughput, the capital charge should be around $1.70 per tonne. The current Special Harbour Due is $2.37 per tonne.

There have also been significant capital contributions by some of the users which currently attracts a reduced rate on some of their tonnage. For the allocated tonnage of these users, the capital charge should be around $1.20 per tonne.

[10] DBCT estimate

Other concerns which could affect the performance of DBCT are:

- The need for the state government to adequately consult with the management of DBCT prior to making decisions on capital expenditure. There are opportunities to avoid or better-allocate capital of which management may be aware.

- Ensure a consultative approach is used when considering changes to shipping regulation such as vessel survey requirements.

- Currently the coal shipping industry is paying for navigation facilities that it no longer uses. These costs should be borne by either the government as a service, or the users, who are primarily recreational boat owners.

In summary, the Queensland Government is using the DBCT as a generator of revenue far above reasonable commercial rates. The government, in effect, is engaging in uncompetitive monopolistic charging practices. The government must initiate reform of its charging practices, and install a system that is responsive to competitive forces.

Recommendation - Queensland Ports
The State Government should urgently reassess the charges imposed at Queensland coal ports with an imperative to providing a service at a competitive price, based on reasonable, commercial returns on investment to the government.

3.6 Infrastructure Investment

It is vital that infrastructure is planned to cater for planned volume growth, otherwise the viability of the complete industry will suffer; this is the case at present in Newcastle, where demurrage charges of up to US$2 per tonne are being incurred.

The role of State Governments, port authorities and rail authorities is, in the case of private industry investment to:

- ensure that the legislative framework for statutory approvals and appeals is conducive to allowing properly planned projects to proceed in a timely manner; especially by ensuring that the guidelines for Environmental Impact Studies and other pre-construction approvals are sufficiently specific to allow all of the issues to be resolved during, not after the planning phase, and
- provide input and advice to the planning process where government services interface with the proposed expansion.

In the case of capital expansion within government enterprises, State Governments and their authorities should:

- Seek advice from users (and sometimes operators) of the enterprise during the planning phase to gain an understanding of relevant issues for the users, and possibly some alternative strategies to improve the enterprise,
- keep users informed of changes to infrastructure, and
- ensure the capital expenditure is commercially justifiable, and charge reasonable commercial rates of return on capital expenditure.

Investment in new capacity must be planned, particularly in rail and port capacity. The latter is capital intensive, and requires large investments with long payback periods. Australian companies are unlikely to make these investments unless the industry is achieving reasonable returns. Without this infrastructure, the opportunity will naturally fall to competitive suppliers overseas.

All governments need to acknowledge the national importance of Australia's black coal industry, and the competitive market in which it operates. Governments charges should be responsive to these competitive forces to enable the industry maintain and enhance its global competitiveness.

3.7 Safety Regulation and Performance

Safety regulation in coal mines is the responsibility of state governments. Historically, the safety record of Australian coal mines, both open cut and underground, has not been good. Numerous studies have confirmed this, several of which have been undertaken in the last 12 months. These studies show an improvement in coal mining's safety record, but highlight significant shortcomings within the systems that regulate safety.

3.8 Safety Performance Data

Extensive analysis of work-related injury data by Corrs, Chambers, Westgarth (Corrs (2) - Appendix 11)[11] in a forthcoming study showed the following:

Fatality Data

- Data sourced from the Minerals Council of Australia (MCA) recording Fatal Injury Frequency Rate (FIFR) in the Australian black coal industry:
  - clearly distinguish the open cut and underground mining sectors;
  - rank the open cut coal sector below the open cut metalliferous sector and with an average FIFR less than one quarter of the underground

[11] Easson M, Creighton B, Sharad T, "Regulation of Occupational Health and Safety in the Australian Black Coal Industry - Examination of Work Related Injury Data",*Coors, Chambers, Westgarth (forthcoming)*

coal sector and less than one eighth of underground metalliferous sector;

- indicate that the underground coal sector FIFR is half of the underground metalliferous sector FIFR; and
- do not show a sustained reduction in FIFR for any sector over 1987/88 to 1995/96;

- Data were also sourced from the National Occupational Health and Safety Commission ("Worksafe"). This was compiled from information supplied by State and Territory workers' compensation authorities. The Worksafe FIFR data in the Australian black coal industry:
  - are not directly comparable to MCA data, preventing accurate quantitative benchmarking of mining industry sectors;
  - are not broken down to allow comparison between coal mining industry sectors;
  - suggest that the underground coal FIFR is much greater than a comparable All Industry figure, although this cannot be precisely quantified; and
  - suggest that the open cut Coal FIFR may be less than that of a number of ASIC (Australian Standard Industrial Classification) industry groups.
- MCA sourced United States data:
  - suggest the same order of ranking between FIFRs in the open cut and underground coal and metalliferous sectors as the MCA data.

It has also been suggested that the pattern of underground coal fatalities may be distinguished from other industry sectors by a higher rate of incidents resulting in multiple fatalities.

Lost Time Injury Data

Available Lost Time injury data produce the following results:

- MCA sourced LTIFR data:
  - clearly distinguish the open cut and underground coal mining sectors;
  - do not show the clear distinction between open cut coal mining and underground metalliferous mining seen with the FIFR data;
  - rank the open cut coal sector higher than the open cut metalliferous sector and underground metalliferous sector, but much lower than the underground coal sector; and
  - show a considerable reduction in the LTIFRs for all sectors from 1987/88 to 1995/96;
- MCA sourced duration rate and severity rate data:
  - do not show a sustained reduction in the duration of time off work for LTIs over the period 1992/93 to 1995/96;

  - rank sectors according to their average duration rates from shortest to longest as: open cut metalliferous, underground metalliferous and underground coal, then open cut coal;
  - rank sectors according to their average severity rates (days lost per million hours worked) from lowest to highest: open cut metalliferous, underground metalliferous, open cut coal, underground coal; and
  - suggest a distinction between open cut coal and the metalliferous sectors, and between underground coal and all other sectors;

- National Data Set for Compensation based Statistics (NDS) sourced LTIFR data:
  - are not directly comparable to MCA data thereby preventing accurate benchmarking across industry sectors;
  - are not broken down to allow comparison between open cut and underground coal mining; and
  - indicate that the Mining ASIC group rates considerably worse than the All Industry group, and above most other ASIC industry groups;
- the limited NDS sourced duration rate data located in the course of this study:
  - indicate that the Coal ASIC subgroup has a considerably shorter average duration of absence than All Industries and the other ASIC industry groups considered (however this is not reflected in the MCA data);
- NDS sourced severity rate data calculated for just one year:
  - suggest that on a measure that captures both frequency and duration of occurrences, the Coal ASIC subgroup may not rank as poorly against All Industries and other industry groups as the LTIFR suggests;
- US data considered in this study:
  - are not directly comparable to the Australian data, but are interesting in that on a measure of frequency of non-fatal injuries causing lost time or restricted work activity for US industry sectors, they rank open cut coal lowest in contrast to the Australian data, but rank underground coal significantly higher than all other mining sectors as in the Australian data.
- New South Wales workers' compensation data analysed in the Victorian Institute of Safety and Health (VIOSH) study:
  - suggest that underground coal mining has a greater proportion of less severe lost time injuries than open cut black coal mining.

3.9 Analysis of Inter-Industry Safety Data

A forthcoming study by NILS (NILS 3 - Appendix 12) [12] has sought to explain why worker's compensation claims (as a proxy for workplace injuries) vary across industries and why the frequency of compensation claims is so high in coal mining. The study found that the difference in the rate of compensation claims between industries was explained by:

- fatality rates
- the incidence of shift working
- the proportion of blue-collar workers in the industry
- the level of paid overtime
- the proportion of workers over 55
- the level of employee influence, and
- the length of occupational experience,

all of which were associated with higher rates of claims. The proportion of employees working more than 48 hours per week was associated with lower claims.

The study found several contributing factors that explain 85% of the higher rate of worker's compensation claims in coal mining. These factors are:

- A workforce with a long average occupational experience (12.2 years compared with an all-industry mean of 8.8). This could be because:

  (i) experienced workers are more likely to lodge a claim after an injury due to greater knowledge of the compensation system and perceived job security, and

  (ii) experienced workers are more likely to breach safety rules and regulations by substituting their own informal safety rules.

- A high incidence of shift working (59 percent of coal mining workers were estimated to work shifts in August 1993 compared with just 18 percent of the total employee workforce). Relevant observations from this factor were:

  (i) working shifts was found to be associated with high rates of injury claims. However, there were not (the expected) obvious relationships with either shift length or working night shift. This suggests the answers cannot be found by isolating shift work alone, and that further research is required.

  (ii) The working of 12 hour shifts did not increase injury rate. This factor is consistent with the findings of an assessment by ACIRRT [13] which found that the "impact on incident and accident rates seemed to be minimal".

- high levels of paid overtime (6.4 hours per worker per week compared with an all industry average of 3.1 hours). The study noted that the short standard working week in the coal industry (35 hours), and high overtime premia

[12] 1997, Wooden and Robertson, "Determinants of Work related Injuries - An Inter-industry Analysis", *National Institute of Labour Studies,* August 1997, Study based on analysis of compensation claims for a three year period 1991-92 to 1993-4.

[13] 1997 "Assessment of the Occupational Health and Safety Impact of 8.5 and 12 Hour Shifts at the Vickery Coal Mine", *Australian Centre for Industrial Relations Research and Training* , p2. Appendix 10

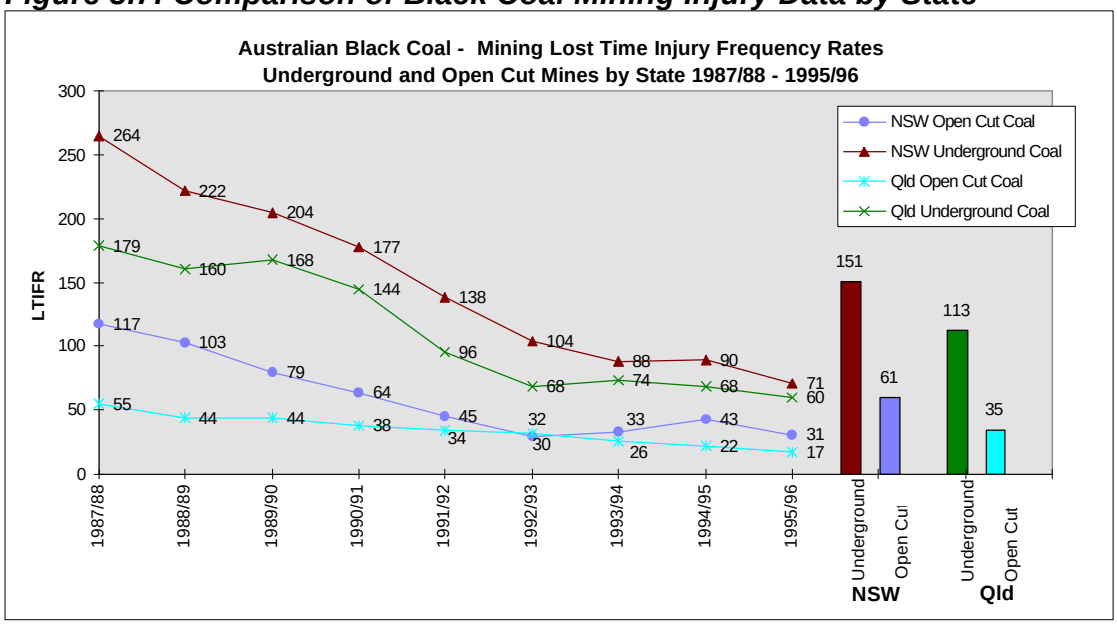
encouraged workers to seek high levels of overtime. This may expose them to injuries associated with fatigue due to not working a regular shift pattern.

NILS (3) notes that "the evidence suggests that very little of the higher rate of claims in coal mining is the result of work in coal mines being inherently more hazardous than other industries, though this conclusion clearly applies with much more force to open cut operations than it does to underground."

Differences between NSW and Queensland

Figure 3.7 shows a consistently higher injury rate in NSW mines when compared to Queensland for both open cut and underground mines. In 1995/96, NSW open cuts had an injury rate 82% higher than Queensland, and in underground mines, NSW was 18% higher.

Figure 3.7: Comparison of Black Coal Mining Injury Data by State



Source: Corrs Chambers Westgarth (1997),

To date, no substantial research has been done into why this difference exists.

Conclusions from Injury Data

Corrs (2) found a significant volume of information available on work-related injury in Australia and overseas. However, their study concluded it was difficult to use these data in an effective manner, either in terms of ascertaining the nature and causes of injury, or in developing strategies to deal with them. This was largely due to the fact that the data are collected and analysed for widely different purposes by a range of different organisations and agencies.

What can be concluded from the data is:

- There is a clear distinction between safety performance in open cut mines and underground mines in Australian black coal; with underground mines being three to four times worse than open cuts in terms of injury and fatality rates.
- Safety performance in Australian black coal mines is poor by comparable local and international standards. This suggests that there is significant room for improvement.
- NSW mines generally perform worse than Queensland mines, but the reasons why are not clear.
- Some of the major reasons for the poor safety performance in coal may be associated with some characteristics of the coal workforce and some of its work practices.

3.10 How is Safety Regulated in Australian Open Cut Coal Mines?

Another recent study by Corrs Chambers, Westgarth (Corrs (1) - Appendix 4) [14] found that in NSW and Queensland there is a substantial volume of occupational health and safety (OHS) regulation relating to coal mining. The regulators have attempted to identify and deal with mine hazards through detailed, highly prescriptive rules governing the way in which mine operations are carried out.

Corrs (1) concluded that the prescriptive basis for these regulations had been established during the 19th and early 20th centuries when the coal mining industry was largely based on underground mining. In the general pattern of the time, governments laid down prescriptive standards. This often occurred in a piecemeal manner over an extended period of time as technological advancements and information on disaster prevention became available, and were appended to the regulation.

When open cut mining developed in the mid 20th century, the perceived need for specific regulation of open cut mines resulted in both NSW and Queensland producing regulations that were similar, and often "paired" to those of underground coal mines. With some exceptions, the two regimes have tended to develop in tandem ever since.

Part of the prescriptive regime in both states involves the appointment of union elected "Check Inspectors" and "District Check Inspectors" who have statutory powers under the various legislation. The employees in those roles face a tremendous conflict of interest between their union allegiance and appropriate safety performance.

A recent example of this conflict occurred in August 1996 at the Blair Athol Mine in central Queensland when the CFMEU disrupted the commencement of manufacturer-provided equipment training by use of the Check Inspector's statutory powers. Training was stopped by the Check Inspector making an entry concerning the safety of the training process in the mine's Record Book. The

[14] 1997, Rogers, Sharard, Whittaker, "Regulation of Occupational Health and Safety in the Australian Black Coal Industry - Examination of Open-Cut Regulation",*Corrs, Chambers Westgarth, April 1997*

Department of Minerals Inspectorate has confirmed that this was an improper use of these powers.

Criticism of the Prescriptive Approach

Corrs (1) notes that in the metalliferous mining industry there has been a tendency to move away from highly prescriptive legislation to one of performance based standards and "Duty of Care" principles. This has come about in NSW under the *Metalliferous Mining Regulation 1995.* There is a general trend for adoption of performance type OHS standards following the report of the Committee on Safety and Health at Work ("Robens Committee") established in the United Kingdom in 1970.

A key finding of the Robens Committee was that there were severe practical limits to the extent to which workplace health and safety could be achieved through negative regulation by external agencies. The Robens Committee identified four key factors that characterised the OHS regulatory regime in the UK at the time:

- there was an uncoordinated proliferation of statutory standards;
- there was excessive complexity in many of the standards;
- the system failed to keep pace with new technology, social and economic change; and
- there was a failure to formally and consistently involve employers and workers.

Parallels can be drawn with Australian black coal mining safety legislation; as the Corrs (1) study noted:

> *It is clear in both New South Wales and Queensland that the regulatory regime which applies to open-cut coal mining consists largely of an adaptation of that which applied to underground coal mining at the time the perceived need for specific regulation for open-cut mining first arose. With some exceptions, the two regimes have tended to develop in tandem ever since. There appears to have been little reliance upon metalliferous mining as a source of regulatory standards - especially in New South Wales. This pattern of development suggests that there has never been any systematic and objective evaluation of the most appropriate regime for open-cut coal mining in either jurisdiction.*

An Industry Commission inquiry[15] into workplace OHS supported the findings of the Robens committee and subsequently recommended that:

"Australian Governments should provide the necessary leadership and support by reforming their policies on OHS. In essence they should:

- *streamline but strengthen regulation* with fewer but simpler rules;
- *allow greater flexibility* for workplaces to manage injury and disease;
- *beef up enforcement* of key legal responsibilities
- *strengthen financial incentives* for safer workplaces;
- *overhaul co-operation arrangements* between Australian Governments;
- *provide greater contestability and transparency* in research funding; and
- *make OHS agencies more accountable* for their performance."

[15] 1995, "Work, Health and Safety - Inquiry into Occupational Health and Safety'*Industry Commission,* September

To summarise, improvement is the safety performance of coal mining requires cooperative efforts by all the stakeholders in the industry and action on a number of fronts to improve the regulatory framework.

Recommendations - Safety Regulation

Notwithstanding the current data problem, there is a case for general reform of safety regulation, and a basis for a future preventative strategy built around the following:

Safety laws regulating coal mining should be modernised in accordance with several key considerations:

a) a best practice model based on performance standards, a duty of care and credibility and presence in enforcement regimes,

b) a distinction between open cut and underground coal mining as a basis for broad safety preventative strategies; state governments should consciously begin to draw this distinction now and use it as a basis for developing future regulatory administrative and enforcement activity,

c) over time, the mainstreaming of safety regulation for open cut mining, that is, removing distinctions between the regulation of open cut coal and open cut hard rock mining.

d) the removal of the supervisory role that union officers have under some aspects of safety regulation.

e) safety law governing mining should require mechanisms to be established which enable non-managerial employees to be consulted about mine-based safety regimes and to have concerns about aspects of safety management dealt with through those mechanisms.

f) governments should support cooperation between coal producers and their employees, mining associations and coal mining unions in research to evaluate the work hazards in mining, including mechanisms for sharing information and best practice.

Further Research

Rio Tinto has sponsored several research projects on safety in Australian black coal mining. That research provides a basis for the recommendations in this submission.

However, further research needs to be done. Research by Corrs Chambers Westgarth has revealed the absence of a systematic and dispassionate evaluation of the work hazards in open cut coal mining. This means that there is no objective basis for deciding the most appropriate regulatory approach to safety in open cut coal mines, at least beyond the recognition that a duty of care approach is preferable to the current prescriptive approach, and that open cut safety laws need to be mainstreamed.

At Rio Tinto's request, Corrs has developed a proposal (Appendix 9) for further research to fill the gap identified. The proposed terms of reference for the review cover the collection and analysis of data, the impact on behaviour of existing regulatory regimes, different models for regulation, an evaluation of the current enforcement regimes and possible response strategies.

Rio Tinto will be approaching industry associations and other coal producers to participate in the study. The study will achieve most if coal industry unions participate and Rio Tinto will be actively seeking their support.

3.11 Conclusion

Markets are driving the coal industry to improve competitiveness. Rio Tinto's coal interests in Australia regard it as their accountability to make the best use of their managerial and operational resources, their technology and their coal resources to respond to the new demands the market is making on them.

They are not seeking the assistance of governments in those managerial tasks.

Consistent with what they regard as their overall responsibilities, governments should facilitate the response of coal producers by putting in place new policies and practices where necessary, and by altering existing policies and practices.

In practice, this means aligning relevant government policies and practices with the strongly competitive environment coal is now operating in, and will operate in for the foreseeable future.

In particular, governments need to promote competitiveness within their own enterprises and, by the nature of their policies, allow the industry itself to change when necessary.

There is also a strong case for modernisation of safety laws, in a cooperative approach involving all the industry's stakeholders. However, further research is necessary to give content to new laws.

Chapter 4 Employee Relations Performance

The coal industry is a fundamental component of Australia's international comparative advantage, but performance in the area of workplace relations reform has not kept up with the pace of reform in other industries. It is one of the few industries remaining where managers cannot make decisions on how their business runs without being hindered by very inflexible industrial awards and agreements, inefficient work practices, over-prescriptive legislation and resistance to change. The level of industrial disputes in coal, a proxy measure of this resistance, is 45 times the national average.

The Australian economy has benefited considerably from the extraordinary quality of the current resource available to coal producers in Australia, and coal producers have tolerated the sad picture of workplace inefficiency. However, there are domestic and international competitive forces on coal prices, the resource coal at existing mines is generally becoming deeper and more difficult to mine, and prospective mines are often further from the coast. Added to this, many established mines are over capitalised and have not produced adequate returns for their owners.

In order to maintain its market share and position as a significant national export earner, the black coal industry needs to drastically improve its performance in all areas. A vitally important part of this improvement is to make the industry's capital assets perform to their best potential by improving employee relations performance.

4.1 A brief recent history of the black coal industry

Australia's black coal industry was developed in underground mines in the early days of European settlement. Underground mines earned their reputation as hard, dirty and dangerous places to work.

Beginning in the late 1960s and continuing until the present, large, highly mechanised open cut coal mines were opened in Queensland and New South Wales to supply coal to export and domestic markets. Many of the underground mines could not compete with the open cuts and they were closed.

The staged introduction of open cut mines found them as extensions to the underground industry. Indeed, some open cuts were operating within the same mining leases as underground mines. As a result, open cuts came under the regulation of the coal mining inspectorates and Occupational Health and Safety rules, the coal mining industrial authorities and the coal mining union. This was despite the reality that the work being done in the open cut mines, the skills required and the hazards were all quite different. As well, employees commencing work in these open cut mines were often retrenched underground

miners. Restrictions placed on employing new recruits brought the culture of underground coal mining to the surface.

In the same way, the conventional emphasis placed on maintaining continuous supply of coal to customers survived the transition to open cut. Until the 1970s most coal was supplied for domestic purposes for use in coal fired power stations, industrial boilers, steam locomotives and domestic coke ovens for steel production. With the industrialisation of Australia, these services were often declared vital, and governments intervened both through regulation and even directly through use of the armed forces to break strikes. The consensus was that the coal must be kept moving at almost any cost. The coal unions knew this and naturally used it to seek higher wages, improved conditions and a privileged, unique status in Australia's industrial relations system.

The historical development of coal bequeaths a modern legacy which is manifested in a romanticised view of the coal industry, based on an irrelevant vision of underground coal mining. Even open cut coal mining is seen as extremely hazardous employment where the boss is a bastard and the only certainties are the coal in the ground, the mate you have crib with and the union. That romanticised view buttresses resistance to change and partly accounts for the poor employee relations performance of the industry.

4.2 Coal's Special Treatment

A critical factor in coal mining employee relations is that coal is treated as an industry with special characteristics. That has resulted is "special" treatment for coal in industrial relations and other senses. For example coal has had:

- a special industrial tribunal
- special long service leave arrangements
- special safety laws
- special training infrastructure (a coal industry training board separate from other mining)
- special supervisory arrangements (the Joint Coal Board)

The outcome of special treatment has been that coal is isolated from industrial relations and other developments which have helped modernise employment relations in most other industries.

All industries are "special". All industries have unique characteristics which distinguish them from other industries. The distinguishing characteristics may be the nature of the product, the nature of the market, the special skills of the workforce or the industry's technology.

For most Australian industries, however, none of their special or unique characteristics has justified the kind of special treatment the coal industry has had for so long.

The integration of the CIT and AIRC establishes that there is no need for separate and special arrangements for coal mining. The integration of coal employee relations into the mainstream of regulation should be extended by the removal of those arrangements which give coal its special treatment.

Recommendation - Mainstreaming of Coal

State and Commonwealth Governments should eliminate the "special" treatment of coal by integrating coal into the mainstream of Australian industry. This should be done by:

the abolition of special long service leave arrangements by making individual companies accountable for long service leave obligations,
the mainstreaming of safety laws,
the withdrawal of government support for training infrastructure which treats coal separately from other mining,
the abolition of the Joint Coal Board.

4.3 The Performance of Management

In the absence of performance data, it is difficult to directly measure the employee relations performance of managers in the coal mining industry. A valid alternative is to compare coal mining management with management in similar industries on the basis of their relative level of experience and qualifications. This analysis was performed by the National Institute of Labour Studies in 1997 [16]. Although only a proxy for performance, these data revealed that in terms of age and level of qualification, coal mining managers did not differ greatly from the managers in metalliferous mining, or oil and gas industries. If anything, coal managers were slightly better qualified.

What, therefore, accounts for the tolerance coal producers have shown for poor work practices, and, if indeed, coal managers have performed poorly in employee relations, why might that be so?

The most likely explanation of past behaviour of coal managers is that they were influenced by favourable market conditions (both domestic and export) which emphasised production not productivity. They "kept-the-peace" at the coal face to prevent disruption to supply. In these circumstances, improving managerial leadership of employees gave way to efforts to manage the industrial relations system so that supply was not disrupted.

This behaviour continued into the era of enterprise agreement negotiations.

Managers may have felt they were behaving rationally given the business circumstances they faced, but the failure to see and prepare for changes in market conditions has left Australian coal producers exposed.

[16] Wooden, M and Robertson, F (June 1997), 'Employee Relations Indicators: Coal Mining and other Industries Compared' *National Institute of Labour Studies - Working Paper Series No. 143*

Apportionment of blame, however, is an unproductive exercise. What is more important is that a variety of forces is at work - pressure on coal price, more competition - which will calls for a change in management behaviour.

In the future, therefore, rational management behaviour will challenge the norms and conventions of coal industry employee relations. That change to management behaviour is already apparent. But much more needs to be done. Among other things, coal managers will have to be open with operational employees about the state of the business and the market and be able to translate that into a managerial style which helps create the circumstances in which employees will be prepared to align what they do at work with the needs of customers. The "command and control" approach to management has to be abandoned in favour of understanding the relationships coal miners have with their work, each other and local communities. Real managerial leadership will become more important than the ability to manage the interface with the industrial relations system.

The improvement of the quality of managerial leaders in Rio Tinto Energy's coal businesses is aiming in that direction. Rio Tinto is committed to ensuring that the quality of managerial leaders in its coal businesses is prepared for the task.

4.4 Workforce Characteristics

Preliminary results from a forthcoming ACIRRT study[17] (Appendix 13) examining and comparing the employee profiles of the black coal and metalliferous mining industries found the following significant characteristics:

- overall the black coal industry had a very low proportion of female employees (black coal: 2.3 percent, metalliferous mines: 12.1 percent).
- in the occupations of tradespersons, operators and labourers, 99.4 percent were male in black coal, and 95.3 percent were male in the metalliferous mines.
- production and maintenance employees in black coal mines were, on average, older than similar employees in the metalliferous mining industry. In coal, only 9 percent of employees were aged less than 24 years whereas in metalliferous mines, 17 percent were under 24 years old.
- coal mine employees, on average, are more likely to be married and have a family. This is a likely consequence of the age profile.
- coal mine employees generally work less hours and are paid more than metalliferous mine employees.
- numbers of migrants employed in production and maintenance roles varied widely. In metalliferous mines more than twice the proportion of employees were born outside Australia compared to black coal (26 percent and 12 percent respectively).
- the proportion of persons of aboriginal and Torres Strait Island origin employed in metalliferous production and maintenance roles was nearly three times the proportion in coal (2 percent compared with 0.7 percent).

[17] "A Profile of Mining Employees"*Australian Centre for Industrial Relations Research and Training(ACIRRT), September 1997(forthcoming)*

A typical profile of a coal mining production or maintenance employee would be a married male in his thirties or forties, with significant family commitments including, children and a home.

A workforce with this profile has many qualities. Against that must be set the homogeneity of the workforce, which is potentially associated with a conservative approach to change. It will be up to managers in coal to understand better the profile of the workforce and its implications. Rio Tinto regards that as part of the task of improving the quality of its managers.

4.5 Employee Relations Performance Data

Recent studies by the National Institute of Labour Studies (NILS (1) [18] - Appendix 2, and NILS(2) - Appendix 3) have examined available employee relations data and compared the Australian black coal industry with other sectors, most significantly the Australian metalliferous mining sector.

Enterprise Bargaining

In 1996, NILS (1) examined all of the federally registered enterprise agreements for coal and metalliferous mining and found the significant differences.

The data in the following table indicate that in every aspect of enterprise agreement negotiations, coal industry employers have achieved less flexible agreements and have paid significantly more than their metalliferous counterparts.

Table of Comparison - Enterprise Agreement conditions

Coal Mining Industry	Metalliferous Mining Industry
92% of agreements remain at least partially dependant on the parent award	84% of agreements totally replace the award.
No coal agreements included a provision for employment of part time production or engineering personnel	44% of agreements allowed for part time employment
22% of agreements allowed casual labour to be used on site, typically from a pool of retrenched coal miners.	79% of agreements allowed casual labour to be used on site without specification of labour source
95% of agreements adopted a 35 hour ordinary time week	93% of agreements adopted 38 or 40 hour ordinary time weeks

[18] Wooden, M, Robertson F and Cernaz R, "Coal Industry Awards and Agreements and the Implications for Work Practices and Working Conditions", Working Paper Series 141*National Institute of Labour Studies,* November 1996

Coal Mining Industry	Metalliferous Mining Industry
74% of coal mining agreements place significant restrictions on the use of contractors	11% of metalliferous agreements place significant restrictions on the use of contractors
100% of agreements set annual leave entitlements at five weeks (or six weeks for continuous shift workers)	81% of agreements set annual leave entitlements at four weeks (or five weeks for continuous shift workers)
46% of agreements have a "no forced retrenchments" policy	No agreements have a "No forced retrenchments policy"
There are no known agreements which relinquish the P&E award clause requiring forced redundancies by seniority (last in - first out)	Only about 14% of metalliferous agreements require forced redundancies by seniority (last in - first out)

There are also strong indications that coal agreements are not particularly "enterprise" (ie. mine) based. They adopt coal industry norms and do not relinquish significant restrictive features of the parent award. This outcome is most likely explained by the three level process adopted by the CFMEU for approving enterprise agreements. The process involves lodge, district and possibly national scrutiny. The purpose appears to be to prevent "sacred cows" being bargained away by individual site lodges. The result is that the pace of change in coal work practices is geared to the changes the CFMEU is prepared to approve at its most conservative lodges.

Rates of Pay

In 1995[19], full time adult non-managerial employees in the black coal industry earned $30.25 per hour which included an average of 6.1 hours of overtime. Excluding overtime from this figure give a result of $29.50.

This compares to metalliferous mine employees who earned $20.85 per hour in 1991 and $24.10 in 1995.

Comparison of Average Hourly Pay Rates, 1991 - 1995

	Coal Mines	Metalliferous Mines
Average hourly rate 1994/95	$30.25	$24.10
Average hours paid per week in 1995	43.5	45.0

The key point here is that rates of pay in coal are 25 percent higher than in metalliferous mines. However, productivity in most coal mining activities is up to 48 percent lower than metalliferous mining, as shown in Chapter 1.

[19] Estimated from unpublished earnings data, ABS 1995, compiled by NILS

In summary, enterprise bargaining has failed to achieve significant workplace reform in the Australian black coal industry. It has resulted in high wages for employees, without significant benefits to employers.

It has produced exactly the opposite to what the market demands:

- **Higher costs structures, and**
- **Little substantive productivity improvement**

Other Employee Relations Indicators

Other recent research by NILS (2)[20] (Appendix 3) has indicated further anomalies in the black coal industry when compared to the Australian hard rock mining and other Australian industry. In particular, the coal industry has been found to be characterised by:

- high rates of absence, with male coal mining employees taking on average, almost 10 sick days per year each. This compares to the national average of 5 days.
- high levels of paid overtime, and zero level of unpaid overtime. Coal mine employees were paid an average of 6.1 hours overtime per week, compared with an average in metalliferous mines of 2.3 and a national average of 2.9 hours. Average Australian employees work 3.1 hours of unpaid overtime per week. Coal miners were found to work none.
- particularly low rates of labour turnover. The voluntary average turnover rate for males in all Australian industries is 9.9 percent. For coal the figure is 4.7 percent and 12.5 percent for metalliferous mining.
- high rates of industrial disputation. Coal mining industrial disputation in the form of strikes was found to be 45 times higher than the average for all Australian industry.
- high work injury rate. Coal industry employees are significantly more likely to lodge a claim for workers compensation than employees in metalliferous mines. This safety issue is dealt with in detail in chapter 3.

The report found the coal industry somewhat of an enigma and concluded by saying,

"No other industry in Australia has the same combination of high employee earnings, high levels of paid overtime but zero levels of unpaid overtime, high rates of absence, low rates of labour turnover, low levels of job satisfaction, high rates of disputation and high work injury frequency".

[20] Wooden, M and Robertson, F (June 1997), 'Employee Relations Indicators: Coal Mining and other Industries Compared' *National Institute of Labour Studies - Working Paper Series No. 143*

In other words, the coal industry is special, but for no other reason than it is a unique combination of characteristics suggesting perhaps, the worst employee relations in Australia.

4.6 Industrial Disputes and Workplace Change

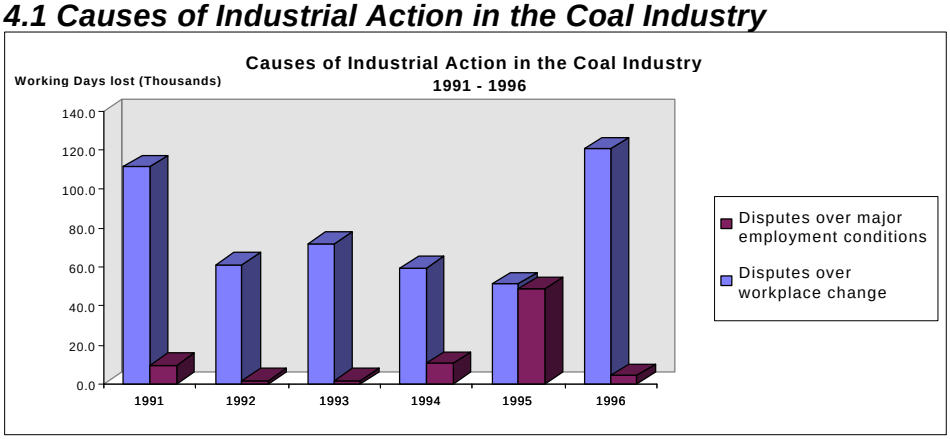
The outcomes of enterprise bargaining, already examined, is one measure of the success of workplace change.

Another measure can be calculated from industrial disputes statistics. Industrial disputes data can be analysed by categorising the nature of the dispute:

- disputes over re-negotiation of major employment conditions such as a dispute claiming a pay increase, more leave entitlements, or more union influence in decision making, and
- disputes about workplace change involving interpretation, application or operation of an award or agreement, such as a dispute over a manager's right to change employee's rosters.

Figure 4.1 charts the 1990's history of these categories in the coal industry. The chart draws on ABS data and shows, on the one hand, disputes over major employment conditions such as wages, hours, and leave and, on the other, disputes over managerial policy and physical working conditions, that is, disputes about workplace change.

Figure 4.1 Causes of Industrial Action in the Coal Industry



Source: ABS data compiled by NILS

Principally due to the variability over time of disputes data, there are risks in relying too heavily on it. However, the data in figure 4.1 provide a quite strong basis for several conclusions:

- the settlement of major employment conditions is not the principle cause of industrial conflict in coal
- on the other hand, attempts by management to make changes in work practices appear to generate considerable resistance from unions in the coal industry.

In short, there appears to have been active resistance to change in workplace arrangements at the same time as enterprise bargaining delivered better employment conditions. Rio Tinto estimates that as much as 70 percent of management time is consumed in negotiating employee relations changes other workplaces have taken for granted.

It is a paradox that Australian coal producers have been regarded as reliable suppliers, notwithstanding the vast amount of industrial disputation. Perhaps the explanation for this paradox is that there were fewer competitors in the past, both international and domestically, and customers were prepared, or had to, put up wit the disputation.

The point of the observations above is, again, not to apportion blame for poor industry performance in the past. Rather, it is to illustrate that the continuation of past behaviour in a new era of pressure on prices and increased competition will carry much higher risks than in the past.

In the past, the high level of industrial action over workplace change (and probably changes management were entitled to make) was also tolerated by industrial legislation. The new distinction between “protected” and “unprotected” industrial action represents a change for the better in that situation. But more needs to be done.

4.7 The Role of Industrial Tribunals

The Coal Industry Tribunal

Until July 1995 the industrial regulatory body for the Australian coal industry was not in the mainstream of the Australian industrial relations system. It was a separate network of industry specific tribunals and authorities. These included the Coal Industry Tribunal, various Local Coal Authorities, and Boards of Reference. Under this regime the coal industry developed and maintained ‘The Award’ [21] which legitimised and entrenched such practices as:

- preferential employment of retrenched miners,
- last-on first-off redundancy provisions,
- generous leave provisions,
- high levels of overtime (through low ordinary hours per week)

[21] The Coal Mining Industry (Production and Engineering) Interim Consent Award (Sept 1990)

- preference to unionists,
- inflexible work hours
- inflexible shift arrangements
- inflexible employee training provisions.

In addition, many decisions made by these authorities further locked employers into processes whereby improvements in efficiency (which their award rights probably permitted them to make) could only be implemented with the consent of the CFMEU.

A relevant example of this is the introduction of 12 hour shifts into the industry. Across other heavy industries, eg. metalliferous mining and petroleum, employees accepted 12 hour shifts enthusiastically, because it meant they could work fewer shifts and have more leisure time for an equivalent rate of pay.

In the coal industry, 12 hour shifts are seen as an attack on "hard-won" conditions such as the 35 hour week and 8 hour days. The award requires that any roster with shifts in excess of eight hours is only able to be implemented by agreement with employees, which in practice means by consent of the CFMEU.

The Local Coal Authorities, Boards of Reference, and the Coal Industry Tribunal have heard many such disputes and on numerous occasions have:

- deferred to the union because of threats of escalation of the dispute to strike action (which has often occurred prior to the hearing regardless), and
- used the reasons of "custom and practice" and "maintaining the status quo" to legitimise the work practices, and
- arbitrated a compromise that usually guaranteed that the efficiencies being sought were never fully realised.

These bodies have been dissolved and coal industry disputes have been dealt with by the Australian Industrial Relations Commission since mid 1995. Nevertheless, the CIT helped set the style of employee relations for the coal industry. The style emphasised compromise over differences, even where the difference arose because of union disagreement with the exercise by management of a right it had in accordance with an award or agreement. The CIT, in effect, encouraged continuous bargaining and compromise over what were often established rights.

Case Study 1

Coal Industry Tribunal Entrenches Restrictive Work Practices at Hunter Valley No.1 Mine

The Coal Industry Tribunal has been the vehicle by which many uncompetitive work practices have become entrenched in the coal industry. In 1991, the Hunter Valley No.1 mine in NSW attempted to introduced staggered meal breaks to allow continuous operation

of high priority equipment and activities. The union disputed management's right to do this under the award, and the matter was referred to the NSW Local Coal Authority, then to the Coal Industry Tribunal, who held that management's right only existed in exigent[22] circumstances.

This decision still prevents management at the mine from operating in a more efficient way. It has cost thousands of hours of production on critical components of the mining cycle which benefit from continuous production.

[22] LCA Decision 2 of 1991, CIT Decision 3 of 1991. Appendix 8

Case Study 2

The Blair Athol Training Dispute.

In 1996, Blair Athol Mine purchased a new overburden drill of a vastly different design to existing equipment on the site.

In order to train its employees in the most efficient use of this drill, Blair Athol management decided to utilise the services of the drill manufacturer's specialist trainer, as it was entitled to do. The CFMEU claimed that the operators should be trained by the site skills trainers (CFMEU members), despite the fact that these trainers had no knowledge or experience of this machine.

It was important to the mine to have operators able to safely and efficiently operate the new drill. The only effective way of achieving this was to use the specialist trainer. When the CFMEU was unable to achieve its position through discussion, it acted consistently with its past behaviour by commencing a strike on 15 July 1996.

The dispute was heard in the AIRC, which directed that strike action cease. The order was disregarded by the CFMEU. In further conferences, the AIRC sought to resolve the issue by encouraging the company to make concessions, despite the fact that the CFMEU were in breach of a direction of the Commission. The Commission's approach is exemplified by its remarks that "... a five week strike is better than a six week strike" and "...this has nothing to do with merit".

The management maintained its position during the conference. The CFMEU realised that continuation of the strike would not resolve the dispute in its favour, and asked the Commission to arbitrate the claim. The claim was arbitrated in favour of the company.

The strike lasted 5 weeks and cost the mine $50 million in lost production.

- *The management of the mine completed drill training using specialist trainers as it had intended.*

Case Study 3[23]

Australian Workplace Agreements at Hunter Valley No.1 Mine.

The CFMEU opposed Australian Workplace Agreements (AWAs) at the Hunter Valley No. 1 mine.

The employees who had sought agreements remained at work while the union engaged in a campaign of rolling stoppages in support of enterprise negotiations. The union demanded the company deny any other employees the opportunity to ask for an AWA. The company refused this demand, and the union gave immediate notice of a two week "protected" strike in support of its enterprise negotiations.

The AIRC recommendation was that the union return to work and the company decline to offer AWAs to other employees during the period of negotiations.

The decision was rejected by both parties, and the strike action continued.

[23] based on Watson G, "The Impact Of The Workplace Relations Act 1996 On The Rio Tinto Hunter Valley No. 1 Coal Mine Dispute - Speaking Notes"*Freehill Hollingdale & Page, Sept* 1997

The Australian Industrial Relations Commission

The integration of the CIT and the Australian Industrial Relations Commission under the Industrial Relations Act in 1995 did not substantially alter the style of industrial disputes in the coal industry.

Coal unions continued to use dispute notification as a means of bringing grievances and similar disputes before the Commission for recommendations or orders or voluntary arbitration, often in protest against action taken in accordance with management rights under awards or agreements. Rio Tinto's experience was that the Commission continued to make recommendations which compromised those rights.

Under the Industrial Relations Act, the absence of a clear distinction between industrial disputes over the making of employment conditions, and over reacting to management initiated change, probably contributed to the confusion in the role the Commission played.

To some extent, this lack of clarity has been addressed by the Workplace Relations Act.

The distinction between "protected" and "unprotected" industrial action, and the availability of orders under Section 127, are steps forward in clarifying the Commission's role.

There continues to be, however, insufficient clarity over the role of conciliation in disputes over the making of awards and the negotiation of agreements, and the role of conciliation in resolving grievance disputes.

In other words, the distinction between agreement making processes and the application of award or agreement provisions governing the settlement of grievances arising from management action is not clear.

Clarifying these distinctions would also clarify the role of industrial action and the circumstances in which it is legally available and those in which it is not.

Recommendation - Clarifying the role of the AIRC

The Commonwealth Workplace Relations Act needs to be amended to make clear that the rights which managements have under awards and agreements to undertake workplace reform can only be the subject of conciliation or arbitration by the Australian Industrial Relations Commission with the explicit agreement of the parties affected or in accordance with a grievance procedure applicable to the mine concerned; specifically, this requires:

(continued)

(a) The Act to be amended to make clear the distinction between compulsory arbitration (which should be clearly confined to award safety net matters with the exception of the circumstances delineated in the Act), compulsory conciliation (which should also be confined to disputes or applications about award matters) and voluntary conciliation and

arbitration about enterprise bargaining negotiations or about grievances or disputes dealt with in accordance with grievance or dispute procedures in awards or agreements.

(b) The Act to be amended to allocate the work of the Commission on a functional basis, with different parts or divisions of the Act dealing separately with:

compulsory conciliation and compulsory arbitration over safety net award matters,
voluntary conciliation or arbitration over enterprise bargaining negotiations,
voluntary conciliation or arbitration over grievances or disputes,
unfair dismissals,
inter-union disputes etc.

Under these arrangements, there would be no need for a nominated panel of Commission members to be appointed to the coal industry (or any other industry). The expertise of Commission members would be in compulsory or voluntary conciliation or arbitration or unfair dismissal etc. and not in the minutiae of the industrial relations of a particular industry.

(c) The power of the Commission to arbitrate procedurally to be confined to disputes over the making or variation of safety net awards. The Act should be amended to ensure the Commission does not have and does not exercise procedural powers of compulsion in cases where parties voluntarily bring enterprise bargaining disputes or grievance disputes before the Commission. The only exceptions to this should be cases where the parties agree to the Commission exercising arbitration powers for procedural purposes or where grievance procedures explicitly provide for the Commission to exercise such powers.

4.8 Uncompetitive work practices

The consequence of the interaction between the employee relations factors considered above is a value destroying array of uncompetitive work practices which:

- maximise the number of people doing a job
- stretch the job out, and
- maximise coalminers' earnings and spreading earnings "fairly" between coalminers.

These practices affect or constrain the allocation of overtime, manning arrangements, use of contractors, task allocation, equipment productivity and most reward systems.

The following is a table of typical uncompetitive work practices which exist in Australia's black coal mines:

Existing Practice	Effect of this Practice
Demarcation between production and maintenance and coal preparation plant employees; production and maintenance employees and staff and supervisory employees	Overmanning, poor use of available skills, delays in undertaking minor repairs or adjustments to equipment, poor maintenance practices which lead to poor equipment availability,

Existing Practice	Effect of this Practice
Restrictive training by 'stream', number of skills and seniority	Cannot "cross-skill" between production and engineering, cannot train most suitable person for new jobs
Inflexible meal breaks	Disruption to continuous production in critical areas
Insistence on keeping non-core roles	Roles such as gardener, cleaners, etc. are more cost effectively done by contractors
Overtime allocation by seniority	An employee can not complete a partly completed job on overtime, sometimes the level of skill required for a job means a specific person is needed.
Overtime restrictions	CFMEU district rule requires employees work no more than 14 hours overtime per week. Normal roster uses 5 - 7.5 of these hours leaving little for employer flexibility.
Restrictions on use of contractors	poor equipment availability
"Shadowing" of contractors	overmanning, intimidation of contractors
Restrictions on contractors use of overtime	jobs get left partially complete, poor equipment availability
Attempts to veto particular contractors	an attempt to intimidate contractors into conforming with what the union wants
Shift allocation by seniority	Poor skills mix
Disputes procedure not followed	Excessive industrial action in the from of strikes
Insistence on early shift finish (tolerance time)	Poor equipment utilisation
Doing more than one job in a shift is actively discouraged	overmanning, poor equipment utilisation, over-capitalisation
Involvement in improvement programs discouraged	Improvements programs can fail due to lack of employee commitment.

Custom and Practice

The way production and maintenance employees go about their work is governed by a strict code (sometimes written, sometime not) enforced by their union through industrial action or the threat of it. This code revolves around the maintaining of "custom and practice" established either on the site or elsewhere in the industry.

Many custom and practice issues constitute uncompetitive work practices such as:

- restrictions on the use of contractors
- minimum manning practices
- demarcations between maintenance, production and staff employees
- inflexible allocation of employees to shifts
- inflexible meal breaks during shifts
- early shift finish "tolerance time" which is a hangover from the underground coal mines where "shower time" was allocated at the end of each shift.

Seniority

Seniority in terms of length of service at a particular mine, frequently the primary determining factor when deciding issues such as:

- compulsory redundancy (last-on-first-off provision)
- allocation of training opportunities

- allocation of overtime
- allocation to shift
- promotion to higher levels of pay
- allocation of annual leave

In most industries, the ability to make these decisions is a business issue, taken on efficiency and other grounds. In the coal mining industry, the union insistence on custom and practice, the costs of change and the award severely limit the ability of management to make such decisions. Seniority is the basis for many important decisions, as demonstrated in the following case study.

Case Study 4

Custom and Practice and Seniority Stifle Efficiency at Hunter Valley No.1

At Hunter Valley No.1 Mine (during 1994) it was decided to change from seven day production in the mine to five day production to increase the weekend maintenance effort on major equipment and reduce the cost of high shift premiums. The aim was to redistribute the production employees such that an appropriate range of skills was maintained across shifts, and that the employees worked rotating shifts (Day, Night and Afternoon, changing each week or fortnight). However, the "custom and practice" was to allocate permanent shifts based on seniority. Most senior employees were able to pick their preferred shift, and the least senior employees were allocated to whatever positions were left, usually the permanent night shift.

After weeks of trying to reach an agreement, it was decided that it was more important to get the new rosters in place than continue unproductive arguments with the CFMEU.

The predictable outcome was that the most senior 35 employees stayed on the seven day roster as cleaners and servicemen in the maintenance department, and the rest of the workforce were allocated to shift by seniority. This left significant skill deficiencies on some shifts.

The 35 servicemen were amongst the most highly qualified, experienced and highly paid operators at the mine. Several of them expressed a desire not to be allocated to the job of cleaning and servicing equipment, but in order to maintain their seniority, they were forced into the position by their union.

(continued)

This work practice penalised the mine in several ways:

By the time and opportunity cost involved in negotiations.

By not being able to allocate the highly qualified, experienced personnel to the priority mining equipment.

By having to undertake accelerated training of employees where skills deficiencies existed.

By having disgruntled employees forced to move from the workshop to the mine and vice versa.

At a later date the management decided on further changes which would allow 25 of the 35 servicemen to be redeployed in the mine's production department. The changes were well within the award entitlements of an employer, but the union strongly disputed them on the grounds that they believed the company should maintain the current arrangements

including numbers of employees and the roster system at the mine for the continued coverage of equipment servicing and lube bay work [24].

Seniority is, of course a discriminatory system for managing employees. It means that merit can rarely be a factor taken into account in employment decisions. The losers from seniority decisions will be highly capable younger people, women and people of non Anglo-Saxon and indigenous backgrounds, all of whom effectively face high barriers to entry into the coal mining industry.

The Workplace Relations Act currently provides a somewhat tortuous path to the removal of discriminatory seniority practices. The award simplification process is no guarantee of the removal of seniority which, it will no doubt be argued, is incidental or necessary to the effective operation of the award. The simplification process is likely to take some time, possibly another 18 months.

The seniority provisions are also protected by provisions of the Sex Discrimination Act, which preserves discriminatory acts done in accordance with an award, and by provisions of the Workplace Relations Act saving certain discriminatory provisions of awards. Such provisions are only challengeable upon complaint under the provisions of the Sex Discrimination Act permitting the Sex Discrimination Commissioner to refer the discrimination to the Commission.

Complaints about the discriminatory provisions in the coal award are unlikely because little recruitment is forecast in the foreseeable future and because of the intimidation employees who challenge the system are likely to face from their union. State anti-discrimination laws also permit discriminatory award clauses to continue to operate.

A different approach is called for:

Recommendation - Seniority Discrimination

The Commonwealth Government should address seniority discrimination by establishing a legislative regime which permits and encourages applications to be made to vary awards whose provisions fail to meet the requirements of the Sex Discrimination Act . Interested parties including individuals, employers, unions and the Sex Discrimination Commissioner should be entitled to make applications.

Inefficient Rosters Cause Poor Capital Utilisation

Coal mining requires enormous capital investment prior to commencement of operations. To maximise the return on this capital, high cost equipment needs to

[24] CFMEU Application to AIRC for order. 24 Nov 1995. Appendix 7

be utilised as much as possible. In addition to the "staggered meal break" case mentioned earlier, poor work practices and impositions of Australia's coal industrial systems have prevented this from happening by allowing only very restricted roster options for 7 day/24 hour employee coverage. In NSW this was typically the 5 panel, 8.5 hour roster, which requires 29% more employees than the only system covered by the award in Queensland, the 4 panel 8.5 hour roster. All 7 day rosters involve significant overtime components for work outside the standard 35 hour, Monday to Friday week.

Many mines have found the cost of shift premiums and employing additional people under this roster more expensive than the cost of additional equipment. The result is that large, expensive truck and shovel fleets remain idle for a significant length of time every weekend.

4.9 Signs of Change

There are signs of change in the employee relations situation in Australian coal. Of most significance are the Ensham and Burton projects in central Queensland and CIM's Stratford Coal project in NSW. These mines have commenced in the last six years and have achieved low cost production through improved profit focus by management and vastly improved work practices. Ensham was the first of these mines and differs from the others in that the majority of the workforce are employed by the company. Burton and Stratford utilise contract miners.

The setting up of Ensham is well documented by its Chief Executive Officer, Ken Foots[25]. Overcoming the industrial relations hurdles was a major feat taking three years, eleven CIT hearings and weeks of Industrial Court appearances to get an Enterprise Flexibility Agreement in place. Ken Foots states that the "opposition and intransigence" of the CFMEU was the main reason for the delay. The CIT supported the CFMEU by allowing the application to be rejected due to technicalities. It was not until the CIT was dissolved that an agreement was reached.

At Rio Tinto's Hunter Valley No.1 mine, a small, but growing group of production employees are finding out what the new face of coal has to offer, and just as importantly, what they can do to support the viability of their enterprise. Staff employees at the mine have also embraced flexible work practices with supervisors, administrative and technical personnel all prepared to do vastly different work when requested.

Conclusion

Perhaps the key message from the review of the employee relations performance of the coal industry is that workplace change has been exceedingly difficult to achieve and has only been achievable at a very high price, paid heavily in industrial action.

[25] Foots K, "Ensham - Deliberately Different", May 1996

The height of the barriers to change can be attributed to:

- the past impact of favourable market conditions on management behaviour, especially the emphasis on production over productivity and the work practices that behaviour embedded in the industry,
- underdeveloped human resource capability and managerial leadership,
- the conservative characteristics of the workforce and union resistance to change, especially by industrial action,
- the behaviour of industrial tribunals, which have emphasised compromise in dispute settlement even when rights under awards and agreements to make change are at stake,
- the legislative framework, which has failed to distinguish sufficiently well between disputes over the determination of employment conditions and disagreements about change initiated in accordance with rights under awards and agreements.

This latter group of issues is now becoming critical as markets and customers are demanding low cost and efficiency from producers. In turn, this requires of producers an ability to decide upon and implement every available cost saving and productivity or efficiency improvement.

There is now no longer time to go through the convoluted dispute settlement processes that have made custom and practice so hard to change in the Australian coal industry, and which consume so much management time. Every opportunity needs to be taken, and taken quickly, to improve mine performance. Work practices need to be able to change continuously if necessary. This requires management to have greater discretion to make change; and to make change without having to pay a (more than) offsetting price.

The industrial relations framework, with its distinction between “protected” and “unprotected” industrial action is heading in that direction. But it is not yet there.

Further legislative progress is needed to permit managers to make the changes in work practices they believe are necessary within a framework of rights and responsibilities set down in simplified safety net awards and any limitations on management activity agreed in enterprise bargaining. Within such a framework, coal producers should be able to make change, without being forced continually to negotiate beyond the normal managerial task of creating the circumstances in which employees themselves are prepared for change.

Such a framework will encourage management to consider much more carefully the change process and offers hope of improvement in workplace employee relations.

Chapter 5 The case for reform

The case for reform of the Australian black coal industry rests on international and domestic economic developments; and the consequences of a failure to reform in the face of those developments.

Those economic developments have been examined at a number of points in this submission. They include:

- continued pressure on prices for coal
- the rise of low cost competitors for Australian coal producers
- the deregulation and privatisation of power generation industries in Australia and overseas.

Each of these developments points towards a similar direction for reform: towards cost reduction and productivity improvement. It is clear from the benchmarking study reported in this submission that the Australian industry has considerable scope to improve on both cost and productivity.

Reform to a best practice standard would enable producers to maintain and increase their market share, provide a basis for investment in new mine development and slow the decline in employment in the black coal industry.

The choice is a clear one: an efficient, productive and growing industry which continues to help support regional economies, notwithstanding continuing employment declines; or a high cost, unproductive, declining industry with falling employment and unfavourable regional economic effects. The former is clearly the preferred course.

The nature of reform

What is the nature of reforms that can best achieve the preferred course? At the broadest level, the requirement is to align behaviour, policy and practice along the coal chain with the demands that international and domestic competitive forces are placing on coal producers so that costs can be reduced and productivity improved.

For coal producers, this means being able to take the decisions necessary to improve the performance of mines as the need for those decisions becomes apparent; and being able to implement those decisions in a way and a timeframe which is responsive to competitive pressures. The reforms need to put the onus for success on mine management on the basis of the optimum combination of managerial and operational talent, quality of coal resources and technology.

For governments, this means the provision of government services to coal producers on a competitive basis, allowing the cost and quality of that service to become responsive to the competitive needs of coal producers, just as any other

provider of a service responds to a customer's competitive needs. This is all the more important in cases where a government is the monopoly provider of a service.

The facilitative role of governments in the coal industry needs to apply to the legislative frameworks they set as much as it does to the services they provide.

The more unnecessary restrictions there are on the decisions coal producers take and the less is the competitive basis for the provision of government services and legislative arrangements, the harder it will be for the black coal industry to adjust to the changing market place and the harder it will be maintain market share and employment.

The process of reform

The quickest way to bring a focus on reform of the coal industry is to create a political responsibility for it. Rio Tinto recommends that the Minister for Workplace Relations in the Federal government assume political responsibility for coal industry reform in the same way the Minister has assumed responsibility for waterfront reform.

Rio Tinto further recommends that the Federal government put coal reform on the agenda of the Labour Ministers Council at the earliest opportunity (November 1997) and that, where appropriate, coal reform issues be referred from the Labour Ministers Council to the Council of Australian Governments. Reform of safety laws and the competitive basis for rail and port services for coal are particular issues the Council of Australian Governments could address.

It is clear that the coal industry in NSW is by far the worst performing sector of the Australian black coal industry and a case for special attention. This is particularly so in relation to its safety record which is much worse than Queensland's. The government of NSW can play a valuable role by leading, sponsoring and nurturing reform, helping create a climate for change politically and legislatively. Coal reform needs a special focus in NSW, preferably at head of Government level.

Specific recommendations

Rio Tinto recommends the following specific initiatives for reform:

1. The Commonwealth Workplace Relations Act to be amended to make clear that the rights which managements have under awards and agreements to

undertake workplace reform can only be the subject of conciliation or arbitration by the Australian Industrial Relations Commission with the explicit agreement of the parties affected or in accordance with a grievance procedure applicable to the mine concerned; specifically, this requires:

(a) The Act to be amended to make clear the distinction between compulsory arbitration (which should be clearly confined to award safety net matters, with the exception of the circumstances delineated in the Act), compulsory conciliation (which should also be confined to disputes or applications about award matters) and voluntary conciliation and arbitration about enterprise bargaining negotiations or about grievances or disputes dealt with in accordance with grievance or dispute procedures in awards or agreements.

(b) The Act to be amended to allocate the work of the Commission on a functional basis, with different parts or divisions of the Act dealing separately with:

- compulsory conciliation and compulsory arbitration over safety net award matters,
- voluntary conciliation or arbitration over enterprise bargaining negotiations,
- voluntary conciliation or arbitration over grievances or disputes,
- unfair dismissals,
- inter union disputes etc.

Under these arrangements, there would be no need for a nominated panel of Commission members to be appointed to the coal industry (or any other industry). The expertise of Commission members would be in compulsory or voluntary conciliation or arbitration or unfair dismissal etc. and not in the minutiae of the industrial relations of a particular industry.

(c) The power of the Commission to arbitrate procedurally to be confined to disputes over the making or variation of safety net awards. The Act should be amended to ensure the Commission does not have and does not exercise procedural powers of compulsion in cases where parties voluntarily bring enterprise bargaining disputes or grievance disputes before the Commission. The only exceptions to this should be cases where the parties agree to the Commission exercising arbitration powers for procedural purposes or where grievance procedures explicitly provide for the Commission to exercise such powers.

1. Improvements in the safety performance of coal mining require cooperative efforts by all stakeholders in the industry and action of a number of fronts to improve the regulatory framework. Safety laws regulating coal mining should be modernised in accordance with several key considerations:

(b) the best practice model based on performance standards, duty of care and credibility and presence in enforcement regimes as a basis for safety regulation,

(c) a distinction between open cut and underground coal mining as a basis for broad safety preventative strategies; state governments should begin to draw

this distinction now and use it as a basis for developing future regulatory, administrative and enforcement activity,

(d) over time, the mainstreaming of safety regulation for open cut mining, that is, removing distinctions between open cut coal and hard rock mining.

(e) the removal of the supervisory role that union officers have under some aspects of safety regulation.

(f) safety law governing mining should require mechanisms to be established which enable non-managerial employees to be consulted about mine-based safety regimes and to have concerns about aspects of safety management dealt with through those mechanisms.

(g) governments should support cooperation between coal producers and their employees, mining associations and coal mining unions in research to evaluate the work hazards in mining, including mechanisms for sharing information and best practice.

3. State and Commonwealth Governments should eliminate the "special" treatment of coal by integrating coal into the mainstream of Australian industry. This should be done by:

    - the abolition of special long service leave arrangements by making individual companies accountable for long service leave obligations,
    - the mainstreaming of safety laws,
    - the withdrawal of government support for training infrastructure which treats coal separately from other mining,
    - the abolition of the Joint Coal Board.

4. The Commonwealth Government should address seniority discrimination by establishing a legislative regime which permits and encourages applications to be made to vary awards whose provisions fail to meet the requirements of the Sex Discrimination Act . Interested parties including individuals, employers, unions and the Sex Discrimination Commissioner should be entitled to make applications.

5. State governments should base provision of rail and other infrastructure services on competitive principles, allowing the way in which those services are provided, and their cost, to be aligned with the economic and business demands arising from changes in the market. In particular:

    (a) The NSW State Government should:

    - Continue its work in rail reform, particularly through encouraging the introduction of competition and the elimination of monopoly rent.
    - Review the Rail Access Regime with a view to making charges more transparent, and returns more in line with commercial rates.
    - Undertake rigorous price and customer service benchmarking with other rail freight providers interstate and overseas, and subsequently, implement required changes to Freightcorp and the Rail Access

Corporation to ensure they provide competitive pricing and customer service levels.

- Ensure that the legislative framework for statutory approvals and appeals is conducive to allowing properly planned projects to proceed in a timely manner to avoid loss of investment and market opportunities, including by ensuring that the guidelines for Environmental Impact Studies and other pre-construction approvals are sufficiently specific to allow all of the issues to be resolved during, not after the planning phase.

(b). The Queensland Government should:

- Urgently introduce reforms to Queensland Rail by:
    - separating the natural monopolistic elements of track ownership and access from the rail operation
    - creating an effective, fair and transparent Rail Access Regime that provides reasonable, commercial returns on investment to the government.
    - providing the opportunity for private access to the rail system thereby creating a competitive market.
- Urgently reassess the charges imposed at Queensland coal ports with an imperative to providing a service at a competitive price, based on reasonable, commercial returns on investment to the government.
- Ensure that statutory approvals for developments at port and mines are processed in a timely manner to avoid loss of investment and market opportunities.

5. The Commonwealth Government should:

- Acknowledge the impact on some state economies of reforming coal rail and port infrastructure charges by providing transitional support to facilitate alternative methods of supplementing state revenue.
- Continue to encourage the states to adopt the principles of the National Competition Policy in all of their services.