

THE CASE FOR ROXBY DOWNS

An Address by

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EDITORIAL NOTE: The recent election of a new State Government in South Australia has refocused attention on the economic impact of development at Roxby Downs. This address, not previously available to S.I.A. members outside South Australia, will be of interest to JASSA readers. NHC

It is, I think, a sign of the times, that I should be asked to entitle my remarks "The Case for Roxby Downs", suggesting, perhaps, that some other association, somewhere else in this city, is today hearing an address entitled "The Case Against Roxby Downs".

In just over twelve months we will celebrate the centenary of the discovery of Broken Hill. On 5th September, 1883, Charles Rasp, when rounding up sheep, chipped at some rocks at Broken Hill; found them black and heavy for their size, thought perhaps they might be tin; went back to camp and formed a syndicate of seven to launch that fabulous mine, a mine that has meant so much to Australia.

I very much doubt that anyone in the 1880's gave an address to an association like yours entitled "The Case for Broken Hill". I think it most improbable that any party of those days put out advertisements saying "Can South Australia afford Broken Hill?"

Whilst Broken Hill became, in the 1880's, the third largest city in New South Wales, it was economically part of South Australia. The mines gave work to South Australia's wharves, railways, farms, factories, warehouses and silver smelters. For every eleven breadwinners in South Australia there was one in Broken Hill, and nearly all he spent or saved returned to Adelaide.

Hardly anyone, in those days, questioned the value of mining, and because of the pragmatic and energetic way in which the pioneers grasped the opportunities which the new colonies afforded, Australia in the 1880's, and indeed up until the Great War of 1914, was, on a per capita basis, the wealthiest country in the world.

Have a think about Australia in 1939 as it entered its most critical stage of its existence and you will observe that most of the vital industries upon which we relied had their financial genes in the mines of Broken Hill.

Today it is very different. Mining is regarded by many as an undesirable thing. Indeed, it sometimes seems as if any economic activity is sinful, unless of course, it is run by the government, or is heavily subsidised by the taxpayer.

Let us ask this question, then. Is it wrong to mine? Are the implications of the title of a new book "Quarry Australia", which questions the value of developing Australia's mineral resources, well founded?

The answer is, I think, very simple. Mining, and the extraction of metals, have gone in hand with civilisation. The very names "Bronze Age", "Iron Age" given by historians to successive periods of civilisation show this.

If we wish to live in houses, drive motor cars, watch TV, use the telephone, enjoy the benefits of modern medicine, then mining is essential.

Just as we have to harvest the wheat crop, and shear the sheep, so must we harvest, each year, the iron, the copper, the coal, the oil, the uranium, without which our civilisation cannot function.

If we *are*, in fact, prepared to follow John the Baptist, and go into the desert, and live on locusts and wild honey, then perhaps we have got an option. But the world will not be able to sustain a large population of John the Baptists, and so those who embrace a John the Baptist lifestyle, and insist that everyone else should do the same, will have to accept a world population very much smaller than we now have.

Logically of course, one can accept the necessity of mining and the use of metals, but still say "no" to Roxby Downs. Why, indeed, should we develop the particular ore body at Olympic Dam? There are plenty of other ore bodies. The world is replete with companies and states who want to supply, who wish to compete in, the international market with copper, gold, uranium, silver and rare earths.

Those who wish to delay or stop development at Roxby Downs are asking South Australians to "step aside" and let our international competitors have the running, have the jobs, the skills and the economic benefit that undoubtedly arise from such a development. I suggest that the acid test of the desirability of Roxby Downs lies not in some sophisticated economic model but rather the eagerness which all other countries would wish to seize on the opportunities presented by this great ore body.

What is patently clear to the joint venturers are the following factors:

1. The ore body cannot be developed mining one mineral product without mining all products and that it will be necessary to sell all of the minerals produced to generate the required revenue to support the project.
2. Much more work is required before a definitive project design can be finalised and we have indicated to the Government that that sum will be not less than a further \$50 million.
3. The joint venturers are not prepared and cannot justify to their shareholders entering into commitments totalling more than \$100 million without having all the conditions being set forth that would apply to the development of a large project.

What is it then that presently is known of the Olympic Dam orebody? There will be handed to you today a brochure that will provide greater detail but in summary we have:

1. A copper, uranium, gold, silver and rare earth mass of mineralisation spread over an area some 8km in length and 4km wide lying at least 300 metres below the surface.
2. The orebody lies in a remote area, occupying an area totally insufficient to even support one family at a subsistence level.
3. To date over \$50 million have been spent on feasibility work
 - a shaft has been sunk;
 - some 13 drills have cored hundreds of kilometres of sections of the ore body to obtain samples;
 - metallurgical studies have been necessary to design the required plant and chemical processes required to separate the gangue material from the mineralisation and marketing and financial surveys to see where the product will go and how the funds can be best marshalled.

The Joint Venturers want to push on with the project. We think it is going to be profitable. But if we're wrong, it is we the Joint Venturers who suffer the major financial penalty. The arithmetic of earnings and costs is crucial to its success.

Whilst I would like to look at the question of uranium and nuclear electricity, I want first to look at the economics of Olympic Dam, the question of royalties and the Indenture Bill.

It has been said that Roxby Downs will be an economic burden to the State. Much ink has been spilt over calculations of what are the implications for South Australia.

Let us propose the following. The investment required for Olympic Dam to produce at an annual level 150,000 tonnes of copper and associated product will be not less than one and a half billion dollars. A significant proportion will have to be from overseas. Let us assume, for ease of arithmetic, that this is spread over five years, i.e. \$300 million per annum.

Let us assume that two thirds of this expenditure, (and this is probably conservative), ends up buying goods and services, and paying wages in South Australia. (Our experience to date is that in excess of 80 per cent of our first \$50 million has been spent in South Australia).

This is approximately \$200 million per annum.

Most of this money ends up ultimately in wages or personal income — and even if we taken an average figure for wages of \$25,000 per annum, this means, in round figures, 8,000 people employed, (and profitably employed), because of the capital works programme at Olympic Dam.

To put it simply and in another way — we would be spending in South Australia, in today's dollars, almost \$1,000 for every man, woman and child living in the State.

Only a small proportion of this is seen at the mine itself, but to assume that it is only those employed at Olympic Dam who benefit, is akin to saying that it was only those who worked at Broken Hill in the 1880's who benefited from that great mine.

When the capital works programme is complete, and the mine goes into production the mine has to pay its way, with annual income from export sales probably of the order of \$500 million. A substantial portion of this will be required to pay interest on and amortise the overseas capital borrowed during the investment period.

Some \$200 to \$300 million will be spent in operating the mine, paying taxes, royalties and other charges for services, paying dividends, and so on; but once again, most of this ends up, in one form or another, paying wages and personal income in South Australia.

And so, once again, in round figures, South Australia stands to gain in the order of 8,000 well-paid jobs, based on export income with no government subsidy, no tariffs, no protection, coming from an industry operating in the world market place.

Another way of looking at this particular issue, that of the economic and psychological influence of export based mining developments, is to consider what has happened in Western Australia and South Australia over the last 20 years. The populations of the two states are now very similar. In the last twenty years Western Australia has had a number of export-based mineral developments — iron ore, bauxite, nickel, and so on.

In 1960 the population of South Australia was 31 per cent greater than that of Western Australia. In 1979, the percentage lead was only 4 per cent. In the intervening period there have been the great mineral developments in W.A. and constitute the main obvious difference in circumstance between the two states in this period. Yet the change in the percentage of the workforce in Western Australia directly involved in mining and quarrying, has gone only from 4.2 per cent in 1960 to 5.2 per cent in 1979.

These figures show, I think, the catalytic effect of employment in profitable export-oriented, highly productive, non-subsidised, world competitive industry.

South Australia on the other hand, has so far missed out on similar development.

To suggest that Olympic Dam will be a *burden* to the South Australian economy, as has been done, is to rely on Alice in Wonderland arithmetic.

The key to understanding the economics of Olympic Dam is this. The richness of the ore body lies not in its grade of mineralisation but in its size. If it is to pay its way, it must operate by world standards on a large scale, in order to benefit from economies of scale, and it must operate for many years to justify the large capital commitment particularly in infrastructure facilities. This means that the initial investment has got to be big and in all probability whatever is the initial scale of operation it will be expanded over time.

Olympic Dam is an all or nothing project.

As you all know, there is an Indenture Bill to give Parliamentary blessing to the Agreement between the Joint Venturers and the Government which, we understand, is going to be put to the vote in both Houses of Parliament in June. There is a possibility, perhaps even a probability, that this Indenture Bill will be defeated in that House. If this does happen the Joint Venturers in the Olympic Dam project will have to wind down their activities at Roxby Downs until the situation is resolved. If, as far as WMC is concerned, a misfortune that this great project should have run into what has become a party political matter.

W.S. Gilbert described the game of party politics this way:

“I often think it’s comical
How Nature always does contrive
That every boy and every gal
That’s born into the world alive,
Is either a little Liberal
Or else a little Conservative!”

and in contemporary terms, (assuming this gathering this afternoon is statistically representative), that means that half of you vote ALP and half vote LCL, with perhaps a few of you, particularly in the seat of Mitcham, forsaking traditional loyalties to vote Democrat.

Likewise our employees, the people who actually produce the minerals; they will split approximately 50/50, in their political allegiance.

And when one or two of you, no more, change sides at election time for some reason or another, than a government falls, we have a new set of Ministers, and a new batch of policies, like scones fresh out of the oven, to contend with.

This is the context, then, in which the Joint Venturers are trying to raise up to one and a half billion dollars to get this great project off the ground. We are well aware that, given an operating life of at least 50 years, we will have to operate under Ministers of all shades of party political hue.

The Indenture Bill is opposed, we are told, for a variety of reasons.

There is the claim that the Bill is unnecessary, or premature. There is the argument that the terms of the agreement are unreasonably generous to the Joint Venturers, or that the passage of the Bill will compromise the sovereignty of the South Australian Parliament.

Let us consider these points.

To get a prospect such as Olympic Dam onto a production basis, a large capital expenditure will be required. To raise this money, the Joint Venturers will have to borrow substantial amounts of overseas capital. The international bankers who lend that sort of money are keenly interested in the cost structure of the whole operation, naturally; but they are also very interested in the degree of commitment to the project of the South Australian Government. Likewise we, our bankers and customers wish to see that the project has both legal and practical commercial security in its dealings with governments. In passing the Indenture Bill the Joint Venturers will have the best legal security possible. We recognise that what the South Australian Parliament can pass in 1982, it can certainly amend, or even revoke, in 1983 or thereafter. But it can only do

that after full and open debate, in accordance with the South Australian Constitution. There can be no restriction by one government to irreparably bind its successor but if it does seek to change by unilateral action the arrangements such action will be observed by the investing public, the world banking community and the world metal consumers. No government would lightly undertake such action.

From a commercial point of view we have reached agreement that certain of the vital matters that affect the project should be subject to arbitration rather than unfettered ministerial discretions. In this manner what cannot be done indirectly must be done directly either by agreement with the Joint Venturers or through the Parliamentary process.

What the passage of the Indenture Bill means therefore is the ability of the Joint Venturers to go to the international banking community, with the very clearly defined support of the South Australian Parliament, together with accurate knowledge of royalty payments, infrastructure costs, and government participation in those costs, and the knowledge that changes to those costs and conditions can only come about by new Acts of Parliament. This increases, very greatly, the status of Olympic Dam in the estimation of the international capital markets.

The Bill has been attacked because it commits the South Australian Government to spending up to \$50 million on infrastructure. It must be emphasised that the \$50 million is a maximum figure, is pro-rated against town size, in other words it is only as the size of the town increases that the State is called on to make expenditures and that naturally enough, the expenditure will be spread over a considerable time. Finally, as far as this point is concerned, it should be remembered that for every single dollar put in by the South Australian Government into infrastructure development, the Joint Venturers will be putting in \$7.

If Olympic Dam goes ahead, the township will be built with less government support than any other town in South Australia.

All we are asking of the State Government is that they contribute a *proportion* of the costs of facilities and services that all other citizens and taxpayers take for granted as being the proper role of the State to provide.

Turning now to royalties. I see this in two parts. Firstly, is the heavy and in my view undue focus of attention on this aspect. It has been presented as if the only benefit to the State is via royalty receipts. The absurdness of this emphasis is to suggest that if an industry — any industry does not pay royalties, then it is of no benefit to the State. The real major benefit from the project is the flow on from job creation investment on top of which are royalty receipts.

The second aspect is the royalty calculation.

Royalty payments, under the Indenture Bill, are in two parts. The first part is levied on production, not on profit. This means that even if profits are low, this first part of the royalty is still going to provide the most secure, predictable and steady flow of receipts to the State Government.

The second additional part of the royalty is a surplus related payment. This means that in times of good commodity prices, the State Government will do well. In times such as we are now experiencing, when prices are unusually low, I would expect and make no apology that the second element of the royalty payment will be zero.

The iron law which governs these projects was well expressed by Mr. Micawber in David Copperfield:

“Annual income twenty pounds, annual expenditure nineteen pounds, nineteen and sixpence, result happiness.

Annual income twenty pounds, annual expenditure twenty pounds ought and sixpence, result misery”.

In the case of the Joint Venturers at Olympic Dam, the result is not just misery, but ultimately bankruptcy, and so we do need to know, before we commit ourselves to the expenditure of billions of dollars in capital works, what our commitments for royalties, township facilities, transport, water, and so on, and so on, are going to be.

The minerals produced at Olympic Dam must be sold on the world market, at market prices. There is no world government to which we can turn for tariff assistance, or for protective quotas on competing imports.

The copper, the uranium, the gold that comes out of Olympic Dam must be profitable at the going world price. Otherwise we are in the Micawberish situation of income twenty pounds, expenditure twenty pounds and sixpence, or much worse.

Mr. Micawber based his advice on the prospect of a fixed and predictable annual income. Would that the Joint Venturers could do the same! The rise and fall of commodity prices, as you all know, is a subject which has provided a livelihood for lots of people over the centuries, as well as having bankrupted others. Copper, which we anticipate generating approximately half the income from Olympic Dam, has had a long history of ups and downs, but the Australian mining industry has had long experience in copper, and so our calculations are confidently based. Likewise in gold — and Olympic Dam will produce small amounts of gold. But in uranium we have metal which is today politically different from all other metals. It has spawned a host of car stickers importuning Australians to “Keep uranium in the ground”. Ironically many of the cars carrying

those stickers have a substantial nuclear electricity component in them. Those fashionable French and Swedish cars over 30 per cent constructed with nuclear energy.

Those who display such messages are following in the footsteps of William Branwhite Clarke, a God-fearing Anglican clergyman, who, Geoffrey Blainey tells us, taught in the King's School near Sydney, and in 1841 went prospecting across the Blue Mountains. Near Hartley he found gold embedded in quartz, but for him gold was "The cry of Mammon", in a country where he saw no honesty in servants, and no morality in masters. He believed gold mining was morally and economically undesirable. "There is no instance," he wrote dogmatically in 1849, "of a man making his fortune by opening a gold mine". We hear today very similar comments about uranium.

It was the Rev. Clarke who ascribed to Governor Gipps the remark "Put it away, Mr. Clarke, or we shall have our throats cut". Gipps was alleged by Clarke to have said this to him when he was showing the Governor some of his gold specimens. Similar allegations are made about uranium — not so much in terms of cut throats, more in terms of home-made nuclear weapons.

Let us briefly take up the nuclear issue. For those who want a much more detailed discussion, let me recommend Sir Fred Hoyle's latest book "Commonsense in Nuclear Energy", now available in Adelaide for, I think, approximately \$5.

The main present thrust of the anti-nuclear position has been of a moral or theological kind. This is the ground to which most of the opponents have been required to retreat after the many technical and economic and safety issues have been thoroughly investigated. We are confronted with the untestable proposition that nuclear electricity is just wrong primarily by seeking to link nuclear electricity with nuclear weapons. I think that deep down this happens because, in some way, it is felt that the nuclear weapons at Hiroshima and Nagasaki are connected with nuclear electricity. Nothing could be further from the truth.

One can understand the horror which most people have concerning nuclear warfare. No sensible thinking person would object to meaningful multilateral nuclear weapons limitations. But the connection between nuclear electricity and nuclear warfare is exactly the same connection that exists between many other products with which we associate in our daily lives. On this thesis there would be no war without

steel, petroleum, electronic gadgets etc. Yet we accept them. We accept that we should kill citizens of Planet Earth at the rate of one Nagasaki bomb per every three months. Where are the demonstrators? To many countries who do not enjoy the luxury of being an energy surplus community as we are, the use of nuclear electricity is just as vital as access to adequate supplies of oil. It is foolish to think it is either sensible or possible to deprive those countries of uranium. Perhaps it is overlooked how common is the element of uranium in the Earth's crust. It is certainly more common than tin and as exploration continues I believe it is even easier to find.

The distribution of the mineralisation is widespread and given prices two or three times the present levels many millions of tonnes of uranium could be classified as mineable reserves. In Sweden alone, mining of uranium is kept at a low level for economic reasons but if required for security reasons or changed economic circumstances at a price of about \$90 per lb., — its "reserves" would be about 1 million tonnes — or more than twice Australia's present estimated reserves. And so it is for many countries.

Ultimately, what the anti-nuclear protagonists are demanding, is to base their arguments on a zero risk society.

The risks associated with nuclear electricity are miniscule compared with other activities we take for granted. If the South Australian Parliament House were a nuclear power station it would be shut down tomorrow and encased in concrete as the radiation emissions from it are well in excess of those permitted from a nuclear power station. Some might suggest this goes a long way to explaining the actions of our politicians.

If a zero risk society is accepted as necessary, the only course of action I can recommend is that we all should go home, go to bed and die healthy.

Let me conclude. The decision about Olympic Dam is a decision that the people of South Australia have to make. The Joint Venturers must deal with the government of the day. We are for the project. We want to push on with it. But if South Australia doesn't want it, we will accept that decision. Indeed, we have no choice. We can only present the facts as we see them — and I've tried to do that today.

If South Australia does say no to Olympic Dam, I think it will be a sad and unprecedented action. I cannot recall a state anywhere in the world rejecting an opportunity that offers the rewards, the excitement, the challenges, that Olympic Dam offers us today.