

Ministerial Inquiry into the Electricity Industry

Submission from the
Campaign Against Foreign Control of Aotearoa,
P.O. Box 2258, Christchurch.

1. Introduction

- 1.1. This submission is not intended to cover all areas of the terms of reference in detail, but to raise issues we regard as important. The principal areas we address are:
 - 1.1.1. The market approach to electricity supply;
 - 1.1.2. Equity in pricing and supply;
 - 1.1.3. Sustainability;
 - 1.1.4. Public ownership as a means of ensuring the government's desired outcomes and others besides.
- 1.2. We are pleased that *environmental* sustainability is one of the Government's objectives for the industry, and consequently are disappointed that it is barely mentioned in the Issues Paper. There are, in addition other issues of sustainability that are not mentioned. We address some of these below. We are also disappointed that equity is not one of the Government's objectives, and that different forms of ownership are not explicitly discussed as means to achieve the objectives. Ownership has played a vital role in the electricity industry in New Zealand's past.

2. CAFCA

- 2.1. The Campaign Against Foreign Control of Aotearoa (CAFCA) has been in existence for over twenty-five years. It concerns itself with all aspects of New Zealand's sovereignty, whether political, economic, military or cultural. It opposes foreign control of New Zealand by other States or by corporations, but welcomes interaction with people of other countries on the basis of equality. It is anti-racist and internationalist in outlook and has wide networks with other groups and individuals in New Zealand and overseas.
- 2.2. Its members include a number of institutions and libraries, journalists, politicians from most political parties, public figures, trade unionists, environmentalists, and other researchers in the area. It is consulted by a large number of organisations. Members receive a magazine, *Foreign Control Watchdog*, approximately three times a year. It is acknowledged as a unique and well-researched source in this area, where hard information is difficult to come by. CAFCA also researches, publishes, and organises public meetings and other events.

3. The market approach to electricity supply

- 3.1. The inquiry has arisen from the failure of the previous government's approach to the electricity industry's structure. It is difficult to think of any benefits to New Zealanders of that structure, other than capital windfalls by sellers of electricity assets such as local governments and community trusts. The main long term beneficiaries have been companies – mainly overseas owned – that have made large profits – often through capital gains – as a result of the new regulatory structure. We will describe this in more detail in the section on ownership below.
- 3.2. For residents and small businesses, prices have risen, service has deteriorated, and security of supply in the long run is put into doubt (see the section on sustainability below). In addition they have suffered the loss of control and a real sense of community ownership of these important public services. Some large commercial and industrial users have benefited, although those benefits began (at the expense of residential and small business consumers) before the most recent "reforms". (We hesitate to use the word "reforms", as it implies "improvement".)
- 3.3. Evidence of this failure is documented in two articles attached to this submission, which were originally published in *Foreign Control Watchdog*. Further evidence is in the report of the 1999 Roger Award judges, of which the Inquiry has already received a copy (the award, for the worst transnational in New Zealand in 1999, went to TransAlta).
- 3.4. For example, TransAlta is no model of service. In October, the Ministry of Consumer affairs described its contracts as "onerous and harsh on customers". The contracts limited the company's liability (to \$10,000 for an incident or \$50,000 in a year) if negligent, which is in breach of industry standards. They also allowed the company to disconnect power for non-payment of bills, even if the power account is up to date. Its price list did not clearly specify the services covered by each

charge. However, TransAlta rated sixth-best company in the survey (*Evening Post*, 30/10/98, "Harsh contracts earn rap for power firms"). In Christchurch, the only service available to consumers from TransAlta is via telephone. There is no way to make human contact with TransAlta staff – a radical change from the service previously provided by Southpower when it was local government-owned.

- 3.5. TransAlta, among others, has forced up retail prices. In April 1999 it announced increases of 3 to 10% in Auckland, 5 to 10% in Wellington, and 13% in Christchurch (*Press*, 7/4/99, "Govt queries power charges", p.1). It introduced substantial new charges for previously free services, including reconnection, disconnection, and final reading fees. It also transpired that Southpower, under TransAlta's ownership, had been switching off hot water cylinders over summer and autumn, not for the well-accepted reason of managing peak network loads in winter, but simply to save itself money. Although First Electric has offered considerably cheaper rates, it has attracted only a few thousand customers. This illustrates the problems of inertia and marketing that in practice mean any benefits of competition are not nearly as significant as proponents allege. Further will be said about the costs of marketing below.
- 3.6. Those reforms were based on as pure a market model of the electricity industry as could be practically achieved, and explicitly aimed at encouraging competition on the assumption that it would bring benefits to consumers. That it has failed so comprehensively, we would have expected to lead to a more sceptical approach to a pure market model. Yet the issues paper adopts that as the base of its analysis, regarding regulation as simply a way to improve on that at the margins. Paragraphs 40-44, of the paper, and especially paragraph 41, make that explicit.
- 3.7. We attach a recent paper by U.S. consulting economist, Dr Eugene P. Coyle, ("Price Discrimination, Electronic Redlining, and Price Fixing in Deregulated Electric Power", by Eugene P. Coyle, prepared for The American Public Power Association, January, 2000).
- 3.8. This provides a carefully argued and economically orthodox case that in industries with either high fixed costs or undifferentiated products – which describes the electricity industry on both counts – the usual conclusions on the benefits of competition do not apply. Indeed Coyle argues that

"For small business and residential customers the promise of deregulation is an empty one. Those with good reason to expect to be winners have lobbied hard for deregulation. If we measure society's good by either the 'economic efficiency' of the economist or by the well-being of the average small business or residential customer, however, deregulation will leave society worse off. This is not because producers of electricity prefer one kind of customer to another, but because, to be profitable, producers must discriminate. Essentially they will charge each type of customer a different price, based not on cost but on 'what the traffic will bear'.

Rigorous economic analysis, including a branch of game theory called 'the theory of the core', reveals that, rather than textbook competition driving prices down to ever-lower costs and providing low-cost electricity to all, what will unfold is price discrimination, redlining of customers, and, ultimately, producer cooperation and/or collusion to frustrate competition.

This report looks at how the market for electricity will unfold as deregulation goes forward. This paper shows that economic efficiency will not and cannot result from an unregulated electric power industry. It shows, furthermore, that such a market cannot provide rates that will be 'just, reasonable, and non-discriminatory' as is now required in the statutes or regulations of most states."

- 3.9. However his argument goes further than simply arguing for regulation.
- 3.10. He argues that "producer cooperation and/or collusion to frustrate competition" will inevitably occur because of the nature of the industry. This is for a number of reasons, the principle one being that competition forces prices to reduce to the marginal cost, but the marginal cost is below production cost because of the high fixed costs of the industry. For producers to survive, prices cannot be allowed to fall to marginal cost. If the cooperation is not given a legal form by regulation, it will take place, firstly by mergers, and after that by illegal collusion.
- 3.11. If the cooperation is legalised (by regulation) then problems of market dominance arise. Coyle argues that the best way to prevent that taking anti-social forms is either by putting the ownership of the companies in public hands (as was the historical position in New Zealand), or by public authorities organising "public aggregation" (bulk purchase) of electricity.

- 3.12. We note that public aggregation is illegal under the Electricity Industry Reform Act 1998 for the many local governments that still own lines companies. Effectively the function has been taken over by a small number of large commercial retailers (see the table on page 12 of the issues paper). Public unhappiness with these operations is one of the most important issues the inquiry must address. Their prices have risen rather than fallen, in spite of apparent competition.
- 3.13. One reason for price rises is that retail operations have increased overheads, and/or are now taking profits where previous local government or community owners merely covered costs. For example, TrustPower raised its prices in June 1999 saying that “A less fortunate feature of the purchases we made is that they were from local trust owned power companies with very low rates of return on their assets. In a number of cases this left unsustainably low energy margins which did not cover the cost of servicing the customer. TrustPower has moved quickly to correct this position in an open manner. Price rises, however even if from a low base, are not what the Government has promised ...”(Company preliminary result announcement, 14/6/99.)
- 3.14. Coyle gives a further possible explanation for that failure which has more permanent effect: the marketing costs of obtaining and retaining new residential and small business customers are too high. He says the cost of marketing could be as high as US\$600 per customer in the U.S., but even if it is only US\$100, it would take several years to recoup for many residential consumers. Hence retailers will be selective about whom they offer services to: there will be discrimination amongst customers, and in general against low income and low usage consumers. Given a natural inertia – consumers are on the whole unwilling to move to new electricity suppliers – benefits will not flow to by any means all consumers (see p.xii of his paper).
- 3.15. The current split structure of the industry probably intensifies this problem, because only the markup from retailing is available to at least some sales, whereas in a unified industry, marketing can be resourced from the entire supply chain.
- 3.16. He compares the electricity industry to others with similar high fixed cost characteristics. One is the airline industry. He shows that deregulation of the airline industry in the U.S.A. has led to rapidly rising real prices, while the regulated U.S. electricity industry had falling real prices (p.69-70).
- 3.17. In any case, we prefer the option of direct ownership over aggregation because it gives a much greater degree of control by communities when issues such as equity and sustainability are considered. Given the high degree of overseas ownership of the privatised electricity industry, including market leaders Utilicorp, TransAlta, Natural Gas Corporation (which is currently taking over TransAlta New Zealand), and the controlling shareholding in TrustPower, it is also beneficial for the country’s balance of payments. In addition, New Zealand has a very successful record of public ownership of its electricity industry. We return to this in a later section.
- 3.18. We strongly encourage members of the panel to read at least the executive summary of Coyle’s paper and consider the alternative analysis he offers, as it provides possible answers to many of the questions raised in the issues paper.
- 3.19. Coyle however simply gives a rationale for what we have observed in New Zealand in the last few years: that the market does a worse job of providing electricity to the great majority of electricity consumers – residential and small business users – than did the publicly owned industry.

4. Equity in pricing and supply

- 4.1. Equity is an important issue in a number of senses because electricity is, as the first sentence of the Inquiry’s terms of reference states, “a necessity”. Equity can take a number of forms.
- 4.2. **Low income** people must have access to electricity at reasonable prices. Yet TransAlta for example told one 73 year old man in the Hutt Valley that he would be charged more because he used less electricity (Roger Award Judges Report, cited above). This should not be unexpected: as Coyle comments (p.56): “The lower your income, the more you may pay for a kilowatthour”.
- 4.3. Fixed costs hit such people particularly hard. As has happened with banks, electricity retailers are unlikely to want to provide a fair level of service to them at affordable prices if profit is the predominant motive.
- 4.4. **Residential users and small business consumers** must have fair pricing and service. However they lack bargaining power despite the ability of some (not all) to change retail companies. As Coyle’s analysis underlines, all companies are likely to raise prices to residential consumers because of relatively high cost of marketing to gain them as customers, low volumes of use, and lack of ability to opt out (such as by providing their own generation).

- 4.5. Changes to the regulatory environment in the last decade have led to rapid increases in prices to residential consumers and reductions for large users. This is born out for line charges alone, as shown in the Inquiry's Issues Paper tables on p.41, which show that, for example, while small domestic users electricity line charges rose by 3.8% in real terms from 1994 to 1999, large commercial users' charges fell by 12.2%. Though prices fell for all users between 1998 and 1999 (probably due to lines companies trying to avoid the triggering of government regulation), even then they fell more for commercial than for residential users.
- 4.6. The point is made even more strongly when the full retail charges are considered. The table below, from the Ministry of Commerce's Electricity Information Disclosure Statistics, 1999, p.211, shows that, taking almost any period since 1990, commercial electricity charges have fallen while domestic consumer electricity charges have risen markedly. The biggest commercial users have gained the most, small commercial users have stood still, and residential users have suffered huge increases in prices. And this is based only on published rates. Many commercial users – especially the largest ones – will have negotiated special deals for even lower rates.

Weighted Average Incumbent Retail Charges Percentage Change (Inflation Adjusted to August 1999)

Year	Domestic Small	Domestic Medium	Domestic Large	Commercial Small	Commercial Medium	Commercial Large
98 to 99	3.4%	2.8%	2.6%	1.3%	-0.5%	-2.2%
97 to 98	-0.3%	-0.1%	-0.2%	-1.1%	-1.3%	-1.2%
96 to 97	3.7%	4.2%	4.3%	1.5%	3.1%	1.5%
85 to 99	30.3%	21.7%	18.5%	-18.5%	-26.2%	-29.4%
90 to 99	28.2%	23.2%	23.5%	0.8%	-6.5%	-10.5%

- 4.7. It is important to note that this is *because of competition* being introduced into the industry, not despite it. Large commercial users have much stronger bargaining power, because of both their size and their ability early on in the decade to change suppliers, and hence can negotiate better rates. The long term deal with Comalco for the right to take the cheapest electricity in New Zealand – 15% of all electricity produced – is a notorious example that preceded even the last decade's regressive trends. By contrast, residential users can be – and are – largely taken for granted.
- 4.8. The point was hammered home last year when TransAlta led power price increases – by 3-10% in Auckland 5-10% in Wellington and by 13% in Christchurch – shortly after buying Southpower from Christchurch councils.
- 4.9. The side effects of this are as important as the pressure on household budgets. In Christchurch, it makes it more difficult to coax households away from the fuels that cause air pollution. That pollution is responsible for 40 to 70 deaths a year according to the Canterbury Regional Council (*Press*, "City air pollution 'linked to deaths'", 25/2/00, p.3). Further, the pattern of penalising small users appears to penalise frugality and energy-saving.
- 4.10. **Rural consumers** must have an affordable and reliable service for both commercial and social reasons. Yet costs to service them are naturally much higher than in towns and cities, so commercially-driven lines companies are unlikely to be interested in them except at very high prices. Spreading of costs between rural and town or city consumers is a reasonable response which is unlikely in a competitive environment. One alternative is to explicitly subsidise rural consumers, but that has other problems, not least those of trade agreements to which New Zealand is party. Another is to regulate maximum line costs and the right to have access to electricity from the national grid.
- 4.11. Regulation or socially-responsive ownership is required for all these reasons. We suggest that public ownership can provide more sensitive responses than can regulation.

5. Sustainability

- 5.1. The important issue of environmental sustainability covers a huge area, and we do not intend to go into that in great detail. However we make the following points, and then cover a further area of sustainability: that of sustaining the capacity of the industry.
- 5.2. It is less likely that a profit-focused will be as aggressive in encouraging its customers to save electricity, compared to a non-profit publicly owned electricity company taking a broader approach to energy. Yet energy saving is in the public interest. A number of publicly owned electricity compa-

nies have campaigns or free services that encourage energy saving, such as subsidising, giving easy payment options, and advice, on insulation.

- 5.3. By comparison, the Roger Award judges' report documents the behaviour of TransAlta in this regard:

“The conditions of the sale of Capital Power to TransAlta in both 1994 and 1996 included a clause that TransAlta would ‘promote energy efficient appliances and buildings through advertising, consultancy services and provision of finance for economic energy programmes’.

In practice, the company has done little to meet this condition. Hutt-Mana Energy Trust member Molly Melhuish says TransAlta actually discontinued a free home energy audit service that had been started by EnergyDirect.

Later the company supported a trust initiative to provide subsidised energy conservation equipment such as hot water cylinder wraps for households. But Molly Melhuish says the product was still expensive and despite a marketing campaign funded by TransAlta did not sell well. TransAlta has since withdrawn its marketing of the product.”

- 5.4. Similarly, profit-driven companies are less likely to experiment in New Zealand with sustainable technologies such as windpower, if they do not have a quick pay-back. On the contrary, as the next paragraph shows, TransAlta is one of the country's largest contributors of carbon dioxide emissions from its thermal power stations.
- 5.5. Overseas companies are less likely to be experienced with hydro generation, which has 60% of New Zealand's capacity according to the Inquiry's Issues Paper, and are more likely to be familiar with environmentally unfriendly generation options such as coal and gas fired stations. There is therefore likely to be a tendency to focus on these problematic sources of power. For example, TransAlta's parent in Canada has three coal-fired generating plants and 50% ownership of a fourth. Only 5% of its production is hydro based; the other 95% is thermal (coal) based. It has 13 hydroelectric plants, and two coal mines in Canada. It has growing oil and gas fueled generating capacity in Australia. Its generating assets in New Zealand are dominated by the 350 megawatt Stratford Combined Cycle gas-powered power station in Taranaki, and the 115 megawatt South-down plant in Auckland. The Stratford power station alone increased New Zealand's total carbon dioxide emissions by about 5%, depending on its usage from year to year. The effect of the South-down plant has been about a third as big. Together, the two TransAlta plants account for about half of New Zealand's total increase in carbon dioxide emissions since 1990.
- 5.6. Sustaining the capacity of the industry is a further important consideration. Because of the time needed to design and construct new power plants, planning for new generating capacity must be done in the long-term. It cannot be governed simply by the short-term power price signals that the electricity market gives. If the market drives down prices as it is expected to do, then there will be little incentive to build new generating capacity – particularly since new generating capacity will be increasingly expensive per megawatt, relative to existing capacity. This illustrates the problems described by Coyle: marginal prices are insufficient to pay for new generating facilities. There is a high risk that reliance solely on market signals will lead to power shortages in the future. That may force prices up sufficiently to make new capacity profitable – but at the expense of large fluctuations in price and unreliable power supplies in the meantime.

6. Ownership

- 6.1. The 1998 Act led to a stampede of privatisation, largely to overseas companies. According to the data in the table on page 12 of the Inquiry's Issues Paper, operations with 38% of generation capacity and 68% of retail customers have been privatised. Privatisation is not so dominant in lines companies, many of which have been retained by local government or community trusts, but even there, United Networks, majority owned by Utilicorp of the U.S.A., is the largest operator. It has about 500,000 or 30% of all customers (*Press*, 9/12/98, “Power NZ earnings may double”, p.28). In addition, the company that runs the electricity market, M-Co, is owned by RMB Australia Ltd, a subsidiary of the Rand Merchant Bank of South Africa, which originally entered New Zealand in 1996 as the only official “trader” on the electricity market, “pioneering the application of risk management techniques in the deregulated electricity industry with a particular focus on energy risk management” using trading and hedging. All these companies are overseas companies, and are classed as such by the Overseas Investment Commission.

- 6.2. The word “stampede” is not an exaggeration. The prices at which electricity assets were bought and sold was many times independent valuation. For example, the Dunedin City Council’s advisers valued its 42% owned electricity retailing company, United Electricity, at \$6.5 million; United was sold initially for \$42 million, and shortly after resold for considerably more. The electricity retailing operation of Southpower, owned by Christchurch City Council and other councils in the region, was valued in 1997 by independent consultants at about \$13 million. It was sold to TransAlta at \$171 million.
- 6.3. The hugely inflated prices must put upward pressure on retail prices to provide the return on investment that the new owners were expecting. The substantial per kWh price increases, new charges, and cuts in supply and customer service by TransAlta following its purchase of Southpower’s retail operation have already been noted.
- 6.4. Evidence that this pressure was indeed affecting return on capital surfaced in TransAlta’s annual result to the year ended 31/3/99. While it maintained its dividend, TransAlta’s return on total assets fell a third to 8.3% in that year compared to 12.8% the previous year, and the adjusted return on shareholders’ funds fell a quarter to 12.1% from 15.4%. The falls were primarily due the company’s increased shareholders’ funds and asset base according to its chairman, Derek Johnston (TransAlta media release, 27/5/99, “TransAlta reports adjusted net earnings of \$33.3 million for the year to 31 March 1999”).
- 6.5. TransAlta was not the only company paying such prices: Contact Energy and Trustpower also entered into the bidding for retail customers, and Utilicorp for lines customers. Just as spectacular was the \$1.2 billion paid by Edison Mission for its 40% shareholding in Contact Energy. That compared with the next closest bidder, TransAlta, which reportedly tendered between \$800 million and \$1 billion for the 40% share (*New Zealand Herald*, 24/3/99, “Power of difference between big bids”, by Mark Reynolds). Edison’s bid worked out at \$5.00 a share and put a value of \$3 billion on the whole company – double the \$1.5 billion the government was reportedly hoping for. However, Contact’s book value at 30/9/98 was only \$883,766,000, and it expected that to rise only modestly to \$895,400,000 by the same date in 1999 and \$911,300,000 in 2000. In other words, Edison paid about 3.4 times book value. Shares have traded at around \$3 since then.
- 6.6. But this was only the climax to the situation that had been acted out before the 1998 Act came into force. The wars between Mercury, Utilicorp, and Power New Zealand for control of electricity retailing and lines operations in the northern North Island, which steadily bid up their price, seem just as absurd. The Auckland power crisis can be seen as a spectacular and disastrous symptom of the business of providing reliable electricity supplies becoming a side show to competitive empire building. This picture was repeated in a less dramatic way elsewhere where the local authorities decided to sell their electricity assets.
- 6.7. While the above privatisations may possibly have led to more efficient (though not always more reliable) operations, that efficiency has been used to maintain the rate of return on inflated asset prices rather than improve prices or service, especially to smaller residential and commercial consumers.
- 6.8. In addition it has come at a substantial cost to New Zealand’s balance of payments. The current account has been in an increasingly desperate shape for the last five years, in large part due to the increasing deficit on investment income. If the 1999 profits and ownership of Contact Energy, Natural Gas Corporation, TransAlta New Zealand, Trustpower, and UnitedNetworks were typical (though of course the environment is changing continually), approximately \$190 million a year would be paid overseas in dividends. In 1999 there was in fact more like a \$370 million negative effect on the current account, being swollen by abnormal capital gains. The normal response to concerns at the effect on the balance of payments is to point to the expertise and technology foreign firms can bring. That is not in evidence in this case, and any benefits appear to have gone to the investors rather than to New Zealanders.
- 6.9. As the Roger Award Judges’ report showed, overseas ownership has in at least one case also come at a cost to New Zealand’s capital account: assuming its sale of TransAlta New Zealand to Natural Gas Corporation proceeds, TransAlta will have made a net capital gain of \$278 million, or 43% since 1994. Capital has been brought into the country, but overwhelmingly to take over existing assets rather than to build new ones. Some of the capital for these takeovers (such as that used by Utilicorp, according to its annual report for 1998 filed with the U.S. Securities and Exchange Commission) has in fact been raised locally, but will still contribute to a rising burden on our current account in years to come. On the other hand, Contact Energy has declared a policy of paying 80% of net profit in dividends, which implies low levels of reinvestment to maintain and improve

the infrastructure its new owners bought from the New Zealand Government. This adds to our concerns regarding the sustainability of this regime in providing sufficient capacity.

- 6.10. There is an obvious alternative to privatisation. Until less than a decade ago, New Zealand's electricity industry was almost entirely central or local government owned. It was that structure that produced a system that now has amongst the lowest costs of production in the OECD, as the table on p.37 of the Issues Paper demonstrates. It was also able to provide a balance between residential and large commercial or industrial rates that an unregulated market demonstrably does not do. The same table shows that the balance between industrial and residential rates is more markedly against residential consumers than in other OECD countries (8th most unfavourable out of 23).
- 6.11. The reasons for moving away from that regime are not clear, but appear to have been based on an unwillingness by the governments of the day to commit to further capital expenditure in generating capacity, and a wish to reduce costs to commercial and industrial consumers (which as we have seen, came at the expense of residential consumers). While both those objectives have been attained, they have been at the expense of rising prices, inequity, poor service, a catastrophic power failure, potential threats to the sustainability of the system, and significant contributions to the current account deficit.
- 6.12. We emphasise that these effects are not because the companies involved are ogres (though a number of them have appalling records overseas) but because of the nature of the electricity industry, as Coyle outlines.
- 6.13. Regulation is a step towards remedying some of these problems, but in a privately owned system it also carries the risk of institutionalising monopoly positions that can only be bluntly controlled. Public ownership allows much finer control; and in addition, any monopoly profits are returned to the community, largely negating concerns that monopoly control increases inequities. The achievements of local ownership can be seen in Christchurch, where the City Council has consistently acted both to ensure that costs are held down and to achieve what equity it can in pricing by, for example, minimising fixed charges.
- 6.14. U.S. economist and regulatory expert, Gregory Palast writes in this regard:

I want to tell you a secret. American consultants have sold the world on the wonders of Free Markets and Private Enterprise, yet one nation has held tight to its socialised public service industries: the United States. In the USA, three out of four citizens – 78 per cent – are served by government-owned water systems. Government ownership of sewerage systems approaches 100 per cent. Out of 3,000 electric systems in America, 2,000 are owned by government or consumer co-operatives.

US corporate chieftains march the globe telling other nations to sell their utilities, but in America itself, the story is quite the opposite. US electricity privateer Entergy Corporation, which recently bought London Electricity, offered to sell its US home electric company to the city of New Orleans. And recently, government took over the large, privately-owned water utility for the state of New Mexico.

Here is another secret. In Europe and Latin America, US corporate executives promote the policy of reducing government regulation of privatised utilities. What they do not tell you is that America itself has the world's strictest system for regulating private utilities. Here in the land of Free Enterprise cowboys, we have little tolerance for private ownership of water and no faith in free markets for electricity. And for good reason: Americans have 100 years experience with for-profit utilities, and we have learned they must be either owned by or controlled by government.

(From an article based on speech at the PSI Water Conference in Stockholm, August 1997, copy attached to this submission.)

- 6.15. Palast outlines the methods used by U.S. authorities to regulate electricity utilities, which include requirements to provide information even beyond the level of commercial sensitivity.
- 6.16. Coyle quotes evidence (p.112) that public ownership in the U.S. does indeed work: it lowers prices and reduces inequity, while not significantly raising commercial rates:

More varied and intriguing are the results on public ownership, duopoly competition, and popular election of utility commissioners. As shown in column (a), public ownership has a very large and significant effect on the price of residential power relative to IOU [Investor Owned Utility] prices. The differential, 1.20 cents per kWh, is fully 15.4 percent less than the average residential price from investor-owned utilities. This represents a huge effect of public ownership for residential cus-

tomers, suggesting perhaps that much of the ownership effect previously detected for average price may be concentrated in this segment.

Confirming this, column (b) reveals a price reduction of 0.34 per kWh for commercial users under public ownership, considerably smaller than the advantage for residential users. This effect is nonetheless significant and constitutes a 4.8 percent differential relative to IOU pricing. Clearly, both of these customer classes realise significant price benefits from public ownership.

A rather different story holds for industrial users. Their power actually appears to be priced slightly **higher** under public ownership, though not quite significantly so ($t = 1.29$). The estimated differential of 0.16 per kWh is 3.1 percent of industrial price from IOUs. In fact, a large and significant price differential to industrial users would be unlikely, given their various alternatives to local-utility power noted above. Perhaps the better interpretation of this result is that industrial power price simply does not differ much by ownership mode.

(Quoted from an econometric analysis by John E. Kwoka, Jr., "Power Structure, Ownership, Integration, and Competition in the U. S. Electricity Industry", Kluwer Academic Publishers, Boston, 1996. Emphasis in the original.)

7. Conclusions

- 7.1. We have presented evidence that there is a very strong case, which can be justified analytically, for returning the electricity industry to public control.
- 7.2. This is not simply for social and political reasons: it is also because the nature of this industry means that any other regime will not be as effective in controlling inefficiency, rising prices, inequity, poor service, insecure power supplies, threats to the sustainability of the system, and significant contributions to the current account deficit.
- 7.3. We submit that the appropriate policy mixture is to encourage public ownership of our electricity industry, but make it subject to
 - 7.3.1. price control
 - 7.3.2. a requirement to act in a commercial manner consistent with social objectives including:
 - social equity in prices and service,
 - environmental sustainability,
 - economic development, and
 - ensuring there is (as appropriate) sufficient generation, transmission and distribution capacity for security of supply.
- 7.4. There is recent precedent to legislate for such actions, including the Electricity Industry Reform Act 1998 itself, which forced the sale of assets, and the renationalisation of ACC. It could be done relatively simply for lines and generating assets, the majority of which are still owned by central or local governments.
- 7.5. Alternatively it could be achieved by giving local and central government first refusal on the sale of any such assets.
- 7.6. Failing these alternatives, regulation of all parts of the industry should be put in place in order to, as far as possible, control the inequities and market failures that will inevitably occur. If this (least preferred) alternative is taken, we submit that encouragement and legislative backing should be given to local authorities to organise "public aggregation", a form of bulk purchase of electricity, as suggested by Coyle (p.113ff), and to (re)purchase electricity companies as they are able.
- 7.7. We also suggest the Inquiry consider the types of measures that Palast reports are in place in the U.S.A. to enable the public to enforce regulation.
- 7.8. We strongly encourage the Inquiry to speak to Coyle (email: eugenecoyle@igc.org) and Palast (email: Palast@aol.com).
- 7.9. We are interested in making an oral submission, but only if the Inquiry sits in Christchurch.
- 7.10. We are happy for our submission and accompanying papers to be made public on the Web, and will submit electronic copies by email.