

Unions NSW

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Contents

Executive summary	4
Introduction	6
Government Investment and Debt	7
Government debt is stigmatised for no good reason	7
Debt reduction is a major rationale for privatisation	8
The benefits of privatisation are often short term	8
Private debt is more expensive than government debt	8
The emphasis on debt reduction has resulted in underfunding of infrastructure	9
Debt is the best way to finance public infrastructure	9
Credit ratings are not determined by debt levels	10
Private Investment	11
Profit-oriented companies tend to manipulate prices	11
The electricity market provides an incentive for undersupply by private investors	12
Private companies prefer to build peak rather than base load power stations	12
Prices need to be very high to attract private investment in generation	13
Private investment is unlikely to be timely	13
Public investment is not solely based on profit considerations	14
Power Purchase Agreements tend to be very expensive	14
Private ownership of NSW generators would not prevent price manipulation	15
Efficiency vs Lower Prices and Jobs	16
Private companies do not produce cheaper electricity	16
Privatisation has not lowered prices in Australia	18
Private companies make cost savings by cutting jobs	19
Cutting jobs means cutting maintenance, safety and reliability	19
Cutting jobs does not benefit the consumer	20
Efficiency is a means not an end	20
Retail Prices and Risk	22
Price volatility raises retail prices	22
Vertical integration keeps retail prices high	22
Vertical integration undermines the financial contracts market	23
The sale of NSW retail would not help the contracts market	23
Government ownership reduces risks and keeps prices down for consumers	23
Privatisation and deregulation of retail mean higher prices	24
Private companies do not have to meet social obligations	24
Private ownership shifts price burden to poorer and regional households	25
Private retail companies do not necessarily compete on the basis of price	25

2

Consolidation vs Competition	27
Competition is a major rationale for privatisation	27
Privatisation has led to less competition	27
The ACCC cannot be relied on to prevent this consolidation	28
Consolidation increases barriers to entry	20 29
Consolidation improves economies of scale lost as a result of restructuring	29
Transnational companies are increasingly dominating electricity markets	29
National governments have difficulty regulating large transnational corporations	31
Greenhouse Gas Emissions	33
Private companies seek to maximise their profits not environmental gains	33
Deregulation encourages maintenance of old polluting power plants	33
Emissions trading is ineffective	34
Mandatory renewable energy targets are too small and ineffective	35
Government investment is necessary to maximise environmental benefits	35
Conclusion	37
Endnotes	38

EXECUTIVE SUMMARY

The goal of the NSW government should be to supply affordable, accessible and reliable electricity to the community in an environmentally sound way. In meeting this goal the NSW government should not be prepared to sacrifice the interests of NSW consumers simply in order to ensure that the National Electricity Market (NEM) functions as a competitive and efficient entity. Competition and efficiency are not ends in themselves; they are means to an end, and they are not always the best means.

Energy efficiency options and measures in each sector of the NSW economy need to be fully explored before the need for additional baseload electricity generation can be determined. If and when baseload generation is required it should be provided through government investment rather than private investment. Government debt is the best way to finance public infrastructure. Because this infrastructure generates income and the NSW government is able to support the additional debt involved, it will not undermine the government's credit ratings.

Private investment cannot be relied on to provide baseload power generation in a timely and affordable manner. Private generation companies are able to manipulate prices when there is minimal reserve capacity and are reluctant to jeopardise that situation by increasing reserve capacity. This means they will not invest in baseload power generation until reserve capacity is very low and prices are very high. When this situation is reached it will take some years to construct a power station, during which time the power supply will be both unreliable and expensive. Alternatively they need government guarantees of high prices over a lengthy period of time via a power purchase agreement (PPA).

In contrast, the NSW government can invest in baseload generation before the situation becomes critical, avoiding a period of energy shortages, blackouts and very high wholesale prices. What is more, since it is not restrained by a single company's commercial concerns, the government can site baseload power stations to suit transmission requirements and use the most environmentally sound technology to build them. The government is also in a better position to research and develop power stations that utilise emerging technologies that have potential to reduce greenhouse gas emissions such as hot rock technology.

Publicly-owned electricity enterprises have consistently provided electricity at no greater cost than privately-owned enterprises and often for prices that were far less than those charged by private companies. The government can borrow money at lower rates than a private company and does not expect the high returns on investment that a private company requires. Private companies reduce their own costs by cutting workforces and maintenance and expenditure on equipment. This seldom translates to lower costs for consumers yet it often lowers reliability of supply and reduces service as well as depriving thousands of people of their livelihoods.

Private companies also seek to increase their market power, reduce competition, improve economies of scale and minimise their risks by merging and acquiring other companies. This has led to increasing horizontal and vertical integration of private companies in the NEM. This has reduced competition and raised barriers to entry by new firms into both the generation and retail sectors. It has increased the market power of dominant firms and exposed the market to the possibility of takeover by even more powerful transnational energy conglomerates.

Vertical and horizontal integration has facilitated the ability of private generators to manipulate wholesale prices. In addition it has reduced the liquidity and depth of the market for hedging contracts that are supposed to reduce the risks to standalone retailers and generators posed by the volatile wholesale electricity market. NSW residential consumers have been protected from the fluctuations in wholesale price through price regulation, facilitated by the Electricity Tariff Equalisation Fund, which enables funds to be moved between state-owned generators and state-owned retailers.

The phasing out of the equalisation fund and the proposed privatisation of the retail sector in NSW would inevitably raise prices for most, if not all, consumers. This is recognised by the decision of the Independent Pricing and Regulatory Tribunal (IPART) to raise prices over the next three years to prepare consumers for a privatised market where competing companies need to charge extra to cover their marketing costs, profits and compensate them for the risks posed by the volatile wholesale market.

The pressure for NSW to privatise both the generation and retail sectors of the electricity industry is coming from private investors who want increased opportunities to invest in NSW's healthy and profitable electricity industry without competition from state-owned enterprises, and from politicians and bureaucrats who have an unfounded belief that private ownership is superior and an irrational faith in competition and efficiency as goals worth pursuing in their own right.

However, it is clear that any further privatisation of electricity in NSW will not only lead to increased prices but increased consolidation amongst the major vertically and horizontally integrated players: AGL, Origin Energy and TRU Energy. Further privatisation therefore will not even increase competition and it will certainly not benefit consumers.

Some argue that higher retail electricity prices in NSW and privatisation of the retail sector will encourage more private investment in generation in NSW. However private retailers would be more likely to invest in peak power plants to reduce their exposure to volatile wholesale electricity prices, than in baseload generation. Such investment would mostly be in gas-fired power plants rather than in renewable energy-based power generation. Private companies decide on energy sources primarily on the basis of profitability and have an incentive to maximise electricity demand so as to maximise those profits rather than encourage energy efficiency.

If greenhouse gas emissions are to be reduced, any additional peak power in NSW, should it be necessary, needs to be based on renewable energy such as solar or wind, and the best way to ensure this is for the NSW government to build it. Mandatory renewable targets have been ineffective at encouraging any wide-scale adoption of new renewable energy in Australia. Similarly, emissions trading has been ineffective at achieving any significant reduction in greenhouse gas emissions in Europe. These mechanisms seek to alter market conditions and provide financial incentives to private companies to invest in environmentally sound technologies but government investment is a more direct, more certain means of achieving the vital goal of greenhouse gas emission reductions.

Traditionally governments have sought to supply affordable, accessible and reliable electricity to the community. Now those goals have been subordinated to the goal of ensuring that electricity markets work. In Australia, as elsewhere, the National Electricity Market (NEM) has introduced major price volatility and risk into electricity supply. Now there is pressure on NSW to privatise sectors of its electricity supply despite strong public opposition to electricity privatisation.

In the lead up to the 1999 election the Liberal Party adopted a policy of full electricity privatisation along with guarantees of three years of job protection to electricity workers and a 'bribe' of \$1000 to every household, or \$1100 worth of shares, after privatisation. What is more it was able to make other election promises worth a billion dollars per year to be paid for by privatisation proceeds.¹ The deputy leader of the Liberals, Ron Phillips, said that the reason that people were opposed to privatisation was that they didn't perceive there to be any "personal or tangible benefit" and the promises were "aimed at winning the hearts of the [industry's] current owners, the NSW taxpayers".²

The Liberal Party's own pollster, Mark Textor, had warned them that privatisation of electricity would lose them the election and on radio talk back shows privatisation of electricity was the number one issue with 70 percent of callers being opposed to it. People were aware of the power failure in Auckland and the news of poor reliability and rising prices in post-privatisation Victoria. Even the majority of small businesses surveyed were opposed to it.³ And indeed, despite the promised bribe, the Liberals lost the election resoundingly, indicating the strength of public feeling against privatisation. In 2002 a new Liberal Party leader, John Brogden, promised not to privatise the state's electricity. And the Labor government also put its privatisation hopes on hold.

However the pressure from outside NSW to privatise sectors of the NSW electricity supply is still strong. Market advocates claim that the failure to privatise in NSW has distorted the electricity market and prevented it working as it should. Current moves to privatise the retail sector and leave provision of new power generation to private investors are not in the interests of NSW electricity consumers but rather driven by a futile attempt to fix a market system that has failed to deliver affordable, accessible and reliable electricity in other states.

GOVERNMENT INVESTMENT AND DEBT

Government debt is stigmatised for no good reason

Government debt has been stigmatised as part of the propaganda campaign aimed at promoting government asset sell-offs. However there is nothing inherently wrong with debt. Debt is financially advantageous if income from assets is greater than the debt repayments. It also enables the costs of building capital infrastructure to be spread over the lifetime of the asset, which can cover several generations of taxpayers.

Traditionally, public infrastructure has been financed through government loans and bond issues. This was necessary in Australia because of the unwillingness of private companies to risk investing their money to develop public infrastructure unless they could be sure of making very high returns from it. Also the few private power companies that did start up in Australia were nationalised in the first half of the 20th century by state governments because private companies seemed willing to sacrifice reliability, affordability and quality to satisfy shareholder interests.⁴

The government debt incurred was justified on the assumption that the infrastructure would benefit future generations and that therefore it was only fair that they should also contribute to the cost. Economies of scale combined with technological advances ensured that the electricity was reasonably priced despite the maintenance of reserve capacity. The cheap electricity promoted more consumption and further growth.

However during the 1980s the idea of government loans being used to finance investment in public infrastructure was stigmatised by ideological interests who had an agenda of reducing the size and influence of government and shifting government assets into private hands. The Washington Consensus, first imposed on Latin American countries by the World Bank, and then adopted voluntarily in Australia and New Zealand, was a formula that included 'fiscal discipline' – that is reducing budget deficits and debt at all levels of government; privatising government businesses and assets; abolishing barriers to foreign investment; and deregulating sectors of the economy.⁵

These were measures that benefited business interests at the expense of local communities. They were particularly beneficial to transnational companies looking for investment opportunities in public services around the world. The measures were promoted by corporate-funded think tanks in the US and the UK as well as Washington policy networks supported by large corporations and international financial interests. In Australia these 'reforms' were undertaken in the name of increased economic efficiency, productivity and industrial competitiveness.

However, as Professor Allan Fels noted in 2004, the "chorus of voices urging federal and state governments to rethink their aversion to debt is getting deafening... There are very few credible arguments against governments borrowing to build needed infrastructure".⁶ Similarly economic commentator Ross Gittins referred to the public's economically illiterate notion that deficits and debts are bad and surpluses are good".⁷ This, however, was a notion promoted by many neoliberal commentators in Australia and elsewhere.

Debt reduction is a major rationale for privatisation

Government debt reduction has been a major political rationale for privatisation and this was particularly true in Victoria in the early 1990s when the debt ballooned to the point that the state's credit rating was downgraded by international rating agencies.⁸ However, in the case of the State Electricity Commission of Victoria (SECV), debt was not really a problem. In the year before it was broken up, 1992/3, "it paid \$995 million in interest, a \$191 million dividend to the State Government, and had a profit of \$207 million."⁹

An Independent Inquiry into the Privatization of Victoria's Electricity Industry found that in the year prior to SECV restructuring, its debt-equity ratio was 342 percent compared with an average of 382 percent for the top 20 Australian companies on the Australian stock exchange. In addition a 1994 Bureau of Industry Economics study found that Victoria's electricity prices to industry were eighth cheapest out of 40 OECD countries.¹⁰

Electricity privatisation in South Australia (SA), which occurred in 1999, was also promoted as a debt reduction measure. State debt was portrayed as being out of control. In fact SA's debt was "at historically low levels". Before its breakup and sale the Electricity Trust of SA (ETSA) contributed some \$2 billion dollars to state revenue over the previous decade and its operating costs had decreased significantly. The money from the sale did not adequately compensate for this loss of income.¹¹

The benefits of privatisation are often short term

The money raised from the sale of government enterprises is often presented as if it is all bonus revenue for a government. However governments do not gain in the longterm if the savings in interest repayments, together with the tax payments from the new private companies, are less than the combination of lost dividends and additional costs resulting from privatisation. The latter include the costs of market regulation, market failures, bankruptcies, government bailouts and abuses of power by the private companies.

Economist Richard Blandy confirmed in 2002 that "revenues earned by ETSA for the South Australian government before it was privatised would match, if not exceed, the interest on South Australian debt retired as a result of ETSA's sale. Hence, South Australians now face historically high electricity prices compared with the rest of Australia for no net benefit to the state government finances."¹²

Similarly, Australian National University economist John Quiggan agreed that "privatisation of the South Australian electricity industry has reduced the net worth of the public sector... the interest savings on the sale price will fall consistently short of the earnings foregone through privatisation. This is consistent with most Australian experience of privatisation."¹³ Quiggan has also pointed out that the privatisation in Victoria resulted in no net gain for the Victorian government.¹⁴

Private debt is more expensive than government debt

Privately-owned electric companies need to borrow money to buy government enterprises and build new facilities and so the electricity sector ends up with higher debts in many cases than when it was publicly owned. This private debt is more costly than government debt. Governments have access to low interest loans, available because of government guarantees. The high asset sale prices in Victoria represented large amounts of corporate debt. This debt, which came at a higher price than government debt, was far more than the original SECV debt – a debt that the industry was not supposed to be able to support. Analysts predicted the cost savings available to the private sector would not be enough to make a profit and service the debt and therefore they would inevitably have to increase electricity prices or go out of business. Indeed, United Energy, one of the privatised companies, later admitted to the *Sydney Morning Herald* that it had been too optimistic in its estimates of the costs it could cut.¹⁵

Many of the original companies that bought up Victorian electricity assets, unable to raise prices sufficiently because of state government price caps, were later forced to sell them. There was \$10 billion of existing electricity infrastructure up for sale in 2002 alone. And that didn't include the \$2.8 billion worth that US-based supplier TXU had unsuccessfully tried to sell the year before.¹⁶

Most of the economies that could be achieved by slashing the work force had occurred prior to privatisation. Booth estimates that the cost savings from this could have led to price reductions of 30% and still serviced the previous \$9.5 billion government debt but because of the need to service the \$23 billion spent by private companies buying the industry, there was pressure to increase prices rather than decrease them.¹⁷

The profitability of NSW generators has been better than their privatised Victorian counterparts. This has been partly because of the greater debt load of the privatised generators, meaning that NSW generators could make profits from much lower wholesale electricity prices.

The emphasis on debt reduction has resulted in underfunding of infrastructure

What began as a strategy for creating business investment opportunities formed the basis for the conventional wisdom amongst politicians and the media that borrowing money for the purposes of infrastructure was irresponsible. In fact, the neglect of public infrastructure that resulted from the withdrawal of government investment is the real irresponsibility. The emphasis on debt reduction has resulted in a decline in investment in public infrastructure in NSW and other states, despite the "compelling evidence that investment in public infrastructure is linked with productivity growth and economic prosperity".¹⁸

The underspending on infrastructure has reached such a level that it has even become a major concern to business. Heather Ridout, chief executive of the Australian Industry Group, argued that "we've really over-emphasised the zero debt fetish and not taken a sufficiently national nett worth approach to developing and maintaining our infrastructure".¹⁹

Debt is the best way to finance public infrastructure

The Allen Consulting Group has also argued for a greater use of government debt to fund public infrastructure projects. A study undertaken in 2003 found that the use of government debt was the funding mechanism most likely to raise Gross State Product (GSP) and to increase employment:

The case for the greater use of government debt is strong. Public infrastructure typically involves long lived assets and it seems rational that they should be financed over time. The evidence provided in this study is that this funding approach provided the macro-economic path with the highest gains from infrastructure investment. Billions of dollars of economic growth and many thousand of NSW jobs hinge on this.²⁰

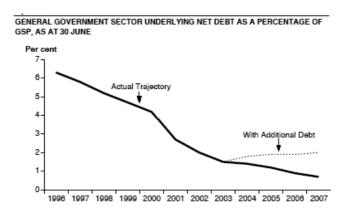
Governments do not require the high returns on investment that private investors expect. For example, the return on equity in publicly owned generators in Queensland is 7.1 percent on average, in NSW it is 10.6 percent. KPMG found that private investors would require a return of between 15 and 20 percent. This means that governments are willing to invest where private companies are not and don't expect as much profit.²¹

Credit ratings are not determined by debt levels

Contrary to common belief, government debt is not a determinant of a government's credit rating. Rather, it is the ability of governments to meet their debt obligations that determines their credit ratings. Ratings agencies, such as Standard & Poor's recognise that state governments have an obligation to fund infrastructure development and that this may be through debt. In deciding credit ratings S&P takes account of a wide number of criteria of which debt burden is only one. With respect to debt, S&P is interested in how that debt is managed, what it is used for, and how risky it is. Debt burdens are measured in terms of a government's ability to support and pay it back: "Importantly, we view the debt burden in the context of an LRG's [local or regional government's] ability to maintain certain amounts of debt obligations."²²

Whilst the average level of government debt in the OECD was over 40 percent of GDP in 2004, the debt of the NSW government was around 1 percent of gross state product (GSP).²³ S&P also recognises that where previous governments have underspent on infrastructure, leading to deterioration of assets, catch up spending will be necessary.²⁴

The Allen Consulting Group pointed out that an increased debt was very unlikely to affect the state's credit rating or to increase interest rates. It demonstrated that the government has retained the AAA credit rating when its debt levels were much higher and that a substantial additional debt would not take debt to levels likely to trigger a reappraisal of the state's credit rating (see diagram below): "It is unlikely that the credit rating agencies would downgrade NSW if it borrowed to finance an additional investment in infrastructure of several billion."²⁵ Moreover, plans by Queensland and Victoria to borrow more for investment purposes did not trigger any change to their credit ratings.



Source: The Allen Consulting Group, 'Funding Urban Public Infrastructure: Approaches Compared', Report for the Property Council of Australia, August 2003, p. 90.

PRIVATE INVESTMENT

In practice the market has turned out to be a rather poor mechanism for ensuring adequate electricity generation. Under market conditions shortages are supposed to lead to high prices which, in theory, provide an incentive to build new plants. But in fact there is more financial reward in creating shortages and so most companies prefer to avoid risky investments that will only lower the wholesale electricity price by increasing supply. For private companies the biggest risk in building new generation facilities is that they will cause wholesale electricity prices to fall.

Profit-oriented companies tend to manipulate prices

In a market, there is no central planner choosing which plants to call on according to logic and marginal costs or environmental costs. Instead "the central planner is replaced by price signals."²⁶ The owners of plant that are sitting idle most of the day require the price they get at peak time to compensate for the periods of idle time. So even in a truly competitive market prices go up and down.

This price volatility is exacerbated by the ease with which private companies can use their market power, or create artificial shortages of electricity, to force the price up to very high levels, even in times of lower demand. Electricity markets bring a disjuncture between price and the cost of production.

The experience of the Australian electricity market has been that private, and also state-owned electricity companies that are required to behave like private companies, have made large profits by charging outrageously high prices when demand is high and reserve capacity low. Market theory assumes that supply and demand reaches an equilibrium at a price that is mutually acceptable but because demand is not flexible in the case of electricity, sellers have power over buyers knowing that they will have to buy even if prices become unreasonable. They can exercise that power by charging exorbitant prices. Profit-oriented electricity companies have exercised market power in electricity markets around the world.²⁷ Whatever mechanism is used to set the price, wholesale electricity prices have spiked at hundreds of times the cost of production.

Price manipulation is also a feature of the Australian electricity market. Generators supplying the NEM are able to withhold capacity on hot days until the price peaks and then they can rebid their capacity at inflated prices. This means that prices can vary from AUD 30 to AUD 10,000 per MWh, even though the average price in 2006 was below \$40 per MWh. Generators admit that the reason for rebidding is 'financial optimisation' – that is making money.

A 2002 Council of Australian Governments (COAG) report admitted that the system enables one or two generators to "effectively set the price at a level they choose" up to the 10,000/MWh price cap.²⁸ A study by the Australian Bureau of Agricultural and Resource Economics (ABARE), a supporter of deregulation and competition in electricity markets, has confirmed that price manipulation occurs in the NEM. Such uncompetitive bidding has cost the Australian economy hundreds of millions of dollars.²⁹

The electricity market provides an incentive for undersupply by private investors

If companies resort to artificially creating shortages by withholding some of their generating capacity in times of high demand so as to be able to charge very high prices for their remaining electricity, they are hardly likely to invest in extra capacity.

The NEM in Australia provides no incentive for generators to invest in new capacity because undersupply keeps pool prices very high and the standby plant necessary to ensure system reliability erodes profits. "Generator profit is inversely proportional to the levels of reserve plant with no incentive for system reliability".³⁰ System reliability is therefore compromised by the unwillingness of private companies to maintain reserve capacity in case of sudden rises in demand.

The likelihood of blackouts increases as a result of lower reserve levels of generation capacity caused by lack of incentives to invest in reserve generation capacity. A study by the Federal Bank of New York found that consumers can expect less reliability of supply: "Market forces may be inadequate to guarantee that providers can always deliver a sufficient quantity of electricity to maintain the grid's stability during peak-load periods".³¹

As noted earlier, it was the unwillingness of private companies to take on the risks associated with constructing capital-intensive electricity infrastructure that led to government provision of electricity in many countries in the first place. In contrast a government can build reserve capacity without much risk, because the costs can be spread over a large number of consumers over long periods of time. In a public system, the risk of lower returns to taxpayers who pay for the infrastructure is balanced by the lower prices to electricity ratepayers, usually the same people.³²

Private companies prefer to build peak rather than base load power stations

Because there is a lag time between a decision to build a power plant and its commissioning a private company investing in generating infrastructure needs to be sure that the extra capacity it is building will be needed in three or four years time. So the tendency is to wait and see. For the same reason private companies are more likely to build peak power plants than baseload because peak plants are cheaper and quicker to build and therefore involve less risk. Whilst private companies may have bought existing base load power stations they are more reluctant to invest in new base load power stations.

The Australian Competition and Consumer Commission (ACCC) and the Australian Energy Regulator (AER) argue that one of the benefits of vertical integration of private electricity companies (see below) is that it allows the companies to reduce their risks from the volatility of the electricity market, and that this has provided an incentive for retailers to invest in peak electricity generating plant.³³ Indeed AGL justifies its proposed Leafs Gully peak gas power plant in NSW in the following terms: "Peaking power generation enables AGL to manage its cost of electricity sold to consumers and minimises market exposure."³⁴

In 2005 the Carr government considered the sale of retail businesses as a way of attracting dominant players such as AGL and Origin Energy to invest in new power generation.³⁵ However it is clear that while the privatisation of retail in NSW might result in more peak electricity plant being built by these companies as they seek to reduce their risks, it is unlikely to promote investment in base load power stations.

Prices need to be very high to attract private investment in generation

In an electricity market, electricity prices have to be very high to provide an incentive for private interests to invest in new generation plant. This has been a major part of the Independent Pricing and Regulatory Tribunal's rationale in approving massive price rises in NSW over the next three years. It argues that "prices need to be sufficient to ensure that efficient and economic investment in electricity generation occurs."³⁶

An AGL environmental impact statement states:

Historically, prior to the NEM, prices have not played an important role in shaping energy infrastructure development. However, since the creation of the NEM, price determines how infrastructure is developed through the supply and demand mechanism. Increasing prices provide an incentive for investors to invest in new generation capacity...³⁷

Ulrik Stridbaek, Senior Policy Advisor with the International Energy Agency (IEA), claims that in the states where electricity has been privatised, that is, Victoria and South Australia, price signals have worked to encourage new investment in electricity generation. According to Stridbaek, the high prices experienced in the South Australian electricity market were necessary to provide a financial incentive for new investment and the state and federal governments were right to ignore the public outcry and let the prices soar.³⁸

For Stridbaek the "price of electricity to the final consumer is rarely a good measure" of how well an electricity market is performing. High prices are necessary to encourage investment.³⁹ In this free market logic, promoted by almost all the international financial institutions and policy bodies, competition is the cornerstone of a performing market because it delivers efficiency. Yet the idea that efficiency is supposed to be a means to lower the price of electricity to consumers seems to have escaped them. In their distorted logic, the goal of efficiency should be pursued for its own sake, not because it will lead to lower electricity prices. It should be pursued even though it leads to more expensive electricity!

Private investment is unlikely to be timely

Relying on the price mechanisms means that investments are not made in time to prevent high prices and electricity shortages leading to blackouts and service interruptions.

Where governments have stepped in to provide electricity generation in advance of price signals, they have been criticised by privatisation advocates. For example, the Energy Reform Implementation Group (ERIG) has argued that government investments in Queensland have been "undertaken too soon, because of concerns about reliability". The problem is that this undermines the profitability of privately-owned generation plant and their ability to manipulate prices.⁴⁰

Electricity markets that rely on private investment in generation tend to produce a pendulum effect between too much power and too little, with private companies reluctant to invest in new capacity until a prolonged period of shortage pushes average prices up. Then they all rush to build new capacity, usually peak plants, creating a glut for a period when wholesale prices drop (though not necessarily retail prices if the market is vertically integrated – see below).

This working of the market creates an unnecessary burden for consumers for long periods of time when prices are high and supply unreliable. Surely planned and timely government investment is preferable to subjecting consumers to the vagaries of the market.

Public Investment is not solely based on profit considerations

ERIG argues that all investment decisions should be made on the basis of purely commercial decisions, that is, what is profitable to the investor. It criticises the way governments make investment decisions that take account of political factors such as "desires for regional development".⁴¹ Yet that is the *advantage* of public investment and control of public services. It means that a broader set of considerations are taken into account, such as environmental impacts, and issues of reliability, accessibility, and affordability of an essential service.

ERIG argues that this consideration of non-commercial factors "is one of the biggest impediments to private investment in the energy sector". However it must be remembered that electricity systems do not exist to benefit private investors but rather the whole community. And competition and efficiency are not goals in themselves (see below).

Narrow commercial decisions are not always the most efficient either. Private power stations are not necessarily located in the best possible locations in terms of transmission efficiency and minimising energy losses, since location decisions are based on the company's own commercial considerations and the energy efficiency of the broader electricity system is not their concern. However, poorly sited generation plant can add to transmission costs and losses as well as congestion issues in some parts of the network.⁴²

Power Purchase Agreements tend to be very expensive

One way to ensure that private investment is timely, while retaining government control of energy planning, is to commission an independent power producer (IPP) with a power purchase agreement (PPA). Such agreements are common in Asia and in developing countries. The rationale for them is that private investment will provide the capital and expertise needed to increase generating capacity quickly.

IPPs eliminate the risk that there will not be sufficient demand for the output of a new plant by insisting that a power sales contract is in effect before construction begins. The PPA typically covers the first fifteen to thirty years of operation of the plant and requires that the state to buy the total output of the plant.⁴³

Even the risks of technological obsolescence and poor management are shed by the PPAs. Because of the length of PPA contract terms governments are committed to paying for older, less efficient plants, whilst technology advances and other cheaper fuels become available. The private investors don't have to worry about the risk that they will become inefficient, unreliable, uncompetitive, because their income is assured, and there is little incentive for upgrading or ensuring the plant is available at times of peak demand. Far from being more efficient forms of generation, "the potential for inefficiencies is substantial if the IPPs meet a large share of the load".⁴⁴

In theory, private entrepreneurs are willing to take on risks if the return is high enough, so that the greater the risks, the higher the price they charge. In reality, IPPs have often managed to ensure that the governments take most of the risk and yet they have still charged exorbitant prices.⁴⁵ Even World Bank analysts admit "that IPPs have often inflated supply prices for utilities".⁴⁶

PPAs end up costing governments far more capital than if they had originally invested in the electricity projects themselves. Also, they force governments to bear most of the burden of risk associated with electricity projects and so undermine "the very reason for introducing private power in the first place – to cap public debt and force private power producers to take the financial risks instead of governments."⁴⁷

Private ownership of NSW generators would not prevent price manipulation

COAG argues that solutions to market power used overseas would not work in Australia and that changing bidding rules so that companies are unable to withdraw capacity to ensure higher prices would distort the market. It claims the only real solution is to get more competition going in the power pool. To do this, it argues, NSW generating companies need to be further fragmented. However, unless the large privately owned companies are also fragmented this would be a meaningless gesture. Nor would increased private ownership of NSW generating plant change the situation since the most likely owners would be one of the three gentailers and that would not increase competition in the pool.

EFFICIENCY VS LOWER PRICES AND JOBS

Private companies do not produce cheaper electricity

Another major rationale for privatisation is that private enterprise is supposed to be superior to government enterprise, particularly with respect to efficient, cost-effective delivery. A myth promoted by corporate-funded think tanks is that state-regulated electricity monopolies are so wasteful and inefficient that private companies competing in a free market could save enough money to both cut prices and make a profit. Private enterprise is supposed to be so much more efficient because of competition and the "disciplines of the market" which are supposed to provide the incentive to cut costs. Public enterprise is said to lack such incentives.

However the supposed inefficiency of publicly-owned electricity providers has been shown to be unfounded rhetoric, particularly in developed countries. It is belied by the cumulative evidence of one hundred years of electricity provision all over the world.⁴⁸ Publicly-owned electricity enterprises have consistently provided electricity at no greater cost than privately-owned enterprises and often for prices that were far less than those charged by private companies. What is more, in the UK and Australia (Victoria in particular) significant efficiencies and cost savings were made by government enterprises *before* their sale so as to maximise their sale price.⁴⁹

US experience

In the US, through a century of public and private provision of electricity, public enterprises consistently offered cheaper electricity to householders and it was federal government schemes that extended the service in rural areas, when private companies failed to do so. Any efficiencies achieved by private companies were countered by their need to raise rates to cover high levels of profit and their practice of using residential rates to subsidise larger industrial customers. What is more Canadian householders who had access to a publicly owned system of electricity paid a third the cost American householders paid.⁵⁰

Ownership	Rates/kWh	Difference	Local Taxes	Federal Taxes
Private	2.51 cents		10.5~%	13%
Public	1.57 cents	- 37%	10.5%	-
Rural Cooperatives	2.33 cents	-7%	10.5%	-

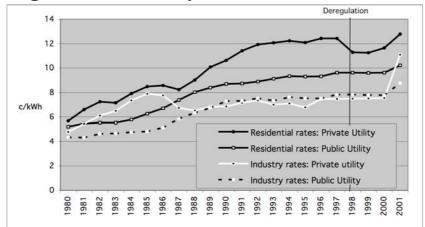
Private vs public electricity systems in the US (1960s)

Source of data: L. Metcalf and V. Reinemer. Overcharge. New York: David McKay Co. 1967, pp. 11-13.

The situation continues in the 21st century. Publicly owned utilities have kept rates 10 to 40 per cent below neighbouring privately owned utilities. Nebraska, the only state with all electricity supplied by publicly-owned utilities, has some of the cheapest rates in the US.⁵¹ Nationwide the residential rates charged by publicly owned utilities are still some 10 per cent less on average than those charged by private utilities and the commercial rates are 7 per cent less.⁵²

Before deregulation electricity rates in Montana were sixth lowest in the country due to having several hydroelectric dams and large coal reserves. Despite widespread public opposition state-based generating plant were sold off to a Pennsylvanian company. In 2001, seeing that something had to be done to redress the escalating prices, the government set up a public power authority to construct new generating plant to deliver electricity at a regulated price. Electricity prices immediately dropped before a single new plant was built.⁵³

Cities in California where electricity was publicly owned, such as Los Angeles, were unaffected by the price rises and blackouts that characterised the Californian electricity crisis because citizens and industries were not at the mercy of private suppliers. The graph below shows how, even with rates held artificially low by the retail rate freeze, residential rates in California were much lower for those served by a publicly-owned utility. Industrial rates charged by private utilities were more comparable to those charged by publicly-owned utilities but these soared following the electricity crisis in 2000.



Average Retail Electricity Prices in California 1980-2001

Source: California Energy Commission, 'Weighted average retail electricity prices', 2002, http://www.energy.ca.gov/electricity/rates_iou_vs_muni_nominal/residential.html and http://www.energy.ca.gov/electricity/rates_iou_vs_muni_nominal/industrial.html

Publicly-owned utilities are able to keep rates low because they don't have to pay dividends, stock options and large executive salaries, and they spend much less money on lobbying and winning influence in the community (see table below).⁵⁴

	PG&E	City of Palo Alto Utilities	LA Dept of Water and Power	Sacramento Municipal Utility District
Electricity customers	4,600,000	27,638	$1,\!374,\!424$	495,167
Monthly Rates	\$94.06	\$53.34	\$72.92	\$65.09
Employees getting over \$250,000/yr	47	0	1	1
Lobbying expenses	\$2,055,946	\$0	\$0	\$126,894
Money transferred to parent company (1997- 2000)	\$5.1 billion	\$0	\$0	0
Money transferred for public services	0	\$7.3 million	\$124 million	0

Comparison between Private and Public Utilities in 2000

Source: 'Public Power vs PG&E.' San Francisco Bay Guardian. 10 October 2001.

International experience

In most places around the world where electricity was privatised, retail electricity prices increased, often dramatically, for households and small businesses. One of the few exceptions was in the UK, where wholesale prices initially declined as a result of a decline in the cost of fuel. In that case, had the government-owned system remained in place consumers and/or taxpayers would have reaped the benefits. Instead savings from lower fuel costs were largely retained by the private electricity companies. More recently, electricity prices have been rising dramatically in Britain.⁵⁵

It has been usual for wholesale prices to go up rather than down, because of price manipulation by private companies seeking to maximise their profits. A World Bank study of 61 privatised electricity companies in 18 countries found that profitability rose an average of 45 percent. However, this profitability was usually achieved at the expense of workers and consumers, rather than through the managerial expertise and increased efficiency of operations under private ownership.⁵⁶

State-owned companies compete successfully in the international market place demonstrating that they can be just as good at financial management. The most prominent example is Electricité de France (EDF), one of the world's largest electricity corporations with ownership of electricity companies throughout Europe, including the UK, Asia, and the Americas. Another example was Singapore Power which has owned electricity interests in Australia.

Privatisation has not lowered prices in Australia

Prices in the states that have privatised their electricity have increased and service reliability declined. It is no accident that South Australia and Victoria have the highest residential prices of all the Eastern states. Lew Owens, the SA regulator, claimed that more than 20 percent of the electricity price to consumers in SA resulted from privatisation.⁵⁷

Between 1994 and 2002 residential rates in SA increased by forty percent and householders now pay more for their electricity than anywhere else in Australia, thirty percent more than in NSW (compared with ten percent more pre-privatisation and the opening of markets).⁵⁸ Business too suffered. When some 2800 middle-sized businesses became contestable and had their electricity prices deregulated in July 2001, they experienced price increases of between 30 and 80 percent.⁵⁹

Even large businesses, which originally pushed for privatisation and deregulation, found that they were worse off. Although prices in South Australia were always high for households, big businesses in SA had some of the cheapest electricity rates in Australia before privatisation. However by July 2001 their prices had increased by 25 percent above inflation rates. Spot prices were so high that "a new summer pastime has grown in SA called 'curtailment', a term used to describe a situation where a business might find the cost of electricity so high they can make more money by shutting down their operation and on-selling the power they would have used."⁶⁰

Because of continued state ownership, average electricity prices in NSW have fallen over the last ten years in contrast to rising prices in Victoria and SA. According to Acting Energy Minister John Della Bosca, NSW electricity prices are 30 percent lower than South Australia's and 10 percent lower than Victoria's.⁶¹ However this is about to change because of pressures to privatise parts of NSW's electricity sector and bring it into line with other states (see below).

Private companies make cost savings by cutting jobs

It was always unlikely that private electricity companies would be able to cut prices and maintain the same level of service whilst paying more for their loans than the government; paying huge salaries to executives; paying dividends to shareholders; funding PR, advertising and lobbying activities.

The supposed efficiency gains to be made by private, competitive companies, have been made through short term cost savings, which included cutting the quality or level of service rather than offering the same level of service for less money. Sometimes return on investment has been increased by charging more for the service. Often cost savings have been made by lowering rates of pay and conditions for workers and making thousands of public sector workers redundant. Full-time permanent employment was replaced by part-time and temporary work in the electricity industry.⁶² In Australia employment in the electricity sector fell from about 83,000 in the mid-1990s to 33,000 workers in 2003.⁶³

Cutting jobs means cutting maintenance, safety and reliability

Cutting safety, maintenance, training and research budgets is an easy way for private companies to cut costs. In this way private enterprises may seem to be more efficient but the gains to shareholders are at the expense of workers and consumers, who suffer a decline in service levels. There have been a number of blackouts resulting from equipment breakdowns in privatised systems around the world.⁶⁴ For example, a lack of maintenance contributed to the blackouts in New York City, Chicago, Long Island, New Jersey, New England, and Texas.⁶⁵

In the US deregulation and competition between private companies has led to a massive reduction of the utility workforce with 150,000 people losing their jobs, including those who were responsible for safety and reliability of electricity supplies, as private deregulated utilities shed staff so as to cut costs. It is estimated by the Utility Workers Union of America (UWUA) and the US Department of Energy's Energy Information Administration (DOE EIA) that utilities now employ less than two thirds of the workers they did in the early 1990s. The UWUA claims that cost-cutting has led to fewer inspections, deferral of repairs, and less worker training, all of which threaten worker and public safety as well as system reliability.⁶⁶

In Victoria the frequency of blackouts increased by 32% between privatisation in 1995 and 1999.⁶⁷ In 1997 a Coopers and Lybrand survey found 35 percent of the privatised companies believed "previously experienced reliability levels would/may not be provided by the market". The Victorian Government could not intervene to prevent blackouts, it argued, as that would result in "an unacceptable distortion of the market". The companies took a cavalier approach to the difficulties blackouts caused consumers, one of them even going so far as to argue that "Customers need to experience some disruptions" so as to appropriately value their electricity supply.⁶⁸

The Australian Retailers Association executive director, Stirling Griff, argued that shop-owners in South Australia were having to shut up shop, losing substantial amounts in sales, because of power failures.⁶⁹ Hospitals considered the possibility of switching to generator power during peak periods to be sure of a continuous electricity supply. There was "a mini-boom in generator sales to guarantee power supplies" in readiness for the following summer.⁷⁰

Service and reliability have also declined in privatised electricity systems because the service obligations of government-owned electricity companies are replaced by short-term commercial goals. In the public service it is not uncommon for employees to have a strong public service ethos, particularly in the utilities where they "traditionally took pride in their safety record, in the quality and impartiality of advice offered to consumers, and in a number of socially responsible activities such as free servicing of old age pensioners' appliances."⁷¹ This public spiritedness was lost as employees were forced to take a more commercial view of their work.

Cutting jobs does not benefit the consumer

A recent analysis of labour productivity in Australian electricity generation showed that Victoria produced higher electricity output per employee than SA, NSW or Queensland between 1999 and 2004.⁷² But who benefited from this? The SECV shed 11,000 jobs before privatisation but the government still felt the need to put the retail price up ten percent to make its enterprises attractive to buyers (and perhaps to give the impression that privatisation caused prices to fall). Another 2,200 jobs were subsequently shed by the privatised companies in their efforts to become more efficient.⁷³ In all, thousands of jobs were lost but are Victorian household consumers substantially better off than in NSW, which is supposed to be so much less efficient?

Efficiency is a means not an end

There is no point in achieving better efficiency if it does not lead to lower prices and better service for consumers. Productive efficiency, for example, means using the least amount of resources to produce a specific amount of goods and/or services, but if all the benefit from using less resources translates into extra profit, then consumers do not benefit. Competition is supposed to prevent this happening, but if there are a few dominant players as is the case in the privatised electricity markets (see below), those players can agree, either explicitly or by understanding, to keep prices high so consumers do not benefit.

Some advocates of privatisation treat efficiency as if it were a goal in itself. For example, the Energy Reform Implementation Group (ERIG) has been formed with the goal of making energy markets more efficient and so seeks to promote competition through privatisation and deregulation. To this end it argues for the "disaggregation and full privatisation of government-owned energy assets throughout Australia, as soon as is feasible given the practicalities of the privatisation process."⁷⁴ Where this is not possible, it argues that some segments of the industry, particularly generation and retail, should be privatised.

ERIG is not concerned that electricity in NSW is already provided efficiently and at a low cost to consumers. ERIG merely sees that public ownership and regulated prices are inhibiting the private sector from entering the NSW market and therefore restricting competition in NSW.⁷⁵ Rather than recognising that lower prices are an indicator that NSW electricity retailers are already efficient, it sees the relatively low retail prices in NSW as being "less than efficient", an inversion of the idea that efficiency is supposed to lead to lower prices.⁷⁶

ERIG even argues that government debt should "be arranged through commercial mechanisms, eliminating the benefits" available to governments to obtain low-interest loads. It also argues that publicly owned electricity corporations should pay government taxes and charges, including company tax, and for an independent board to determine dividends to be paid to government.⁷⁷ Here the goal is clearly not keeping

electricity prices down for consumers but maximising opportunities for private investment.

ERIG engaged KPMG to interview investors to find any impediments to future investment in energy. Not surprisingly, investors identified government ownership, price regulation (wholesale and retail), and government environmental policy as the three key impediments to "efficient investment".⁷⁸ Investors believe government ownership impedes investment decisions because governments invest prematurely (ie before prices go sky high – see p. xx); because private investors do not like to compete with publicly-owned enterprises; because there is less opportunity for private investment if government is also investing; and because government investment undermines their ability to charge high prices in times of scarcity (manipulate prices).⁷⁹

KPMG argues that if there was not retail price regulation in NSW keeping prices artificially low, then:⁸⁰

- more consumers would be changing retailers
- other retail companies would be entering the market, particularly TRU Energy and Origin Energy
- prices would be higher for most consumers and possibly lower for unregulated consumers, such as industry
- there would be improvements in retail operating efficiency
- more private companies would invest in generation
- there would be a chance that one of the existing NSW retailers would become a major player in the national retail market
- dominant private retailers would be likely to gain a greater share of the national market

It is hard to see how these changes, necessary as they may be for the gods of efficiency and competition, would benefit anyone except large business consumers of electricity and private electricity companies.

RETAIL PRICES AND RISK

Price volatility raises retail prices

As noted earlier, price volatility and manipulation are an inevitable function of electricity markets, whatever their design. However it is not politically acceptable nor feasible for retail prices to reflect these fluctuations. Consumers expect a stable tariff and electricity retailers contract to offer consumers electricity at a set rate for a period of time. This can create risks for the retailer.

The obvious way for retailers to deal with this risk is to set a high enough price to be sure that they can pay fluctuating wholesale prices and still make a profit. However such high prices tend to be politically unacceptable and to make electricity unaffordable for some consumers and so governments prefer to regulate retail prices to avoid that situation.

In places where government imposed retail price caps are in place, retail suppliers who have not been able to pass high wholesale prices on to consumers have sometimes experienced financial difficulties that have led to black outs and government bail outs, as in California. These problems were then blamed on the failure to fully deregulate the retail market, that is, failure to allow retailers to pass on massive price increases to householders.

Until 2001 electricity prices to Australian households were protected from the volatile wholesale electricity market through regulated prices. These regulations are being progressively removed as retail markets are opened to competition and consumer protections are removed.⁸¹

When the electricity retail market was opened up to competition in South Australia in 2003, for example, prices rose 28.3 per cent for households, on average. This rise was approved by the Essential Services Commission which had been established to determine whether price rises were justifiable. Commission Chair, Lew Owens, concluded that the price rise was justified because retailers could not be denied "the opportunity to make profit commensurate with the risks".

Vertical integration keeps retail prices high

Private companies seeking to reduce the risks associated with market fluctuations have vertically integrated so that they own both generating and retailing interests so when wholesale prices are high their generating operations benefit and when wholesale prices are low their retailing interests benefit.

Industry players are racing to create a new group of vertically and horizontally integrated structures (businesses owning generation or gas wells, and retailing in different state markets) in an effort to protect themselves from the wild gyrations of the energy markets and to gain economies of scale.⁸²

When companies are vertically integrated they don't necessarily pass the lower costs of wholesale electricity on to consumers but rather they keep retail prices high in order to maintain the profitability of their generation facilities. In the UK, when wholesale prices had dropped dramatically between 2000 and 2002, retail prices did not drop accordingly because of the massive vertical integration of the UK electricity industry. However companies like British Energy, which was not vertically integrated, suffered from the low wholesale prices. British Energy in fact had to be bailed out by the government.⁸³

Vertical integration undermines the financial contracts market

Electricity retailers were supposed to be protected from extreme NEM price fluctuations by financial hedging contracts and the system was designed so that most electricity would be bought via these contracts rather than directly from the power pool. However few financial intermediaries have been willing to take on this risk of wholesale price fluctuation given the extent to which it is exacerbated by pricemanipulating generating companies.

What is more the market for such contracts is small because large private retail companies have protected themselves from this risk by vertical integration, that is ownership of generation plant as well as retail supply. Consequently the market in hedging contracts is too small and prices for such contracts are very high.⁸⁴

The sale of NSW retail would not help the contracts market

Advocates of privatisation argue that if NSW privatised its retail electricity industry and passed market prices on to consumers, this would create a larger market for hedging contracts and help with the liquidity of the financial contracts market and therefore bring down retail electricity prices. However it is clear that privatisation of NSW's retail market would only ensure greater market power for the three dominant gentailers: AGL, Origin and TRU (see below).

This would not help the liquidity of the hedging contracts market since these companies manage their risk through their vertical integration. A far better solution to the lack of financial market liquidity would be to not allow these large non-state owned companies to own both retail and generating facilities.

Government ownership reduces risks and keeps prices down for consumers

The risks to household consumers and retailers associated with fluctuating wholesale power prices have been avoided in NSW because both retail and generation businesses are publicly-owned.

Households in NSW have been cushioned from the impact of NEM volatility thanks to the Electricity Tariff Equalisation Fund, which means that when wholesale prices are so low that state-owned electricity retailers such as Energy Australia and Integral Energy make big profits, they put part of that surplus money into the fund to cover generator losses; when wholesale prices are too high to pass onto consumers, the electricity generators put money into the fund, which is withdrawn by the power retailers.⁸⁵

This arrangement, which protects electricity users from escalating power prices, is to be phased out between 2007 and 2010 leaving consumers exposed. The aim is for "electricity arrangements" to "more closely resemble those in Victoria and South Australia".⁸⁶

Privatisation and deregulation of retail mean higher prices

In NSW around 70 percent of electricity customers are on standard retail contracts that are regulated by the Independent Pricing and Regulatory Tribunal (IPART). However IPART has been asked by the Ministerial Council on Energy (MCE) to set tariffs "in a way that reduces customers' reliance on regulated prices, and facilitates retail competition".⁸⁷ To achieve this IPART is increasing regulated prices by around 4-5% each year for the next three years.

This is an implicit recognition that replacing regulated prices with retail competition will increase prices and that if regulated prices were higher the prices offered by competing retailers would become more attractive. Part of the price increase is in recognition that a new entrant to the retail market would have additional costs, including the marketing costs involved in acquiring new customers. Also a competitive market will mean that existing retailers will incur "customer retention costs".⁸⁸

Another reason for the price increases is that "retail prices need to be sufficient to recover the costs incurred in selling electricity in a competitive market, and to compensate retailers for the risks that they face" with extra profit margin.⁸⁹ Such risks have thus far been dealt with, without cost to consumers, by the equalisation fund but the fund would not be able to continue if retail is privatised.

Despite this inclusion of compensation for risks associated with the fluctuating wholesale price, IPART has included provision for reviews to raise prices even more if wholesale prices go up more than expected: "These reviews are intended to explicitly address the risk of significant changes in the wholesale price of electricity".⁹⁰

It is clear that IPART believes that the privatisation of the NSW retail market and increased competition will mean higher prices to consumers. It argues that in the long term it will lead to efficiency gains, and a wider range of service and price offerings, which will benefit consumers,⁹¹ but these gains in efficiency and choice will not compensate consumers for the rise in prices that are unlikely to return to regulated levels in the foreseeable future.

Private companies do not have to meet social obligations

Private companies, freed from social obligations such as universal access, equity and reliable service to remote individuals, are able to cut costs by concentrating on more profitable services. They are able to compete for more lucrative customers by reducing unit costs for big users. In this way cross-subsidies are not eliminated but shifted, from disadvantaged individuals to big business. The cost of the social obligations, if they are still met, is borne by taxpayers, and the savings are reaped by shareholders and industrial customers.

Price cuts for industrial consumers come from shifting the burden of paying for the non-commercial objectives associated with electricity provision – including environmental goals – from electricity rate payers to general tax payers. They also come from removing cross-subsidies from disadvantaged households and applying them to large businesses who are the most attractive customers for private electricity suppliers, being large users of electricity. Instead of getting dividends from profitable electricity services governments are now under pressure to subsidise those who can no longer afford their electricity bills and offer financial incentives for environment initiatives.

Private ownership shifts price burden to poorer and regional households

In Victoria, industrial consumers have experienced price decreases since privatisation, mainly as a result tariff structures being changed to favour them. Also metropolitan domestic ratepayers with high usage have fared better than low users and regional and rural users.⁹²

The scheduled introduction of deregulation for household electricity in Victoria, when domestic consumers would become contestable and price caps would be removed, was due to begin in January 2001, but was postponed for a year because of the fear of huge price increases. Nevertheless, some private retail companies were able to get around the price caps by increasing off-peak electricity rates by 175 percent and decreasing peak rates to ensure average increases complied with the price caps. This particularly affected farmers who take advantage of off-peak rates for many energy intensive activities. As a result many farmers saw their overall rates increase by up to 60 percent. The president of United Dairyfarmers Victoria, Peter Owen, accused the power companies of "pillaging sections of rural Victoria with the Government's blessing".⁹³

Catherine Wolthuizen, executive director of the Consumer Law Centre in Victoria, noted: "Where consumers are big or rich enough to flex some market muscle, they can take advantage of choice and competition but this should not be at the expense of those currently excluded from the energy market."⁹⁴

Stridbaek, from the IEA, argues that for electricity 'liberalisation' to be a success there needs to be "sufficient political commitment to face the pressures from groups that are the likely short-term losers from liberalisation". He admits that the "benefits of retail competition for the smallest consumers" are debateable, however these consumers gain from "the increased welfare from the freedom of choice" of who to buy their electricity from. The benefit of such a choice – basically the choice of who will bill them – is hard to fathom if it doesn't mean lower prices. For consumers, choice does not mean much in terms of the actual product as one unit of electricity is exactly the same as another, and they cannot change their distributor.

In NSW the Independent Pricing and Regulatory Tribunal (IPART) is gradually deregulating prices. As part of this effort it is setting *average* price caps for retailers servicing customers on standard household contracts, and allowing those retailers to set tariff structures within that average cap as they see fit. IPART recognises that this could "result in above-average price increases for some customers, particularly those on low incomes or who are low consumers of electricity and therefore less 'attractive' to competitors" but dismisses this as unlikely given that some customers on the same tariff as these disadvantaged customers would then seek to negotiate a contract outside of the regulated market.⁹⁵ However IPART also states that its new pricing structure is aimed at providing regulated customers with an incentive to move outside the regulated market. Also, its draft report showed tariffs increasing more rapidly over the next three years for customers with low electricity usage.⁹⁶

Private retail companies do not necessarily compete on the basis of price

Since retailers are often unwilling to compete on the basis of price, they seek to gain customers and make profits in other ways. In the US one commentator noted:

... the new electric industry is using big brother tactics such as cherrypicking the best customers, shifting costs from large industrial users to small commercial and residential users, gutting renewable energy programs, denying weaker companies access to transmission lines, withholding power to drive up prices, or digging the dirt on local government officials who try to look elsewhere for electric service for their constituents. The last-mentioned is so common the industry even has a name for it: 'competitive intelligence'.⁹⁷

In Britain, London Electricity was fined £2 million for its "totally unacceptable" doorstep selling techniques that included offering people gifts to sign up that were never delivered.⁹⁸

In Victoria, the Energy and Water Ombudsman has received complaints about the marketing activities of retailers, most commonly "aggressive or high-pressure sales tactics", being switched to another retailer without consent, and various false statements made by salespeople.⁹⁹

CONSOLIDATION VS COMPETITION

Competition is a major rationale for privatisation

Part of the rhetoric of privatisation had been that it would create "new operators, nimble and competitive that would give consumers a new deal".¹⁰⁰ In each state generation, transmission, distribution and retail supply of electricity were separated and corporatised. Generation and retail monopolies were separated into smaller units and in Victoria and SA sold off to encourage competition. Barriers to interstate trade were removed and open access to electricity networks established. By separating generation and retail, and having smaller companies, the barriers to new retailers or generators entering the market were reduced, and it was agreed this would encourage competition.

Privatisation has led to less competition

However the disaggregation of the horizontally and vertically integrated electricity industry that was meant to foster competition has been undone as a result of privatisation. Mergers and acquisitions are usually undertaken for strategic reasons that include reducing competition and increasing market power. In electricity these are supplemented by the goal of risk management as seen in the previous section.

AGL, a dominant supplier of electricity and gas throughout the eastern Australian retail energy market, said in 2002: "We want to be one of what we predict will be the three or four national energy players."¹⁰¹ It has largely succeeded in this. Today AGL has some 4.1 million retail electricity and gas customers, has gas-fired power stations in Victoria and SA (with more planned for NSW and Queensland), has hydroelectric schemes in Victoria and NSW, has co-generation plants in Victoria and SA, and is a large shareholder in Loy Yang, one of the country's biggest power generators.¹⁰²

Another major player is Origin Energy which provides gas and electricity to over 3 million Australian customers and more than 600,000 in New Zealand. It has partownership of gas distribution networks, explores for and produces natural gas and oil, and operates a "portfolio" of gas-fired power stations with more planned for Victoria and Queensland.¹⁰³

When Queensland sold off its retail electricity company, Energex, it split the customers between two companies, Sun Retail and PowerDirect to ensure competition when its retail market is opened to full competition in July 2007.¹⁰⁴ AGL bought Powerdirect, which had 400,000 electricity customers and Origin bought Sun Retail, which had 840,000 electricity customers. Origin noted that the acquisition "secures the company a leading position in the continuing consolidation and integration of the Australian and New Zealand energy markets...

The depth of integration that Origin now has in the Queensland market, from energy retailing through generation and, most importantly, directly into gas supply, provides the company with a compelling competitive advantage. It is a unique position and replicates the integrated strategy Origin has pioneered over the last ten years across south-east Australian energy markets. This strategy reduces the risks that arise from operating in contestable markets, provides Origin with an expanded range of growth opportunities and has delivered significant returns to its shareholders.¹⁰⁵ The third major player operating in Australia is TRU Energy. It has over a million electricity customers, owns generating plant in SA and Victoria, including SA's largest electricity generating plant, and is building a gas-fired plant in NSW.¹⁰⁶ TRU Energy is owned by the Hong Kong-based CLP (China Light and Power) Holdings, one of the largest electric companies in Asia. It would be keen to buy into the NSW retail sector in order not to be left behind by AGL and Origin Energy in the consolidation stakes.

AGL, Origin and TRU dominate the Victorian electricity and gas markets, control almost all the electricity and gas markets in SA, QLD and ACT, and AGL dominates the NSW gas market. If NSW privatised its retail businesses it is likely that they would be bought by AGL, Origin and/or TRU, meaning that the three companies would dominate electricity provision throughout the south and east of Australia – far fewer entities than "than in the days when all were state owned."¹⁰⁷

The ACCC cannot be relied on to prevent this consolidation

The Australian Competition and Consumer Commission (ACCC) has reviewed and approved each merger and acquisition. When AGL bought Powerdirect the ACCC "took an approach of looking at aggregation on a state by state basis" and since AGL had "very limited" electricity retail interests in Queensland before the acquisition because retail had been state owned, and only 70,000 gas retail customers, the ACCC "concluded that a substantial lessoning of competition was unlikely in Queensland".¹⁰⁸

The ACCC also noted that Powerdirect "had a not insignificant retail presence, particularly in South Australia and Victoria" and that the acquisition would result in an increase in AGL's "very significant retail operations in these states, particularly in South Australian electricity retailing" but it decided this was not a problem because it was not a big increase and there were other competing electricity retailers, in particular Origin Energy.¹⁰⁹

Even where ACCC has sought to prevent an acquisition it does not always have the necessary power to do so as can be seen by its failure, in 2003, to stop AGL's acquisition of a part share in the Loy Yang Power station which the ACCC believed would "result in higher prices, increased barriers to entry and a resulting substantial lessoning of competition", limit the ability of competing retailers to access baseload electricity, increase AGL's market power, as well as "severely impact the depth and liquidity of the NEM related financial derivatives market".¹¹⁰

Today the ACCC, together with the Australian Energy Regulator (AER), do not condemn the vertical integration occurring in the electricity sector although they note it "represents a move away from the initial design" of the National Electricity Market (NEM). They refer to the combined retail and generation companies as "gentailers" and recognise that three gentailers dominate in Victoria and South Australia (and since their report, two in Queensland) and that there could be a trend towards fewer gentailers. This is also a view taken by investors, according to KPMG: "absent market intervention the market is likely to become much more vertically integrated over time".¹¹¹

ERIG argues that "vertical integration is not anti-competitive *per se*. But anticompetitive problems may arise where it is associated with excessive horizontal aggregation".¹¹² Neither ERIG, nor ACCC, nor AER, consider that having three private companies dominating the privatised market is excessive but they argue that the NSW generating market is overly concentrated with three players.¹¹³ It is this inconsistent view that is putting pressure on the NSW government to seek private investment in electricity generation and to privatise its retail sector.

Consolidation increases barriers to entry

The disadvantages of this vertical integration amongst private companies, noted by the ACCC and the AER, is that it raises entry barriers for stand-alone retailers and stand-alone generators. The more that generators are owned by retailers, the more difficult it is for standalone retailers "to secure competitively priced contracts". Moreover stand-alone retailers and generators are unable to reduce their risks in a volatile market through internal buying and selling of wholesale electricity and must depend on expensive hedging contracts.¹¹⁴

Private companies owning existing generating plant have developed a nasty habit of dropping prices when potential competitors are seeking finance to build additional generation facilities. This is something dominant players can do in a heavily consolidated market.

Despite the designers of the NEM specifying vertical disintegration as a necessary condition for competition, ERIG claims that vertical integration is not a problem in terms of competition because there is still competition between major gentailers.¹¹⁵ However given the barriers to entry and the tendency for dominant companies to seek to minimise competition though acquisition and merger, there is likely to be further consolidation over time. For example, in early 2007 AGL attempted a merger with Origin, which would have had one retailer supplying 65 percent of Victoria's gas and electricity users.¹¹⁶ It was rejected by Origin Energy.

Consolidation improves economies of scale lost as a result of restructuring

One motivation for consolidation is economies of scale. Consolidation helps corporations to cut costs and spread expenses over larger operations. Origin estimated that it would be able to save \$20 per customer by acquiring Sun Retail.¹¹⁷

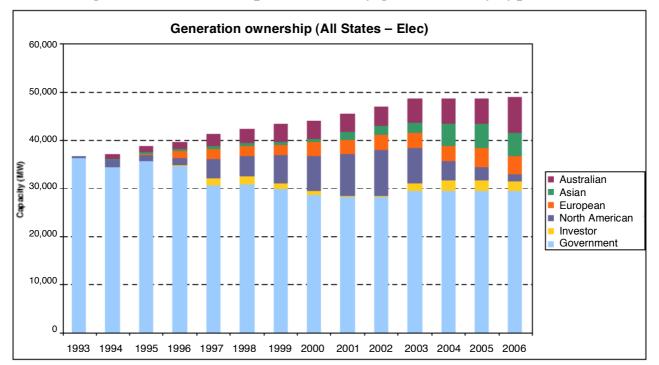
It is ironic that the concept of economies of scale was dismissed as an argument against the break-up of the original public electricity authorities. ETSA claimed that the cost of splitting electricity generation into just two companies was up to \$40 million per year because of duplicated services and loss of economies of scale. Splitting it further into five companies would cost even more.¹¹⁸

Similarly, an Independent Inquiry pointed out that the Victorian generating plants had been designed to operate in a coordinated way and forcing them to compete would result in inefficiencies, higher prices, and more frequent breakdowns.¹¹⁹ John Legge, an academic at LaTrobe University also argued, after the breakup, that no single company could afford to spend a billion dollars on a large power station, ensuring that new generation would be in the form of smaller, less efficient plant.¹²⁰

Transnational companies are increasingly dominating electricity markets

The buyers of government assets and services around the world have mainly been large transnational corporations that, over time, have bought up or squeezed out their competition. Also, government enterprises in other countries often promise higher rates of return on investment than those in a corporation's home country. This prompted US companies to purchase approximately half the available power companies in Britain and Australia when they were first privatised.¹²¹

Increasingly these transnational energy companies are concentrating—through mergers and acquisitions—into a small group of very large conglomerates that dominate national and international electricity provision. Today two of the three major gentailers are Australian owned but there is no guarantee that they will not be acquired by transnational companies based overseas.



Changes in the ownership of electricity generation by type of owner

Source: KPMG, 'Impediments to Investment in Australia's Energy Market: The View of Investors', Energy Reform Implementation Group (ERIG), November 2006, p. 8.

In Europe today seven electricity transnational corporations dominate. Three of these – Electricité de France (EdF), E.ON and RWE (both based in Germany) – control a majority share of generating capacity and retail sales in most European nations and that share is growing.¹²² The concentration of ownership in electricity worldwide also continues to grow with the combined value of electricity and gas cross-border mergers and acquisitions in 2001-2002 alone, being US\$84 billion.¹²³

In Asia, transnational corporations have been withdrawing with those likely to stay on being European firms – EdF, Trachtebel-Suez, International Power and CDC – a US firm – AE – and a Canadian firm –Transalta. Asian-based transnationals are moving in, including Cheung Kong, CLP and YTL (Malaysia).¹²⁴ In Latin America, dominant transnationals in the electricity sector include Endesa, Iberdrola, and Union Fenosa (Spain), EdF and Tractebel-Suez (France), EdP (Portugal), and AES (USA).¹²⁵

The Transnational Institute observes:

Despite the frequent claim about the negative impacts of public monopolies, these are often recreated by private foreign companies that manage to assume control over the whole chain of production, transmission and distribution of electricity, undermining government efforts to introduce competition and keep some authority over prices, supply and environmental standards.¹²⁶

Vertically and horizontally integrated companies that provide full electricity and gas service as well as water and waste services are emerging. Almost half of the largest gas and electricity firms undertook 'convergence-related' acquisitions at the end of the nineties. Oil companies such as BP, Shell and Texaco have been acquiring power companies.¹²⁷ The CEO of Edison International has predicted that by 2011 there will be only 10 energy conglomerates worldwide.¹²⁸ Such conglomerates will have even more ability to manipulate prices and avoid competition, further negating the supposed benefits of deregulation.

Some argue that energy transnationals will become not merely 'power centres' but 'global centres', owning not only electricity systems within national borders but systems extending across entire continents, including not only electricity and natural gas but probably telecommunications.¹²⁹ Given what is at stake it is little wonder that the push for privatisation and deregulation has been strong and relentless, bulldozing citizen opposition out of the way.

National governments have difficulty regulating large transnational corporations

The companies that have taken over electricity provision in most countries are transnational companies with little interest in the welfare of local citizens. Former Calilfornian Governor, Gray Davis, found this was true even of corporations based in other states. He belatedly moaned, in a state of the state speech in 2000: "We have surrendered the decisions about where electricity is sold, and for how much, to private companies with only one objective: maximizing unheard-of profits..."¹³⁰

The problems associated with concentration of ownership in the energy industry are exacerbated because of the inability of national governments to control foreign owners. Firstly there is the problem that foreign owners are likely to send their profits back to their home countries rather than make further investment in their facilities or spending the money in the country where they earned it and stimulating the local economy.¹³¹

Secondly, these massive corporations can use the threat of blackouts as a form of blackmail to pressure governments to bail out private companies, change their policies and/or increase regulated prices. For example, Walt Patterson relates a situation that occurred in 1998 when Quebec was experiencing an electricity crisis. A private US company shut down its plant until it could get the price it wanted for its electricity.¹³² In another example US companies shut down the electricity supply in the Dominican Republic to force the government to pay its debt to them.

Thirdly, foreign owners can withhold all or part of their electricity generating capacity for political and other reasons, thereby cutting off an essential part of the economic system without governments being able to do anything about it. It is this power that electricity providers have over an essential service that causes concern about the concentration of electricity supply in the hands of a few large companies, particularly if those companies are foreign or just irresponsible.

The big energy corporations "are already exceptionally well placed to operate jointly or to form a cartel to pressure governments, control prices and limit competition".¹³³ Companies that do business in much the same way as the infamous such as Enron – that had no qualms about misleading shareholders, depriving employees of their pensions and life-savings, and manipulating prices in California – cannot be expected to exercise their power over foreign governments responsibly. Patterson observed:

Such a multinational will be able to exert almost irresistible leverage on governments and users, simply by the threat of shutting down a system unless its requirements are satisfied. Oil multinationals with a wide portfolio of activities in different parts of the world have never hesitated to suggest that they will withdraw from a particular concession or shut down a particular oilfield if government policy appears contrary to their interest. Electricity multinationals with similarly large portfolios will have a much more potent threat at their disposal....¹³⁴

If privatisation and deregulation are taken to their logical end, which is the aim of advocates, the public will be unable to influence the development of electricity systems, the terms of electricity provision, the reliability of its supply, its accessibility or its price. These will all be decisions made by a cartel of electricity producers whose primary motivation is profit and power. This cartel will be able to exercise power over national, state and local governments. It will decide how much electricity is available, when it is available, how much it will cost and who will have access to it. And because electricity is so essential to modern societies, because it holds the power of life and death, as well as the key to economic development, these corporations will also have gained enormous social and political power.

GREENHOUSE GAS EMISSIONS

Private companies seek to maximise their profits not environmental gains

Electricity privatisation positively deters investment in conservation and energy efficiency: "the market competes for lowest up-front price, not lowest price over the lifetime of a product … In the old electric system, it cost utilities less to subsidize our more efficient bulbs than to build another dinosaur plant".¹³⁵ In the privatised system the incentive is to sell more electricity for premium prices. Private companies are hardly likely to encourage energy efficiency and conservation when their profits depend on maximum demand.

When a private company decides on an energy source there is insufficient incentive to take account of the environmental costs of that source. As a result, new generating capacity around the world continues to be dominated by fossil fuels. In the US the Energy Information Agency predicts that new power plants will be mainly gas-fired in the shorter term and increasingly coal-fired in the longer term as gas prices increase.¹³⁶ (EIA, 2005). Similarly Europe's new power plants are likely to be gas-fired for the short-term future. Although cleaner than coal, gas still contributes to global warming and is not renewable. Worldwide, the use of natural gas and coal has surged.¹³⁷

In the US it is the public utilities that have led in conservation efforts while private power companies have cut their conservation budgets.¹³⁸ The Commission for Environmental Cooperation, a NAFTA (North American Free Trade Agreement) agency, has found that electricity deregulation caused the energy efficiency budgets of North American power companies to be cut by 42 percent between 1995 and 1999.¹³⁹

In Australia, 41 percent of the new investment in electricity generation between 2002 and 2006 (both private and public) Australia-wide has been in coal-fired power stations and 42 percent in gas-fired power stations. Moreover, 88 percent of proposed investment in the national electricity market is also in coal or gas.¹⁴⁰

The Electricity Supply Association (ESAA), in an effort to shift blame to purchasers, argued that in a competitive electricity market purchasers of electricity will buy the cheapest available electricity and that is generally coal-fired "and that is why in the recent past in Australia there has been an increase in the use of coal, and therefore, of course an increase in emissions".¹⁴¹

Deregulation encourages maintenance of old polluting power plants

Privatisation allows, and in many instances encourages, the maintenance of old polluting coal-fired power plants that contribute smog, mercury and particulate matter to the atmosphere causing thousands of deaths annually.¹⁴² In Australia, deregulation and privatisation have led to the increased use of the most polluting type of coal, brown coal, and the ESAA has admitted that by 2001 there had been a 31 percent increase in greenhouse gases as a result of energy deregulation.¹⁴³

The amount of electricity generated by brown coal plants increased from about 23 percent to 31 percent of sources between 1992 and 2001. The increasing dependence on brown coal is because dirty old brown coal plants can produce electricity at low marginal costs, after paying off their loans, because brown coal is cheap. As a result, greenhouse emissions have increased in Australia. Additionally, Australia remains

"one of the least energy efficient countries in the world", according to John Connor, from the Australian Conservation Foundation.¹⁴⁴

Emissions trading is ineffective

The idea of emissions trading is that firms which can reduce their emissions more cheaply can make profits from their 'excess' reductions by selling credits for them to other firms for whom making these reductions would be more expensive. This is fine if minor pollution reductions are all that is required.

However since substantial pollution reductions are necessary to prevent global warming then more expensive reductions also have to be made and there is little point in setting up markets that enable some firms to avoid making those expensive reductions so as to minimise their costs.¹⁴⁵ In other words, the more rigorous the emission reduction the less scope there is to find cheap solutions and sell excess allowances or reduction credits. In the case of global warming the required reductions in emissions of carbon dioxide cannot be achieved by merely undertaking the cheapest reductions.

Experience with emissions trading in Europe

When the EU emissions trading system was introduced in 2005 many governments were too generous in allocating allowances to local firms because they feared their local industries would be at a competitive disadvantage if they had to buy extra allowances. A study by Ilex Energy Consulting examining six EU countries found that none of them had set caps that went beyond business as usual and none would meet their agreed Kyoto obligations.¹⁴⁶

Because allowances were not in great demand, the market opened at 8 euros per tonne and settled around 23 euros a few months later, far less than would be necessary to provide an incentive to reduce emissions.¹⁴⁷ The price again took a dive in 2007.¹⁴⁸

Proponents of emissions trading might argue that this is just a first step. However, carbon credits can be generated by phoney reductions so there is no benefit at all to the environment. The EU's emissions trading scheme has not reduced carbon dioxide emissions and it is estimated that emissions actually rose by between 1 and 1.5 percent in the first two years.¹⁴⁹

In the UK, where companies were given millions of dollars in incentives to take part in a voluntary emission trading scheme, an independent non-government group, Environmental Data Services (ENDS), found that three of the chemical companies involved claimed credit for reductions that they had been required to make previously under EU laws. In addition to the millions they got in tax payer incentives, they made millions from selling the credits they did not deserve. It has also been alleged that other companies have claimed phoney reductions that have resulted from plant closures and 'securing a baseline against a "false" projection of economic activity which exaggerates output and hence emissions'.¹⁵⁰

What is more electricity generators have made up to £1.3 billion by increasing electricity bills in 2005 by 7 percent, supposedly to cover the cost of the scheme, even though they received their emissions allowances for free and have not invested in environmentally sound technology.¹⁵¹ Given that IPART's price increase also includes provision for a percentage to cover the cost of global warming measures, the same thing is likely to occur in NSW.

NSW Greenhouse Abatement Scheme

In NSW the Greenhouse Abatement Scheme issues certificates to those who reduce greenhouse gas emissions that can then be sold to electricity retailers who have to meet mandatory emissions reductions. However a study by researchers at the University of NSW found that 95 per cent of the certificates issued in the 18 months leading up to June 2004 were for projects established before the introduction of the scheme and more than 70 per cent were awarded for emissions reductions that would have occurred anyway.¹⁵²

Three years later, although the scheme has cost NSW consumers \$450 million since 2003, around 80 percent of the reductions that have been recognised by the scheme were for these previously established projects. Two Queensland coal-fired power stations made millions of dollars in the NSW scheme while at the same time producing 9 million additional tonnes of pollution each year.¹⁵³ Even Australia's oldest and most polluting electricity generator, based in Victoria, was awarded certificates worth millions of dollars.¹⁵⁴

A government spokesman defended the scheme, which is predicted to cost rate payers some \$2 billion over 9 years, saying: "It is not possible to distinguish between production or investment decisions made as a result of the scheme and those that would have been made anyway".¹⁵⁵ Moreover the benchmark for assessing emissions reductions is set by assessing the average emissions in the state – which is basically the emissions of coal-fired power stations – so even gas-fired power stations earn abatement certificates.¹⁵⁶

Mandatory renewable energy targets are too small and ineffective

Like emissions trading, mandatory renewable energy targets tend to be set too low, to be too slow, and to be subject to rorting and uncertainty. In California utilities are now required by the government to meet 20 percent of their supply with renewable sources by 2017.¹⁵⁷ The NSW state government has set a target of 10 percent by 2010 and 15 percent by 2020.¹⁵⁸

The Australian EcoGeneration Association claimed that the Australian Mandated Renewable Energy Target (MRET) program, which has lower targets than the NSW scheme, was wasting more than a billion dollars paying incentives to existing generating facilities such as hydroelectric power stations, which are not using the money towards new investments nor pollution reduction.¹⁵⁹ The 2003 review of the MRET stated that by August 2003 190 power stations had been accredited as supplying renewable energy but only 84 of these (around half) had been commissioned since the target had been introduced: "To date, MRET has made only a small contribution to greenhouse gas abatement".¹⁶⁰

Mandatory renewable targets and emissions trading are mechanisms that seek to alter market conditions and provide financial incentives to private companies to invest in environmentally sound technologies but government investment is a more direct, and more certain means of achieving the vital goal of greenhouse gas emission reductions.

Government investment is necessary to maximise environmental benefits

The NSW government is able to put environmental considerations ahead of straight profit in choosing the method of generation in a way that no private company could.

Moreover it is in a better position to research and develop power stations that utilise emerging technologies that have great potential to reduce greenhouse gas emissions such as hot rock technology.

Peak plant in Australia tends to be gas fired because they are cheaper to build¹⁶¹ and more likely to give a good return on capital investment quickly. However, it is more environmentally sound to use renewable energy, particularly solar and wind. Demand is particularly high on hot days when air conditioners are used and this is the time when solar could come into its own. Similarly, on stormy winter days when heating is at a peak, wind generation could be used to meet the peak. At peak times, wholesale prices are very high, making solar and wind technologies more economically viable.

The best way to ensure that new peak power plants are based on renewable energy is for the NSW government to build them. Although private companies have invested in a few token renewable energy plants, only governments, which don't require high short-term returns on their investments, can make the concerted effort to invest in the sort of technologies necessary to prevent further global warming.

CONCLUSION

The goal of the NSW government should be to supply affordable, accessible and reliable electricity to the community in an environmentally sound way. In meeting this goal the NSW government should not be prepared to sacrifice the interests of NSW consumers and cut jobs simply in order to ensure that the National Electricity Market (NEM) meets ideological specifications for efficiency and competitiveness. Competition and efficiency are not ends in themselves; they are means to an end, and they are not always the best means.

If privatisation throws people out of work yet does not improve efficiency, lower prices for most consumers, or add to government revenues in the long-term, why is it still being pushed so hard? Firstly it is because the short-term influx of capital, or the promises that it enables, can help government to win the next election.

Secondly, many government advisors have an ideological or financial interest in privatisation. Over the past two decades, consultants and sectors of the financial community have made millions of dollars from privatisation. Think tanks such as the Institute of Public Affairs and the Tasman Institute, who were primary architects of privatisation in Victoria through Project Victoria, have promoted privatisation as part of their neoliberal ideology of reducing the role of government and increasing the role of markets in public service provision. It is they who manufactured the myths about inefficiency of public enterprise and the boon of government debt reduction.

Thirdly, privatisation is being promoted by established private service providers who are anxious to expand into essential services. At an international level multinational service companies are pushing for the General Agreement on Trade in Services (GATS) to be extended. GATS opens up the provision of public services such as telecommunications to international 'free trade' and its goal is to prevent governments from discriminating against foreign multinational companies that want to buy government services or compete to supply them. According to the European Commission, GATS "is first and foremost an instrument for the benefit of business, and not only for business in general, but for individual services companies wishing to export services or to invest and operate abroad."

Around the world the privatisation and deregulation of electricity has led to wild price fluctuations, a decline in service standards, blackouts, electricity rationing, the loss of thousands of jobs, and the formation of giant multinational electricity firms that are able to blackmail governments and withhold supply for their own commercial ends.

The NSW government would be singularly unwise to ignore the experience of others and follow them down this path. The private ownership of retail electricity supply would be at the expense of NSW householders, who have the lowest electricity prices in the country.

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