

Fax from,: Tom Bagot 1st December 1997  
To: Andrea Coulter  
Industry Commission

4 Pages including cover letter

Dear Andrea,

Industry Commission inquiry into the black coal industry  
Transcript Revision

Thank you for the opportunity to amend my transcript. I appear to have tried to put too many thoughts into too short a timeframe. The following is what the transcript would be like if I had spoken more clearly:

MR BAGOT: Thank you for giving me the opportunity to participate. My name is Tom Bagot, I am a management consultant. I am interested in the optimisation of resources and assets.

The black coal industry needs to be better managed to compete effectively in a market which is becoming more difficult. The situation is getting worse, and will not recover next year or the following. The logistics of the situation is critical now.

Two points are most important, the first does not seem to have been covered and, if ignored, will cost owners and the economy a great deal of money. The second has been raised and is so important that I would like to add my comments to those already made.

1. The market is changing and the changes are likely to disadvantage

steaming coal. - All other presentations seem to be based on an expanding market. The seventies saw massive over capitalisation in the power industry using the same attitude to market growth. Costs can be passed on in power generation. Who will lose if the same situation occurs in coal mining?

The amount of coal exported from the United States has decreased from 116 million tonnes ten years ago to about 80 or 90 million tonnes at the moment. Some of this will have been replaced by Australian coal.

The surplus United States coal production has been taken up by increasing demand for energy (in the United States). This trend is likely to reverse for the following reasons:

- Energy from coal fired production facilities in the USA can be optimised. Coal fired plants can be run at constant base loads with all additional loading done on flexible

and more efficient gas turbines (gas turbines are efficient at a much greater range of loads than are coal fired generation installations).

Gas turbines convert fuel to electric energy twice as efficiently as do steam generators and turbines. (This means they burn half as much fossil fuel for the same energy output to the electrical supply grid as do steam generators). They also cost much less to build and commission. The price of gas is competitive. Pollution from burning a given amount of gas is less than that from the equivalent amount of coal, twice as much electrical energy is thus produced with less pollution.

- Hydro-Electric installations are capable of much higher ratings if complemented by gas turbine installations. (Variable dam levels and variable inflows to the dams determine the actual rating of a hydroelectric installation. The effective capacity to supply energy is limited to the installation's minimum output rather than its maximum output.) The energy shortfall between the dam's maximum capacity and its minimum capacity can be made up by gas turbines. (This approach will provide a considerable increase in relatively clean energy at minimum cost).

- Substantial savings in energy consumption are possible with simple economies such as better insulation of eg. technology used to insulate windows in the US.

- The pressure in the United States to optimise energy use to control green house gasses will accelerate if the green house gas emissions are proved to be costing billions in insurance and rebuilding costs (Flooding, fires etc. )

If less US coal is used in producing electrical energy then the displaced production can be sold cheaply, using marginal costing techniques, to the same markets we depend on.

The markets in Japan will also use less coal if less energy is needed because of better energy management.

China can concentrate on cleaner production using gas and hydro electric generation. Australia has large gas reserves which can and should be used to optimise the use of coal fired and hydro electric plants.

### INEFFICIENT UNPRODUCTIVE STRUCTURES NEED TO BE ELIMINATED

Contention and waste within organisations arises from people not having enough to do.

The structure of the coal mining regulation and management systems is confused.

The mine organisational structure is geared to dealing with unions which in their turn are geared to dealing with parts of Australia's past, some aspects of heavy weight "North American" approaches (which are not much used in North America) and fear, uncertainty and doubt and the confused regulations

This results in inefficiency.

Considerable experience and care is needed to ensure any "solution " works.

Research has shown that the vast majority of flavour of the month management techniques fail, causing bad feelings and creating more confusion.

Multi-skilling is needed in management and the workplace Considerable experience is needed to ensure that the right model is developed.

N B. Multi-skilling, as described in the Camberwell submission, works because tradesmen have the skills to operate the plant and they understand the consequences of poor operations from their training as tradesmen The additional skills needed are minimal.

They are productive because they can undertake repairs, improvements etc., when they are not busy with plant operation.

This very effective model would only work in reverse if the

There is no way to get around the fact that tradesmen and other skilled practitioners know "tricks of the trade" which are sometimes learned and sometimes are inherent abilities.

Multi-skilling in a fast track without enough basic skills does not work.

Poor results are seldom reported.

## CONCLUSION

The market for steaming coal might decrease rather than grow and is now being supplied by a greater number of more efficient mines from many more countries.

Inefficient Australian mines are very vulnerable.

Increasing coal handling capacity to export coal from mines that are low cost producers at the expense of established investments is perhaps the wrong direction to travel in a market which Australia as a whole needs to win.

There is a need for a better set of regulations for the industry.

The industry needs to develop better management structures and philosophies.