

“PUBLIC VERSION”

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COMMERCE COMMISSION

DECISION NO. 302

Determination under the Commerce Act 1986 in the matter of a business acquisition proposal involving:

Powerco Limited; and

Egmont Electricity Limited.

The Commission: A E Bollard, Chairman of the Division
 K M Brown
 T G Stapleton

SUMMARY OF THE PROPOSAL: That Powerco Limited by itself (or a wholly owned subsidiary) acquires up to 100% of the shares in, or assets of, Egmont Electricity Limited.

DETERMINATION: In terms of section 67(3)(b) of the Commerce Act 1986, the Commission determines to grant an authorisation for the business acquisition.

Date of Decision: **21 July 1997**

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THE ACQUISITION

- 1 Powerco Limited (Powerco) has applied, in terms of section 67 of the Commerce Act 1986 (the Act), for authorisation of the acquisition by itself (or a wholly owned subsidiary) of up to 100% of the shares in, or assets of, Egmont Electricity Limited (Egmont).
- 2 The acquisition has been the subject of public consultation in terms of section 88 of the Energy Companies Act 1982. Under that section, the South Taranaki District Council, the owner of Egmont, is required to adopt the special public consultative procedure of section 716A of the Local Government Act 1974 in relation to the acquisition.

THE PARTIES

Introduction

- 3 Powerco, a large sized power and natural gas company proposes to acquire Egmont, a medium sized power company. The electrical networks of the two companies are contiguous in the South Taranaki region. The map attached as Appendix one shows this contiguity. In addition to its electricity business, Powerco distributes and retails natural gas to some, but not all, of the urban areas in Taranaki. A number of the areas supplied with natural gas by Powerco are supplied with electricity by Egmont.

Powerco Ltd

- 4 The registered office of Powerco is located at 151 St Hill Street, Wanganui. However, the Chief Executive and the majority of the management staff are located at Liardet Street, New Plymouth.
- 5 Powerco is a power and natural gas company which generates, distributes and retails electricity in northern and central Taranaki, Wanganui and Rangitikei district, including the cities of New Plymouth and Wanganui and the towns of Waitara, Stratford, Hawera, Marton, Bulls, Taihape, Waiouru and Raetihi. In addition, Powerco distributes and retails natural gas in north Taranaki in New Plymouth, Bell Block and Waitara, and in South Taranaki in Hawera, Manaia, Okaiawa and Normanby.
- 6 Powerco was formerly the Wanganui Rangitikei Electric Power Board. On 1 October 1995 it amalgamated with Taranaki Energy Ltd¹. The latter company was itself, formed in May 1993 pursuant to the Energy Companies Act 1992 from a merger of New Plymouth Energy (a department of the New Plymouth District Council supplying consumers with both electricity and natural gas) and the

¹ The amalgamation was given clearance by the Commission on 26 May 1995.

Taranaki Electric Power Board. Taranaki Energy Ltd acquired the Hawera Gas Company Ltd on 1 January 1994 and amalgamated with it on 1 July 1995.

- 7 Powerco's ownership structure and subsidiaries are shown in Appendix Two². IES Industries Incorporated is a USA based utilities investment company. Of its other public shareholders³, only one holds more than 1%. That shareholder is Utility Investments Ltd, a New Zealand registered nominee company which holds about 3%. Eleven percent of Powerco's shareholding has been assessed by the Commission as overseas owned.
- 8 Powerco has about 73,000 electricity connections. For the year ended 31 March 1997 it had electricity sales of \$101.2 million, of which \$[] million was attributed to its electricity distribution business. Powerco's total volume of electricity sold in that year was 850.1 gigawatt-hours.
- 9 Powerco owns and operates three different electrical networks. These are located in the New Plymouth City region, the Taranaki rural region and the Wanganui City/Rangitikei rural region. Powerco has different network pricing structures for each of its networks.
- 10 Powerco is the largest shareholder of Energy Brokers New Zealand Ltd (Energy Brokers). Until 31 March 1997, the two business functions of Energy Brokers were wholesale electricity purchasing on behalf of its shareholders and retailing electricity to larger consumers throughout New Zealand.
- 11 Energy Brokers for strategic reasons discontinued the retailing part of its business from the above date and its retail business has been taken over, in the meantime by Powerco. Powerco therefore retails to [] large consumers at [] different sites throughout New Zealand which are connected to the electrical networks of other power companies. Currently, the volume of Powerco's off-network retail sales is about [] gigawatt-hours per annum. None of these off-network sales are made through Egmont's grid exit points.
- 12 Powerco has taken over Energy Broker's retailing contracts as its largest shareholder.
- 13 Powerco generates electricity from three hydro power stations embedded into its network. The capacity of these stations is 9.4 megawatts and total annual generation for the year ended 31 March 1997 was 51.4 gigawatt-hours.
- 14 Powerco has about 16,000 natural gas connections. In the year ended 31 March 1997 it had natural gas sales of \$16.1 million of which \$[] million was attributed to its natural gas distribution business. Powerco's total volume of natural gas

² Except for two non trading subsidiaries.

³ Mostly small private investors in the Wanganui/Rangitikei areas who received an allocation of shares when Powerco was originally incorporated.

sales in that year was 2.35 petajoules. Of this volume, it distributed and retailed [] petajoules of natural gas to 12,400 connections in North Taranaki and [] petajoules to 3,500 connections in South Taranaki. Of the latter consumption, [] petajoules was used by Kiwi Co-operative Dairies Ltd (Kiwi), [] petajoules by Lowe Walker Hawera Ltd's plant in Hawera (Lowe Walker) and the balance by small commercial and domestic consumers in Hawera, Normanby, Okaiawa and Manaia.

- 15 Powerco retails natural gas to Affco Ltd's Wanganui works ([] petajoules in 1996/97), which is connected to the natural gas network of Wanganui Gas Ltd. It also wholesales natural gas to Pacific Energy Ltd ([] petajoules, in 1996/97 but expected to grow to [] petajoules). Pacific Energy Ltd is moving its activities away from involvement with electricity and natural gas retailing and, as a result, arrangements are currently being put in place to transfer the rights to that natural gas to Pacific Energy Ltd's shareholders.

Egmont Electricity Ltd

- 16 The registered office of Egmont is located at Union Street, Hawera.
- 17 Egmont is a power company which generates, distributes and retails electricity in South Taranaki including Opunake, Hawera, Normanby, Manaia and Patea.
- 18 The South Taranaki District Council became the sole owner of the company in 1993 when the former members of the Egmont Electric Power Board⁴ and the directors of Egmont could not agree on who in the community should receive the company shares. In such a situation the provisions of the Energy Companies Act 1992 assigned ownership to the local authority.
- 19 Egmont has no shareholdings in other companies⁵. Egmont is a customer, not a shareholder, of PowerBuy Ltd, an electricity purchasing and trading company.
- 20 Egmont has about 12,500 electricity connections and total line and had electricity sales for the year ended 31 March 1997 of \$22.2 million, of which \$[] million was attributed to its distribution business. The total volume of electricity sales by Egmont in 1996/97 was 190 gigawatt hours.
- 21 Egmont does not currently retail electricity to consumers other than those connected to its electrical network. However, Egmont has an arrangement with PowerBuy Ltd (PowerBuy) whereby it purchases all its electricity from PowerBuy and sells all its generation to PowerBuy []. During off-peak consumption periods and depending on the amount of water flowing into its hydro power station reservoirs, Egmont may generate electricity, surplus to its own requirements.

⁴ Egmont's predecessor organisation.

⁵ Other than a non-operating name protection company.

- 22 Egmont generates electricity from two hydro power stations embedded into its network. The capacity of these stations is 31.5 megawatts. Egmont's total generation for the year ended 31 March 1997 was 136 gigawatt-hours.
- 23 Egmont's largest customer, Kiwi, has recently installed a 20 megawatt co-generation plant which made Kiwi self sufficient as regards electricity supply. The co-generation plant is owned by a joint venture between Kiwi and Todd Petroleum Mining Company Ltd (Todd) and is fuelled with natural gas from the Kapuni field. This has currently reduced Egmont's annual electricity sales by [] gigawatt-hours per annum. In addition, Kiwi plans to increase the capacity of its co-generation scheme to 40 megawatts in July 1997 and then to 60 megawatts in April 1998. Kiwi intends to connect its scheme directly to Trans Power's Hawera substation.
- 24 Two further large consumers of Egmont Electricity are to be supplied with both electricity and network services by a new co-generation scheme. The first is the Bay of Plenty Electricity Ltd/Natural Gas Corporation Ltd (NGC) joint venture project to be located at NGC's Kapuni natural gas treatment station. It is proposed that it will provide the steam and electricity needs of Lactose New Zealand Ltd and NGC's Kapuni natural gas treatment station (approximately [] gigawatt-hours per annum) and also have about [] gigawatt-hours per annum available for sale to other consumers. The scheme is to connect directly to Trans Power's network and will also reduce Egmont's sales by about [] gigawatt-hours per annum⁶.
- 25 It is clear therefore that Egmont has or will have substantial stranded line assets in the Kapuni and Kiwi regions of its electricity network and will also have substantially reduced electricity sales.
- 26 Egmont does not supply consumers with natural gas.

COMMISSION PROCEDURES

- 27 The application for authorisation of the acquisition, pursuant to section 67(1) of the Act, was registered on 24 April 1997. Section 67(3) requires the Commission to issue a decision within 60 working days, or such longer period as the Commission and the applicant shall agree.
- 28 If it is satisfied that the acquisition would not result, and would not be likely to result, in the acquisition or strengthening of a dominant position in a market, the Commission may give a clearance to the acquisition under section 67(3)(a) of the Act.
- 29 If it is not satisfied that the acquisition would not result, or would not be likely to result, in the acquisition or strengthening of a dominant position in a market, the

⁶ Because both plants have existing in-house generation.

Commission may grant an authorisation for the acquisition if it is satisfied that the acquisition would result, or would be likely to result, in such a benefit to the public that it should be permitted (section 67(3)(b)).

- 30 Where the benefits to the public do not outweigh the detriments resulting from the acquisition, the Commission shall decline to grant an authorisation (section 67(3)(c)).
- 31 In the course of the investigation of the acquisition, Commission staff have spoken to, and sought comments and received submissions from, a wide range of parties with an interest in the acquisition. These parties are identified in paragraph 37 of this Determination.
- 32 On 30 May 1997, the Commission issued a Draft Determination giving its preliminary view that, on the information then available, the Commission was:
- (a) satisfied that the acquisition, if implemented, would not result, and would not be likely to result, in the acquisition or strengthening of a dominant position in:
- the national market for the retailing of electricity to medium and large consumers; and
 - the post-merger electricity distribution market; and
- (b) satisfied that the acquisition, if implemented, would result, or would be likely to result, in the acquisition or strengthening of a dominant position in:
- the market for the supply of delivered natural gas to small commercial and domestic consumers connected to Powerco's South Taranaki natural gas distribution network; and
 - the market for the supply of delivered electricity to small consumers connected to the merged entity's electrical networks.
- 33 The Commission was, however, satisfied on the information then available, that the detriments arising from the loss of competition likely to result from the acquisition would be outweighed by the public benefits resulting from the acquisition. Accordingly, the Commission's preliminary assessment was that the acquisition should be authorised.
- 34 The Draft Determination also identified a number of subjects about which further information and comment was sought by the Commission.
- 35 Section 69B of the Act provides that the Commission may hold a conference prior to determining whether or not to give a clearance or grant an authorisation under

s 67(3) of the Act. The Commission decided that the issues raised by the application necessitated a conference and such was held on 30 June and 1 July 1997 in Wellington.

EXAMINATION OF THE ACQUISITION

Previous Examination

- 36 The Commission had an opportunity to examine the issues raised by the acquisition in the context of the applicant's August 1996 application for clearance of the same acquisition, which was subsequently withdrawn. Accordingly, the Commission is able to draw on information obtained at that time and that information, together with new information obtained during examination of this application, is reflected in this Determination.

Parties Interviewed

- 37 During the course of the two investigations, Commission staff interviewed the following parties in the Commission's examination of the acquisition:
- Powerco; (applicant)
 - Egmont; (acquired company)
 - Wanganui Gas; (inter-fuel competition);
 - NGC Gas Companies (inter-fuel competition);
 - Lactose NZ Ltd (Lactose - potential electrical cross-border competition);
 - Petrochem Corporation of NZ Ltd (Petrochem - potential cross-border electrical competition);
 - Shell Todd Oil Services Ltd (STOS) at Kapuni Production Stations (potential electrical cross-border competition);
 - Bay of Plenty Electricity Ltd (Bay of Plenty Electricity - new competition from co-generation plant);
 - Lowe Walker Hawera Ltd (Lowe Walker - large electricity and natural gas consumer);
 - Kiwi Co-operative Dairies Ltd (Kiwi - large electricity and natural gas consumer)
 - Pastoral Foods Ltd (claimed public benefits); and
 - Other parties re inter-fuel competition (mentioned in that section later in this Draft Determination)

Parties Making Written Submissions

- 38 The following parties made written submissions on the Draft Determination:
- Powerco (three);
 - Egmont (one);
 - Mercury Energy Ltd (two);
 - Todd (three, two confidential);

- South Taranaki Energy Users Association Inc (STEUA - one);
- South Eastern Utilities Limited (SEU - one); and
- South Taranaki District Council (two).

Parties Making Oral Submissions at the Conference

39 The following parties made oral submissions and answered questions by Commissioners and staff at the conference:

- Powerco;
- South Taranaki District Council;
- Todd;
- South Taranaki Energy Users Association Inc; and
- Egmont.

BACKGROUND TO THE ELECTRICITY INDUSTRY

Electricity Industry Participants

Generators and Wholesalers

40 At present Electricity Corporation of New Zealand Ltd (ECNZ), Contact Energy Ltd (Contact) and Mercury Energy Ltd (Mercury) are New Zealand's largest generators. There are, however, many other small power stations owned by, and embedded in, the local networks of power companies.

41 Generators sell electricity at wholesale either by means of bilateral contracts with purchasers, or by the New Zealand Electricity Market (NZEM) pool mechanism. Purchasers who buy through the wholesale market are retailers and large consumers. The Electricity Market Company Ltd (EMCO) administers the NZEM. EMCO is owned equally by Trans Power Ltd (Trans Power), ECNZ and ESANZ. ESANZ is the Electricity Supply Association of New Zealand, a body which represents the interests of the majority of power companies.

Long Distance Transmitter

42 Trans Power is responsible for the long distance transmission of electricity in New Zealand.

Distributors

43 As at the date of this report, 39 power companies such as Powerco and Egmont are distributors of electricity in New Zealand.

Retailers

- 44 Retailers are either the power companies' incumbent retailers who retail to consumers connected to the networks of each of the power companies or independent retailers who compete with incumbent retailers by using the power companies' networks⁷. However, at present all independent retailers are either existing power companies or the joint venture vehicles of existing power companies and there are no retailers who are new to the industry.

Recent Reforms in the Electricity Industry

Chronology of the Reforms

- 45 The key reforms since the mid-1980s have been:
- the transfer of the Government's electricity generation and transmission business from the Ministry of Energy to a newly created state owned enterprise, ECNZ in 1987;
 - a requirement for all electricity supply authorities to set up as stand alone companies in 1993;
 - the removal of statutory monopolies in the distribution and retailing of electricity in 1994;
 - the separation of the Government-owned transmission business (Trans Power) from ECNZ in 1994;
 - the creation of a new state owned generation company, Contact in 1996, including the acquisition by it of a significant proportion of the generation assets of ECNZ; and
 - the creation of the wholesale electricity market which was considered by the Commission in Decisions 277 and 280 relating to certain aspects of the interim and final rules for NZEM.

Generation and Transmission

- 46 The split of the dominant electricity generator, ECNZ, into two competing state-owned enterprises occurred on 1 February 1996 when ECNZ sold various of its power stations, which comprised 28% of New Zealand's generating capacity, to the new generator, Contact. Further, ECNZ's rights and obligations in terms of:
- existing power station natural gas fuel contracts;

⁷ And the restrictive trade practice provisions of the Act if access is denied by a power company.

- the proposed new Taranaki power station natural gas supply contracts and Resource Management Act 1991 consents, and
- its interests in power station development sites,

were also transferred to Contact. Contact was established for the purpose of competing with ECNZ for the provision of electricity generation. There currently is no announced intention to sell either of the two state owned generators. In 1995, the Government decided that eight of ECNZ's smaller power stations would be available for sale in late 1997 to local power companies and/or Maori interests, to provide further competition.

- 47 The transmission grid which connects all major power stations and the substations which supply electricity to major customers and power companies is owned and operated by Trans Power. In July 1994 at the direction of the Government, Trans Power, which previously was a wholly owned subsidiary of ECNZ, was separated from ECNZ and now operates as an independent state owned enterprise. The purpose of this was to facilitate access by generators and purchasers to Trans Power's grid on fair and reasonable terms.

Distribution and Retailing

- 48 The Energy Companies Act 1992 addressed issues of the ownership of power companies. It required the corporatisation of the then electrical supply authorities. A diversity of ownership forms resulted and these are discussed below.
- 49 The Electricity Act 1992 (effective from 1 April 1993) and its associated Electricity (Information Disclosure) Regulations 1994 (effective from 11 November 1994) provide for:
- the removal of exclusive electricity supply franchise areas;
 - the accounting separation (ring-fencing) of the distribution business and the retailing business within each company; and
 - the introduction of an information disclosure regime which requires the compulsory public disclosure of certain annual financial and performance information pertaining to the power companies.
- 50 The purpose of the reforms was to reduce impediments to competition in the core business areas of the power companies by removing legislated protection (i.e. the exclusive franchise areas) and separating those business areas with natural monopoly characteristics (i.e. the distribution businesses) from those that are potentially competitive (i.e. the retailing businesses).

Summary of the Components of the Electricity Industry

- 51 The production, delivery and sale of electricity to consumers involves five stages:
- the generation of electricity in power stations;
 - the wholesale market;
 - the transmission of electricity from power stations to regions of substantial electricity consumption via high voltage transmission lines;
 - the distribution of electricity to groups of consumers via power lines and cables; and
 - the retailing of electricity to consumers.
- 52 The components are described below.

Electricity Generation

- 53 New Zealand has a mixture of hydro-electric, wind powered, geothermal and natural gas and coal fired thermal power stations. ECNZ and Contact together have the capacity to generate 96% of electricity available for public supply in New Zealand. The balance is presently generated by smaller power stations, mostly owned by power companies.
- 54 Mercury, along with various joint venture partners, is currently building or planning several medium to large sized power stations which have been or are to be commissioned between 1996 and 1998. The feasibility of numerous other power generation schemes is being investigated by other parties.
- 55 ECNZ estimates that its present market share of 68% of electricity generated in New Zealand will fall to 58% in 1998. At that time the other major generators will be Contact, Mercury and the joint venture which owns the proposed new power station to be built near Stratford in Taranaki.

The Wholesale Electricity Market

- 56 In October and November 1995, the High Court heard an appeal against the Commission's clearance for Mercury to, in effect, acquire all the shares of Power New Zealand Limited (PNZ). On 14 December 1995 the High Court delivered its decision, *Power New Zealand Ltd v Mercury Energy Ltd (CL 48/94 Barker J. and Dr Maureen Brunt, 14/12/95, HC-Auckland) (PNZ v Mercury)*, in which it dismissed the appeal. The Court noted that "the heralded wholesale market in electricity is of utmost importance, not only for its impact upon the wholesale

price of electricity but also for its impact upon the character of competition in retail markets.”

57 The trading of electricity at the wholesale level occurs as a result of:

- bilateral contracts between generators and individual electricity retailers and large consumers outside the pooling arrangements discussed below; and
- spot trading of electricity on the NZEM. The electricity pooling mechanism which is inherent in this market involves generators offering to sell to any market participants certain quantities of electricity at certain prices from each of their power stations for each half hour of the year. This offer process establishes a merit order of generation plant. A merit order is a list of power stations running from lowest cost to highest cost for the electricity output of each. The merit order is used to establish which power stations are used to meet demand for electricity by dispatching electricity from power stations in the order of lowest cost to highest cost until a point is reached when one power station supplies the marginal electricity demand. The spot price for electricity is determined by the offered sale price of electricity from the power station which supplies the marginal electricity demand.

58 Bilateral contracting for the sale of electricity has been the norm for the many years when ECNZ and its antecedents were the dominant generators. The NZEM commenced operation in its present form on 1 October 1996.

59 The rules of the NZEM were voted into place by the market participants with each participant’s voting right dependent on its market share. Market participants are generators, power company purchasers, retailers who are independent of power companies, electricity buying groups and major consumers.

60 NZEM also provides a facility for the trading of day ahead electricity contracts at a fixed price allowing purchasers the opportunity to hedge the price of their electricity requirements for the following day.

The Transmission of Electricity

61 Electricity is transmitted throughout the country by high capacity, high voltage⁸, inter-linked transmission lines by Trans Power. Trans Power is a state owned enterprise which owns and operates the national transmission line network and associated substations. Trans Power’s customers are the major electricity

⁸ Alternating current transmission voltages are mainly 220,000 volts, 110,000 volts and 66,000 volts. However, the direct current link between the North and South Islands runs at higher voltages.

generators and wholesalers on the one hand, and power company and major industrial electricity⁹ purchasers on the other.

- 62 Trans Power's substations are the points of connection between Trans Power's high voltage transmission line network and the lower voltage distribution networks of the power companies. Part of the equipment in Trans Power's substations are transformers which reduce the voltage from the high voltages used for the long distance transmission of electricity to the lower voltages which are more appropriate for power companies to use for distribution of electricity to consumers. Trans Power's substations also contain the switches and isolators which are used to control the operation of transmission lines, metering and protection equipment and busbars which may distribute electricity towards several different points of consumption from a single substation.
- 63 Typically, a power company will use several Trans Power substations to supply it with electricity.
- 64 The Trans Power networks in the North and South Islands are connected by the High Voltage Direct Current Link across Cook Strait. This link may transmit power in both directions, although the flow of electricity is generally south to north.

The Distribution of Electricity

- 65 Electricity is distributed locally from Trans Power's substations to consumers by the substations, low voltage, inter-linked power lines and underground cables of the power companies.
- 66 The electricity distribution function can be distinguished from the electricity retailing function (which is further discussed below). Retailing concerns the sale of electricity to consumers at their premises, farms or residences. Distribution concerns the operation and management of the lines, cables, transformers, switches and other physical equipment which is needed to cause electricity to flow from Trans Power's substations to those places where consumers use electricity.
- 67 New Zealand has 39 power companies of which Powerco and Egmont are two. Twenty one of these are owned either by community and consumer trusts. Seven are owned by territorial local authorities. Ten are owned by private shareholders or by a mixture of private, trust and local authority shareholders. One is owned by the Government. Power companies' customers are industrial, commercial and domestic consumers of electricity.
- 68 The distribution networks of the power companies operate at lower voltages than Trans Power's transmission line network and in smaller geographic areas.

⁹ There are seven large industrial concerns whose factories are directly connected to Trans Power's transmission line network (rather than being supplied with electricity by the electricity network of a power company as are consumers other than the seven). The acquisition concerns power companies, not directly connected consumers.

Electricity passes from the low voltage side of Trans Power's substations by power line or cable to the power companies' zone substations. The voltage of this kind of line or cable is typically either 110,000 volts or 33,000 volts. A zone substation is a lower capacity, lower voltage version of a Trans Power substation. Its function is to supply electricity at 11,000 volts to a zone of the power companies' supply area. Once again the voltage is reduced by means of transformers and once again there will be a number of different 11,000 volt lines or cables leading off the substation busbar supplying electricity to consumers in the area surrounding the zone substation. Such lines or cables are known as feeders.

- 69 A high voltage customer buys electricity from its power company at 11,000 volts and then reduces it to lower working voltages using the customers own substation transformers. High voltage consumers are large consumers.
- 70 A distribution substation reduces the 11,000 voltage to 400 volts (or 230 volts between phases) at which voltage electricity may be safely reticulated to smaller commercial and domestic consumers. A distribution substation may be located on a platform raised up single or dual power poles, or it may be located at ground level in a small cubicle.
- 71 Hence, a power company's distribution network is effectively three sub-networks operating at three different voltages (33,000, 11,000 and 400 volts) which are connected via zone and distribution substations. These sub-networks are arranged such that one voltage provides support to the others in the event of a fault.
- 72 Power company engineers add extra capacity to a power company's network in steps. Such an increase in capacity might be to cope with industrial or residential subdivision growth or the arrival of a large new consumer. It may require the capacity of each of the sub-networks to be enlarged. That is a new industrial subdivision may require additional 400 volt and 11,000 volt cables or power lines and distribution substations to be installed between the subdivision and the zone substation supplying the area, along with an increase in the capacity of the zone substation's transformer capacity and the cables supplying the zone substation from Trans Power's substation. Eventually such growth in the demand for electricity will require a step addition to the capacity of the Trans Power substation.
- 73 The minute by minute operation of the power companies electricity networks and electricity flows over those networks is carried out in control rooms which the power companies maintain. Power company staff ensure that the supply of electricity from Trans Power substations into the networks of the power companies constantly matches consumer demand, and that alternative routing of electricity to consumers occurs during the breakdown or removal from service for maintenance of power lines or cables or substation equipment belonging to the power companies.

Retailing of Electricity to Consumers

- 74 Electricity is retailed to consumers in New Zealand by power companies and independent retailers. The independent retailers include power companies such as Mercury and Southpower, which actively seek to supply consumers outside its own distribution network area. In addition, four companies were established jointly by a number of power company shareholders for the purpose of purchasing their electricity from the wholesale electricity market and, as well, carrying out competitive retailing (although the number of companies carrying out competitive retailing has now reduced to one. The reasons cited are the small profit margins now available from electricity retailing as a result of competition and the consequent need for economies of scale).
- 75 Power companies which own and operate distribution networks also have an incumbent electricity retail function taking electricity for sale to consumers over their own lines and cables. Independent retailers, however, must gain access to distribution networks which they do not own, in order to supply consumers with electricity. Such access must be obtained from a power company network owner against whose incumbent retailer the independent retailer intends to compete. Network access by independent retailers is governed by the restrictive trade practice provisions of the Act which renders refusal of access by a power company for anti-competitive purposes illegal.
- 76 Both types of retailer pay Trans Power for access to its transmission network to transmit electricity from power stations to its substations prior to distribution to consumers by power companies and sale by retailers. Both types of retailers purchase electricity at wholesale by the mechanisms described above.
- 77 Power companies have installed electrical load management equipment. The purpose of this equipment is to reduce the electricity consumption of the consumers connected to the power companies' networks at times of high loading on the power companies' own networks or at times when the wholesale spot market price is high, all with the aim of reducing the power companies' investment and energy purchase costs. The load management equipment functions by compulsory control of domestic water and space heating and signalling upcoming periods of high electricity prices to industrial consumers who then have the opportunity to voluntarily reduce consumption.

BACKGROUND TO THE NATURAL GAS INDUSTRY

Production

- 78 The four major sources of natural gas in New Zealand are the Kapuni on-shore field, the TAWN¹⁰ group of on-shore fields, the McKee/Kaimiro on-shore field and the Maui off-shore field. These fields account for approximately 20%, 7%, 3% and 70% respectively of New Zealand's annual natural gas production.

¹⁰ The Tariki, Ahuroa, Waihapa and Ngaere field in central Taranaki.

- 79 In terms of the Maui Gas Contract, the entire production of the Maui field¹¹ is sold to the Crown. The Crown, under the back-to-back agreements concluded in July 1990, on-sells the natural gas to NGC, Methanex NZ Ltd¹² (Methanex) and Contact. Contact has contractual arrangements with ECNZ for the supply of natural gas for burning in ECNZ's Huntly power station.
- 80 Under the Kapuni Gas Contract, all Kapuni natural gas is sold to Kapuni Gas Contracts Ltd¹³. Kapuni Gas Contracts Ltd on-sells the Kapuni gas to Methanex, Petrochem and NGC. The Kapuni Gas Contract was the subject of recent litigation between the KMCs and Kapuni Gas Contracts Ltd/NGC as to the ownership of the remainder of natural gas in the field. The Court's decision, which has not yet been sealed, has the effect of dividing future output of the Kapuni field equally between the KMCs and Kapuni Gas Contracts Ltd.
- 81 The entire production from the McKee/ Kaimiro fields is currently used by Methanex. TAWN production is contracted to Contact for burning at the Stratford and New Plymouth power stations.

Wholesaling and Transmission

- 82 NGC is the largest wholesaler of natural gas and currently the only supplier to the reticulated segment of the market. The natural gas which it supplies through the North Island transmission system accounts for about 20% of all natural gas sold. Natural gas is transmitted by NGC's high pressure natural gas pipeline systems between Kapuni /Maui and Wellington, Hawkes Bay, Bay of Plenty, Gisborne, the Waikato, Auckland and Northland. The Oaonui to Huntly Maui natural gas pipeline is operated by NGC for The Maui Joint Venture. The other pipelines are all owned and operated by NGC.
- 83 The NGC transmission system delivers natural gas to 15 separate reticulated distribution systems as well as directly to a number of large natural gas consumers.
- 84 Other natural gas wholesalers to bulk users are Powerco¹⁴, Contact¹⁵ and the KMCs¹⁶.

Distribution and Retailing

- 85 Historically, these functions have been undertaken by gas utilities within exclusive franchise areas. Powerco operates at the distribution level of the industry in North and South Taranaki. Other utilities are owned by Enerco NZ Ltd (Enerco), TransAlta NZ Ltd (TransAlta), Wanganui Gas and NGC.

¹¹ Currently about 160 petajoules per annum.

¹² For use in its Synfuels and Petralgas plants.

¹³ A Fletcher Challenge Ltd subsidiary.

¹⁴ Powerco is selling natural gas to Affco Ltd's Wanganui works and to Pacific Energy Ltd.

¹⁵ Staff have learnt that Contact is active in the market attempting to secure wholesale natural gas sales.

¹⁶ The Kapuni Mining Companies are selling natural gas to Kiwi via a pipeline built by Todd Corporation.

ANALYSIS METHODOLOGY

- 86 The Commission has developed the methodology it uses to consider power company business acquisitions during its consideration of a number of actual and proposed mergers between power companies. A list is attached as Appendix three.
- 87 In *PNZ v Mercury*, the High Court found that none of PNZ's criticisms of the Commission's procedures or decision had been made out and confirmed the Commission's decision to grant a clearance to Mercury to acquire PNZ shares. In the course of its judgement, the High Court suggested some refinements to the Commission's approach to enhance the analysis of industry and competition issues on power company mergers. Those refinements have been adopted in considering the present application and completing this report.
- 88 The Commission has also considered a number of natural gas company business acquisitions. A list is attached as Appendix four.

RELEVANT MARKETS

Introduction

- 89 The purpose of defining markets is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition being considered. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in terms of section 47(1) of the Act.
- 90 Section 3(1A) of the Act provides that:
- “the term ‘market’ is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them.”
- 91 In a 1984 decision, the Commission, drawing upon the Australian Trade Practices Tribunal decision in *Queensland Co-operative Milling Association*¹⁷, defined a market as:
- “a field of actual or potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive.”¹⁸

¹⁷ *Queensland Co-operative Milling Association*, (1976) ATPR 40-012 at 17,247.

¹⁸ *Edmonds Food Industries/WF Tucker & Co Limited*, Decision No. 84, 21 June 1984.

- 92 Markets are defined in relation to product type, geographical extent, and functional level. With the first two dimensions, market boundaries are determined by testing for substitutability, in terms of the response to a change in relative prices of the good or service in question and possible substitute goods or services. A properly defined market will include products which are regarded by buyers as being not too different ('product' dimension), and not too far away ('geographical' dimension), and are thus products to which they could switch if a small yet significant and *non-transitory* increase in price (*ssnip*) of the product in question were to occur. It will also include those suppliers currently in production who are likely, in the event of such a *ssnip*, to shift promptly to offer a suitable alternative product, even though they do not do so currently. Such suppliers have been referred to by the Commission as "near entrants".
- 93 The Commission's *Business Acquisition Guidelines* suggest the use of a *ssnip* test to provide a framework for testing for substitutability, and hence for determining the boundaries of a market as a matter of fact and commercial common sense.¹⁹ In regard to product market definition, the following question is posed:
- If the price of the product were to be raised by a hypothetical monopolist by a small yet significant non-transitory increase in price (say, five per cent) above the competitive level for at least a year, would so many buyers switch to buying alternative products (demand-side substitutability), or would so much additional supply be added by new suppliers switching their production to the product in question (supply-side substitutability), that the price rise would not be profitable?
- 94 If the price rise is profitable because little or no such switching occurs, then the product as defined has no close substitutes, and it falls within a separate product market. On the other hand, if the price rise is not profitable because of widespread switching, the products to which buyers switch can be considered to be close substitutes for the initial product. These products are then added to the initial product, and the new, enlarged, product definition is subjected to the same test. This process continues until no significant switching occurs in response to the increased price. The boundaries of the product market are therefore identified. The product market so arrived at should occupy the smallest range of products consistent with a hypothetical monopolist being able to exert market power, as defined by the *ssnip* test.
- 95 The *ssnip* test is also used to gauge the geographical extent of the market. The process starts by taking one small district or region as appropriate, and considering whether a hypothetical monopolist of the product in that area, if it were to impose a *ssnip* as defined above, would lose so many customers to suppliers of the product outside that area, that the price increase would be unprofitable. An absence of switching would indicate that suppliers outside that area cannot provide substitute products, in which case the area initially specified would constitute a separate geographical market for the product. On the other hand, the presence of widespread switching would show that suppliers in other areas could provide products which were effective substitutes and, therefore, that

¹⁹ Commerce Commission, *Business Acquisition Guidelines*, 1996, at pp. 14-15.

the geographical extent of the market is broader than the area initially specified. The test would then be repeated with the broader geographical area, and this process would continue until significant switching outside of that area in response to the price rise ceases. Once again, the geographical market for a product is the smallest geographical space in which a hypothetical monopolist could exert market power.

- 96 In practice, the process of defining markets is unlikely to be as precise and as scientific as suggested by the *ssnip* test. However, in the Commission's view, the *ssnip* approach provides a useful framework for assessing the question of what other products, or products from other areas, are substitutable for the product in the area in question as a matter of fact and commercial common sense. The test simply provides a means by which judgements on a case-by-case basis, using whatever information happens to be available or can readily be generated, can be made. The issue remains one of substitutability in response to a price increase, and so evidence relating to the price elasticity of demand, the behaviour of buyers, the availability of technically suitable alternative products, transport and distribution costs, informed opinion from various sources, and overseas studies, will all be of assistance. This has been the approach used with regard to the present application.
- 97 In addition, markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products proceeds through a series of functional levels. For example, that between manufacturers and wholesalers might be called the "manufacturing market", while that between wholesalers and retailers is usually known as the "wholesaling market". The functional levels affected by the application have to be determined as part of the market definition.

The Product Markets

- 98 The Commission, when assessing previous business acquisitions in the electricity and natural gas sectors has adopted discrete electricity and natural gas product markets to undertake its competitive analysis. For instance in its NGC/Enerco decision (Decision 270) the Commission said:

"None of the evidence presented to the Commission points to a clear cut answer to the market definition problem. However, all of the evidence is consistent with the conclusion that natural gas and other fuels, especially electricity and to a lesser extent coal, are indeed substitutes for each other, both technically and commercially - but they are at best imperfect substitutes, and cannot be regarded as being in the same market."

- 99 This approach is consistent with recent decisions of the High Court.
- 100 In *PNZ v Mercury*, the Court said:

"It is common ground that gas is not in close competition with electricity. We see no reason to question this approach."

101 In the *Shell (Petroleum Mining) Company Limited and Another v Kapuni Gas Contracts Ltd and Another (CL 5/94 Barker J and Mr R G Blunt, 3 February 1997, HC - Auckland)*, the Court said:

“We accept that (light fuel oil, coal and electricity) are substitutable (for natural gas) in certain favourable circumstances, but always at the edges and seldom in response to a SSNIP.”

102 Discussions with parties with an interest in the current case do not suggest that this situation is different in the South Taranaki region. In addition, when in the past there have been quite substantial increases in either natural gas or electricity prices in the Hawera area, there appears to have been only a very small change in demand for the other product. As a possible indication of the limited nature of inter-fuel competition, in 1994 when natural gas prices in South Taranaki increased by 35% and electricity prices increased by only 6%, there was no discernible change in Egmont’s electricity sales in the following year.

103 It is proposed, therefore to adopt separate electricity and natural gas product markets in this instance. It is noted, however, that the market definitions adopted do not prevent the Commission from giving full weight in its assessment of the separate markets to the impact of any removal of competition between these two energy forms in its analysis of the acquisition.

104 The applicant has agreed that the supply of natural gas and electricity should be considered in separate product markets.

Electricity Markets

105 The Commission, in assessing mergers of power companies, has considered a number of related markets. Generally, the Commission concluded that there were:

- a national electricity generation and wholesaling market;
- a national electricity network contracting services market;
- a national market for the ownership and operation of new distribution networks;
- distinct geographic markets corresponding to the distribution networks of the merging parties for electricity distribution to all consumers and the retailing of electricity to small consumers; and
- a national market for the retailing of electricity to medium and large consumers.

- 106 In *PNZ v Mercury* the High Court emphasised the need for markets to be distinguished by reference to substitutability “as a matter of fact and commercial common sense”. The High Court noted that if the basis for market definition is taken to be substitutability, then for the distribution function, each customer connection can be considered a separate market. The High Court concluded that the most useful market definition approach is to recognise that the merged firm’s sphere of operations in the distribution function would expand. The High Court noted that the “source of the enlarged firm’s market power in distribution is unchanged; it lies in the natural monopoly possessed by the ownership of the local distribution lines and their dependence upon the nearest transformer. But the geographical scope of its exercise would expand. Its pricing and services would be co-ordinated.” The High Court noted that the constraints on the merged entity should be assessed by reference to those new enlarged boundaries.
- 107 The competition question is, therefore, whether the merged entity would be less constrained than the participant power companies would be without the proposed merger.
- 108 In respect of markets relating to new networks, the High Court concluded that there is a national market for the construction of such networks. However, operation and ownership of new networks is, in the Court’s view, a regionally defined activity that should be treated as a constraint on existing line services.
- 109 Additionally, the High Court believed that drawing a distinction between the distribution and retailing of electricity to small consumers was unnecessary, the relevant market is for the supply of delivered electricity to small consumers. Again the analysis should recognise that the merger would lead to the acquiring firm expanding its area of activities.
- 110 In summary, the High Court considered that the appropriate markets for the consideration of power company mergers are:
- a national market for the wholesaling of electricity;
 - a national market for the transmission of electricity;
 - a national market for the construction of new networks;
 - prior to the merger, two local distribution markets to medium and large consumers corresponding to the electrical networks of the merging companies and, following the merger, one distribution market comprising the merged entity’s electrical networks;
 - similarly to the approach used for distribution, prior to the merger, two local markets for the supply of delivered electricity to small consumers and, after the merger, one such market; and

- a national market for the retailing of electricity to medium and large consumers.

In tabular form, these electricity markets can be represented as follows:

Table of Relevant Electricity Markets		
Functional Level	Geographical Level	Consumption Level
wholesaling	national	all levels
transmission	national	all levels
construction of new networks	national	all levels
distribution	local/regional	medium and large
distribution and retailing (delivered electricity)	local/regional	small
retailing	national	medium and large

111 The High Court’s conclusions in *PNZ v Mercury* were subsequently upheld by a five member bench of the Court of Appeal. The Court of Appeal addressed the High Court’s view that it was necessary to assess potential bypass competition in markets which corresponded with the merged firm’s enlarged distribution area. It considered that this approach was appropriate in the circumstances of the case. It noted, however, that the expanded market area is not a new field of transactions, but rather is a “new market description”. The relevant question which was considered in relation to this market was whether existing dominance was strengthened, rather than whether new dominance was acquired.²⁰

112 The Court of Appeal also upheld the views of the High Court and the Commission that there was not a discrete regional market for retailing electricity to medium sized commercial consumers.

Natural Gas Markets

113 Given the natural gas distribution and retailing component of Powerco’s business, this case requires consideration of natural gas markets. These are:

- a North Island natural gas production market;
- a North Island natural gas transmission market;

²⁰ The question of the application of section 48 of the Act was also discussed by the Court of Appeal in *PNZ v Mercury*. The Court accepted that where an acquisition resulted merely in a bare transfer of dominance, the Commission could give a clearance in terms of section 66(3) to such an acquisition.

- a North Island natural gas wholesale market which encompasses sales to natural gas utilities, natural gas retailers and medium and large industrial consumers; and
 - markets for the supply of delivered natural gas to small commercial and domestic consumers connected to Powerco's South Taranaki natural gas distribution networks.
- 114 The Commission notes that the practical competitive effects of deregulation of the natural gas industry are much less advanced than those in the electricity industry. For example the natural gas disclosure regulations are yet to be promulgated. Further, the industry does not, in general, have an infrastructure to deal with the issues associated with the wheeling of natural gas by retailers over the distribution pipelines of the former utilities. Neither, for example, has competition for the natural gas reticulation of new subdivisions developed as it has in the electrical industry. The Commission does, however, note that Pacific Energy Ltd (Pacific Energy) has purchased a quantity of natural gas from Powerco to retail to consumers in Auckland and that Powerco is supplying the industrial works of Affco Ltd (Imlay) using the natural gas pipelines of Wanganui Gas.
- 115 Conflicting opinions exist within the industry regarding the feasibility of independent retailers selling natural gas to small consumers using the existing natural gas utilities distribution networks. Powerco informed staff that there were many complex issues to resolve before it could develop a use of system agreement for its natural gas network. The Commission has, however, been informed that Pacific Energy has concluded an agreement with Enerco for the use of its Auckland natural gas distribution network, and is selling the natural gas to Griffins Ltd. []
- 116 At this stage of the natural gas industry's deregulation process, the Commission believes that retailing (in a general sense, the supply of natural gas to large natural gas consumers on a national basis) over Powerco's South Taranaki natural gas distribution network is likely for large consumers only. The Commission therefore concludes that, as for electricity, the sale of natural gas to small commercial and domestic consumers occurs on a delivered energy basis. In forming this opinion, the Commission notes its experiences in the electricity industry where national electricity retailing is currently only viable for consumers of greater than 0.1 - 0.5 gigawatt-hours per annum. This converts approximately to 3,000 - 15,000 gigajoules per annum.²¹

²¹ The Commission notes that the band of consumers that may fall within the definition of small natural gas users may not equate exactly with the same band of electricity consumers. However, common to both small electricity and small gas consumers are all domestic households.

Consideration of Relevant Electricity Markets

- 117 Of the electricity markets tabulated above, the Commission does not believe that the acquisition is likely to raise competition concerns in the markets for the transmission of electricity and the construction of new networks. The Commission notes that there are a number of firms actively involved in the market for the construction of new networks and entry conditions do not appear to be onerous. Further, the acquisition is unlikely to have any impact in the transmission of electricity market.
- 118 On the basis of electricity retailer incomes, the sales of the merged entity will reflect about 5% of total New Zealand-wide retail sales. In addition Powerco generates 51.5 gigawatt-hours per annum of electricity from its three power stations which have a total capacity of 9.4 megawatts. Egmont generates 136 gigawatt-hours per annum of electricity from its two power stations which have a total capacity of 31 megawatts. These figures may be compared with national annual generation of about 35,000 gigawatt-hours from about 8,000 megawatts. Therefore, although there may be minor aggregation in retail sales and generation, given the number of other substantial parties active in the wholesale electricity market, the acquisition is unlikely to have any anti-competitive impact in the wholesale electricity market.
- 119 Accordingly, the Commission considers the following electricity markets require further analysis:
- prior to the merger, two local markets for the supply of delivered electricity to small consumers and, after the merger, one such market;
 - prior to the merger, two local distribution markets to medium and large consumers corresponding to the electrical networks of the merging companies and, following the merger, one distribution market comprising the merged entity's electrical networks; and
 - a national market for the retailing of electricity to medium and large consumers.

Consideration of Relevant Natural Gas Markets

- 120 The Commission does not believe the acquisition of Egmont by Powerco raises competition concerns in the natural gas production, transmission or wholesale markets. Of these three markets, Powerco is active only in the wholesale market through its supply contract with Pacific Energy. It would continue to face strong competition from NGC and Contact in the future.
- 121 The Commission considers that the main competition issue in this case is inter-fuel competition and the degree to which the acquisition would lessen the constraint currently faced by the two companies as a result of such competition.

- 122 Accordingly, the Commission believes that the only natural gas market which requires further analysis is that where inter-fuel competition could provide a constraint on Powerco as a supplier of natural gas. That is the market for the local supply of delivered natural gas to small commercial and domestic consumers connected to Powerco's natural gas distribution network in South Taranaki.

ASSESSING COMPETITION ISSUES IN THE MARKETS

Introduction

- 123 The Commission will consider the following markets:
- prior to the merger, two local markets for the supply of delivered electricity to small consumers and, after the merger, one such market;
 - prior to the merger, two local distribution markets to medium and large consumers and, after the merger, one such market;
 - the national market for the retailing of electricity to medium and large consumers; and
 - the market for the supply of delivered natural gas to small commercial and domestic consumers connected to Powerco's South Taranaki natural gas distribution network.
- 124 These markets are addressed in turn.

Markets for the Supply of Delivered Electricity to Small Consumers

- 125 Except for the possible impact of inter-fuel competition, the acquisition is unlikely to have any other impact on the potential for the competitive supply of delivered electricity to small consumers. Currently, metering, reconciliation and other transaction costs preclude small consumers from being supplied by competing retailers "wheeling" electricity over distribution networks. Accordingly, small consumers are confined to purchasing delivered electricity from their distributor.
- 126 In this case, the Commission believes that the supply of delivered electricity from each power company to small consumers of the other power company is unlikely to be feasible in the medium term. To the extent that Powerco and Egmont are dominant in their respective electricity distribution areas for the supply of delivered electricity to small consumers, the acquisition would not result, and would not be likely to result, in any strengthening of that dominant position of the merged entity in the post-merger market.
- 127 However, to the extent that competition from delivered natural gas supplied by Powerco acts as a constraint on the behaviour of Egmont in this market, the

acquisition raises the issue of the strengthening of the dominant position of Powerco in the post-merger market. This issue is considered below under the heading “Inter-fuel Competition”.

The Electricity Distribution Markets

128 The distribution of electricity is, prima facie, a natural monopoly. This is because, in most cases, it is not economically viable to duplicate existing electricity lines due to the sunk cost associated with the existing lines and scale economies derived from the network's operation.

129 Prior to the passing of the Electricity Act 1992, power companies enjoyed an exclusive franchise within a defined geographic area. The franchise area determined the technical design of the network. With the removal of exclusive franchise areas the Commission believes that, over time and in limited circumstances, power companies may connect formerly discrete networks and undertake some technical reconfiguration within networks to improve the quality of supply.

130 However, irrespective of whether or not distribution networks can be, or are likely to be, connected post-acquisition, the Commission believes that the underlying characteristics of distributing electricity mean that distribution networks will not be duplicated except in very limited circumstances. There are very few occasions when any individual customer is able to substitute one network for another (discussed below as cross-border competition).

131 Consequently, each power company can generally be considered as having a monopoly over the distribution of electricity in the area covered by its distribution network.

132 Notwithstanding their natural monopoly characteristics, the distribution businesses of power companies are likely to face some constraints on their behaviour. Generally, these arise from:

- the ability for a customer close to the border between two distribution networks to connect to the adjacent network;
- the ability for a customer close to a Trans Power point of supply to arrange a direct line of supply;
- the Electricity (Information Disclosure) Regulations which require power companies to disclose information to assist in the monitoring of power companies and recourse to the provisions of the Act;
- potential government regulation of pricing by power companies;

- new networks (developments or sub-divisions) within the relevant distribution markets; and
- competition from other fuels.

133 Generally, mergers between power companies are, at present, likely to have only a minimal impact on a number of these constraints. The potential for large electricity consumers to connect directly to a Trans Power point of supply²², and the potential for government regulation of prices, where it is in the interest of consumers, remains.

134 However, as is the case with the acquisition, the merger of power companies with common borders requires closer examination. In such circumstances, the merger could remove or reduce the potential for cross-border competition. Additionally, the merger of power companies has the potential to lessen the effectiveness of the information disclosure regime by making yardstick comparisons more difficult to make. The effect of the acquisition on the information disclosure regime is discussed below. This report also considers the impact of the acquisition on the constraint imposed by new electrical networks. Finally, because the acquisition may result in the lessening of any constraint imposed by Powerco's natural gas and Egmont's electricity businesses on each other in the South Taranaki area, this issue is considered below under the heading "Inter-fuel Competition".

135 As noted by the High Court and endorsed by the Court of Appeal in *PNZ v Mercury*, in considering the competitive effect of a proposal, the issue is whether the merged entity would be less constrained than the participant power/natural gas companies would be without the proposed merger.

Potential for Cross-Border Competition in the Electricity Distribution Markets

136 The High Court in *PNZ v Mercury*, while agreeing with the relevant conclusions, noted that, if anything, Commission staff had taken the possibility of cross-border competition too seriously in that scenario.

137 Instead, the Court adopted the statements of counsel for Mercury and the Commission which led to two decisive points²³:

- counsel for Mercury had noted that the "circumstances of this particular 'border' are about as unpropitious for potential 'cross-border' competition as any could be"; and
- counsel for the Commission had noted that scepticism is warranted as to the reality of cross-border competition between only two adjoining

²² Staff were informed by both Lowe Walker and Kiwi that the companies were keenly aware of the potential for them to connect directly to Trans Power's Hawera substation which is located in the area of the two factories.

²³ At page 62 of its decision.

suppliers. The Court did not dismiss out of hand, the possibility of cross border competition in such circumstances, but observed that “it would need to rest on evidence rather than assumption”.

138 In adopting the *PNZ v Mercury approach*, the Commission notes the following points²⁴, in addition to those made by the High Court, which reinforce a more sceptical view of the amount of cross-border competition which is likely to occur in reality:

- during the Commission’s examination of the mergers listed in Appendix three, Commission staff found only two examples of electricity consumers near the companies’ borders who had been able to negotiate lower line charges as a result of cross-border competition²⁵ (although this case has produced another example - see below). In the same examinations, Commission staff learnt of only one actual cross-border incursion which had occurred, in the three years post-deregulation²⁶;
- the discounted cash flow return on investment approach previously used did not take into account the transaction costs necessary to obtain cross-border customers. In the Commission’s view, the costs of negotiating the necessary long term supply contracts with “over-the-border” consumers would be substantial and would reduce the ability of adjacent power companies to offer lower line charges to over the border consumers;
- previous analyses, which confirmed the potential for cross-border competition for groups of medium sized consumers, relied on an assumption that all (or a very large proportion) of the grouped consumers would change supplier. In reality, the Commission considers this is unlikely. The small savings in the total costs of a business made possible by cross-border competition²⁷ when balanced against the necessity for the consumer to sign a long term contract (with the contingent liability and resultant inflexibility as regards the location of the consumer’s plant) make a 100% “sign-up” rate improbable;
- in the Commission’s experience, commercial consumers often place more emphasis on security of supply than lower line charges. It is possible that there may be reductions in security of supply to cross-border consumers as a result of their necessary connection by spur lines rather than by being enmeshed within a network. The Commission believe reliability of supply concerns may also reduce the incentives for consumers to change from their traditional power company distributor; and

²⁴ Some of which were also made in the PNZ/Mercury staff report.

²⁵ The Ascot Park Hotel in Invercargill and Taylor Preston Ltd in Wellington.

²⁶ Whereby TrustPower Ltd constructed a short extension of its network into the former franchise area of Tauranga Electricity.

²⁷ Estimated at 0.8% of an average business’s total costs, if a 20% reduction in line charges is achieved.

- the ability of a power company to use non-standard line charges in order to gain cross-border customers is limited by the statutory requirement for the power company to disclose such non-standard line contracts. The Commission believes such disclosure could lead to price pressure on the power company from many of its customers. The power company's entire revenue base could be put at risk by the small gains obtainable from a few new cross-border customers.

139 In this case, the border between the electricity distribution networks of Powerco and Egmont runs through rural land in South Taranaki. However, there are major consumers located near the common border in the Kapuni area as follows:

- Lactose;
- Petrochem;
- NGC production station; and
- STOS production.

The first three consumers are supplied by Egmont and the last by Powerco.

140 Generally, given its sparsely populated rural nature, it is the Commission's view that the Powerco/Egmont border is much less conducive to cross-border competition than the Mercury/PNZ border. The Mercury/PNZ border was labelled by Mercury's counsel and accepted by the High Court as "unpropitious" with respect to the potential for cross-border competition.

141 Therefore detailed analysis is required only for the four large consumers in the Kapuni area.

142 As regards Lactose, [].

143 In any event, Lactose's line function services are, in late 1997, to be supplied from another competitor, namely Bay of Plenty Electricity via its direct connection between the Bay of Plenty Electricity/NGC joint venture co-generation plant, which is in turn connected directly to Trans Power's high voltage network. For these reasons the Commission considers there is no potential for cross-border competition by Powerco for Lactose's distribution business.

144 Petrochem currently co-generates the majority of its electricity requirements. In addition, the waste heat from Petrochem's fertiliser production process along with its [] natural gas price give Petrochem the potential to generate enough electricity to make Petrochem more than self sufficient in electricity. Given first, that Petrochem is able to produce such on-site electricity [] and secondly, the distance from Powerco's nearest point of supply at Kaponga substation, the Commission considers that there is no potential for cross-border

competition by Powerco for the Petrochem's distribution business. In addition there is the potential for Bay of Plenty Electricity to supply Petrochem with line function services via its new high voltage connection with Trans Power's network²⁸.

- 145 NGC's Kapuni production station intends to provide its own electricity, generated on site as part of its joint venture arrangements with Bay of Plenty Electricity Ltd and will receive line function services from Bay of Plenty Electricity's new direct connection with Trans Power's network. For this reason and the reasons given in the above paragraph the Commission considers that there is no potential for cross-border competition by Powerco for NGC's Kapuni production station distribution business.
- 146 Finally, STOS's production station at Kapuni is not part of the joint venture arrangements between NGC and Bay of Plenty Electricity. It is supplied with electricity distribution services by Powerco. Egmont has a major substation only a few yards from STOS's production station. This has allowed STOS to negotiate a [] price reduction for its distribution services from Powerco and this cross-border competition would be lost if the merger proceeds.
- 147 The analysis undertaken by the Commission, with the assistance of the power and natural gas companies concerned, indicates that of Powerco's consumers, only STOS is potentially in a position to take advantage of cross-border competition to negotiate more favourable terms and conditions. Lost line competition could be around [] of Powerco's total line revenue or [] % of post-merger (Powerco and Egmont) line revenue. However, STOS is also negotiating with Bay of Plenty Electricity to connect to its high voltage direct connection to Trans Power and there is the potential for this competition to replace that lost as a result of the acquisition with no resulting increase in electricity prices to STOS.
- 148 Therefore, the Commission concludes that the loss of this cross-border competition would not result in the removal of any significant constraints on the merged entity and as such there would be minimal, if any, loss of cross-border competition and no strengthening of dominance in the post-merger distribution market.

Potential for Direct Connection to Trans Power Ltd

- 149 The potential for the direct connection of large consumers to Trans Power substations is a constraint on power companies which is, however, limited to the situation where a large consumer is located sufficiently close to a Trans Power substation for connection costs not to be vast.

²⁸ Although Petrochem staff said that no negotiations were currently taking place.

- 150 The Commission has learnt of several instances where power company pricing has been constrained by the potential for such direct connection.²⁹ In this case there is the potential for this to occur with respect to Lowe Walker and Kiwi. Kiwi has already leased a distribution line connecting its works to Trans Power's Hawera substation and is planning on building its own line in the near future. It is possible for any party with the technical expertise and financial resources to undertake such reticulation projects. Staff at both Lowe Walker and Kiwi believed there was the potential for such work to be done in-house if necessary.
- 151 However, the Commission notes that in *PNZ v Mercury*, the High Court thought it was right to conclude that the ability of large customers (or perhaps groups of medium sized customers) to connect directly with Trans Power was unaffected by the proposal.
- 152 The Commission is not aware of any facts which would alter that conclusion in respect of the acquisition.

Potential for Yardstick Comparisons

- 153 The Electricity (Information Disclosure) Regulations 1994 provide for the disclosure of information intended to reveal anti-competitive behaviour, excessive rates of return, line and other charges and inefficient investment or performance.
- 154 The information disclosure regime is intended, in part, to facilitate yardstick comparisons of power companies' activities. Comparisons between similar power companies provide benchmarks against which a power company's activities can be measured. However, the Commission notes that it may be difficult to make meaningful comparisons between power companies. The regulations allow a degree of interpretation by each power company in defining what makes up each business and how costs and assets should be allocated between the line and energy (or other) businesses of the power company. Additionally, making inter-company comparisons is likely to be made more difficult by the different size, customer mix, and geography of the power companies.
- 155 In *PNZ v Mercury*, the Court considered it unnecessary to consider the extent to which the information disclosure regime provides a constraint on power companies. The Court concluded that the decisive point was that the elimination of PNZ would have very little effect upon the availability of comparative material, both within New Zealand and internationally.
- 156 The Commission has considered the information disclosed to date and believes that, to the extent that valid comparisons can be made, the acquisition will have little effect on the availability of comparative material, both within New Zealand and internationally.

²⁹ For example Alliance Ltd's Lorneville freezing works in Southland and the Ford Motor Company works in South Auckland.

New Networks - Operation

- 157 The regulatory reforms outlined above, *inter alia*, removed exclusive franchise areas for power companies. The ownership and operation of the network in any particular area need no longer be undertaken by the incumbent distributor. In limited circumstances, line extensions from the core network have been owned in the past by private parties. For example, consumers have owned lines in rural areas and port companies and airports have owned and operated their own reticulation. However, it is now possible for network assets, such as substations and other reticulation in new subdivisions, to be owned by parties other than the incumbent distributor.
- 158 It is not necessary to obtain Electricity Operator status, in terms of the Electricity Act 1992, to operate a network. However, Electricity Operator status provides rights of access to land to complete works started prior to the reforms, access to the road reserve and access to railway crossings. Such access can be negotiated independently with the appropriate authority, without Electricity Operator status. However, it is likely to be necessary for the new network owner to provide some surety to the developer and local authority of its substance and longevity as a network operator. The Commission notes there are a number of power companies and contracting businesses with the requisite expertise to build and maintain network assets.
- 159 While each subdivision is site specific, there appears to be no reason why ownership of the networks should be geographically limited to the incumbent or neighbouring power companies. It is likely that a local presence is necessary to operate the network. However, the Commission believes that the actual ongoing maintenance and operation of the network can be undertaken by local subcontractors. At this stage, Mercury, Bay of Plenty Electricity, Tauranga Electricity Ltd, TrustPower Ltd and CitiPower Ltd own network assets outside their established network areas.
- 160 In *PNZ v Mercury*, the High Court noted that the operation of new networks in the Auckland region was not confined to Mercury and PNZ and that the proposal would have little effect on the constraint imposed by new networks. Similarly, in this case, the operation of new networks in the Taranaki region would not be confined to Powerco and Egmont, and the acquisition would have little effect on this factor.
- 161 Competitive ownership and operation of new network assets is relatively new and it is difficult to fully determine how such competition will constrain the incumbent distributor. However, to the extent that competitive ownership of new networks constrains the incumbent distributor, the acquisition is unlikely to lessen that constraint. Neither Powerco nor Egmont have been active in reticulating subdivisions connected to each other's networks. In addition, there are a number of other potential network owners and operators, including property owners themselves, who are able to own and operate electrical reticulation, and finally there are only limited new sub-divisions in the Powerco and Egmont electrical

network regions (between [] new sections connected per annum in the Powerco area and about [] new sections connected per annum in the Egmont network).

- 162 Accordingly, the Commission believes that any constraint imposed by new electrical networks is likely to be limited in this case and unlikely to be lessened by the acquisition.

Conclusion on the Distribution Markets

- 163 When it takes account of the analysis and conclusions in paragraphs 128 to 162, the Commission concludes that, with the possible exception of the impact of inter-fuel competition, the acquisition will not lessen the constraints imposed on the merged entity in the post-merger electricity distribution market relative to those currently imposed on Powerco and Egmont in the distribution markets. The impact of the acquisition on inter-fuel competition in the distribution markets is discussed below under the heading “Inter-fuel Competition”.

National Electricity Retail Market

- 164 The deregulation of the electricity industry resulted in, amongst other changes, the removal of statutory franchise areas for power companies. Consumers of electricity may, therefore, be supplied by a party other than the incumbent power company.
- 165 As noted above, the Commission believes that metering and reconciliation costs presently preclude small consumers from being supplied by competing retailers. Such consumers are, therefore, confined to purchasing electricity from the incumbent retailer. However, metering and reconciliation costs form a relatively small part of the costs of supply to medium and large consumers and, generally, those consumers are believed to be able to use the services of competing retailers. The division between medium and large consumers for whom the competitive retail supply of electricity is possible and the others has been taken by the Commission to lie within the 0.1 GWh (medium sized school) to 0.5 GWh (fast food outlet or department store) per annum consumption range
- 166 At the conference, Todd made submissions relating to detriments arising from the acquisition, as a result of the effect of potential price rises on South Taranaki dairy farmers. The Commission notes that dairy farmers’ annual consumption may range from 0.1 to 0.3 gigawatt-hours per annum. However, the Commission does not know of any dairy farming operation which is supplied with electricity by other than the incumbent retailer and (in spite of the consumption range for the lower end of the national retail market) believes that South Taranaki dairy farmers presently lie firmly within the delivered electricity market. The potential transaction costs involved in servicing such a diverse consumer group probably precludes these customers from the national electricity market.

- 167 There are a number of power companies actively seeking retail customers outside traditional network areas. In January 1997, the National Reconciliation Manager³⁰ reported that 16 independent retailers use its services for the reconciliation of off-network sales. Mercury, PNZ, Mainpower Ltd, King Country Energy Ltd, TrustPower Ltd, Southpower Ltd and others are all known to have electricity customers, other than those connected to their own networks.
- 168 In *PNZ v Mercury*, the High Court noted “the dynamic contribution that is being made by the off-network retailers (the “wheeling” retailers). The power companies are themselves directly involved in making forays into rival territories; and they are also indirectly involved in participating in joint trading ventures. There has been a remarkable growth in wheeling activity, as earlier described. The percentage of wheeled supply to the total supply of electricity to commercial and industrial users (excluding ECNZ’s direct supply customers) on the most recent figures (July 1995) amounts to 13%”³¹.
- 169 Further, the Commission believes that there is the potential over time for non-electricity industry players to operate as retailers of electricity. Generally, entry conditions relate to:
- agreements to access distributors’ networks;
 - access to the wholesale electricity market;
 - industry knowledge and technical expertise;
 - commercial credibility with customers; and
 - the cost of time-of-use metering.

Agreements to Access Distributors’ Networks

- 170 In order to retail electricity, it is necessary to negotiate access to the relevant distribution network. Obtaining such access to some networks has, and continues to be difficult.
- 171 Although a number of electricity retailers have off-network customers and the volume of off-network sales is significant (129.4 gigawatt-hours in January 1997), there appears to be a levelling off of the increase in off-network sales by independent retailers. However, the Commission is investigating, in terms of Part II of the Act, allegations that access to particular networks is being delayed or hindered.
- 172 In *PNZ v Mercury*, the High Court noted that “the most significant barrier to entry in retailing lies in the ‘access problem’”. The Court concluded, however, that “while complaints have been made to the Commission, access to distribution has not been an impediment to the development of the wheeling function”. As noted above, 13% of the retail supply of electricity to commercial and industrial

³⁰ The Trans Power employee responsible for reconciling to generators the amount of electricity sold by competing retailers.

³¹ A similar figure was evident in January 1997.

users in New Zealand (excluding ECNZ direct supply customers) is “wheeled” over distribution networks.

Access to Wholesale Electricity Market

- 173 In this regard, the High Court noted that the “very development of the wholesale market will facilitate entry by independent traders and give a fillip to competition in the retail market”. The recently formed New Zealand Electricity Market (NZEM), with its wholesale electricity pool, is playing an important role in this respect. Firms wishing to trade in NZEM must meet high prudential requirements and face transaction costs, and this has meant that some players, who would otherwise wish to participate, have been excluded (or forced to operate through buying groups). The Commission notes, however, that the wholesale market is wider than NZEM, and that those excluded from NZEM are not necessarily prevented from operating at the wholesale level.

Industry Knowledge and Technical Expertise

- 174 The Commission notes that there is a significant body of industry knowledge and technical expertise both within power companies and outside existing power companies in a multitude of consultants and major consumers. The Commission believes that the requisite industry knowledge and technical expertise for entering the industry can be developed or acquired over time.
- 175 As noted by the High Court in *PNZ v Mercury*, the emergence of a competitive wholesale electricity market suggests that retailers will need to acquire or develop appropriate risk management skills and industry knowledge in order to trade in electricity. However, as the Court noted, these considerations point not so much to the existence of barriers to entry, as to the identity of those who may profitably enter. For example, in referring to the advantageous purchase terms secured by Mercury in recent years, the Court interpreted that fact as “demonstrative of Mercury’s skills and competitive capacity, not its market power.”

Commercial Credibility with Customers

- 176 In the short term, customers may stay with established power companies until they are more familiar with their ability to trade-off incumbent and new entrant retailers. To the extent that consumers are influenced by the features discussed above, new entrants may have to invest in marketing and advertising to become acceptable to some customers.
- 177 The Commission notes that there is little to suggest that branding or the development of commercial credibility is yet a significant factor in the electricity industry. For example:
- while customers may distinguish between retailers largely on the basis of price, they may also distinguish between distributors on the basis of security of supply;

- since the reforms were undertaken, almost all power companies have changed their name distancing the power company from historic supply authority associations; and
- the independent retailers associated with existing power companies have not considered it necessary to associate the name of the retailing arm with that of the parent power company(IES) (NETCO - Capital Power, Energy Brokers, Pacific Energy and United).

The Cost of Time-of-Use Metering

178 At this stage, access to suitable meters does not appear to have been a significant issue for new entrant retailers. However, the cost of time-of-use meters is high and prevents the competitive supply of electricity to small consumers.

Conclusion on the National Electricity Retail Market

179 As noted above, there are a number of retailers actively seeking sales in the national retail market. The situation appears very dynamic with retailers entering and leaving the market. The level of competition in the market is reflected in the small retail margins currently available. This has meant that some of the less efficient retailers have had to leave the market.

180 The Commission notes that there is no published data available which shows market shares of participants in the national retail market. However, *The New Zealand Electricity Sector, 1996-1997*³² provides details of the volumes of sales by power companies to industrial and commercial consumers. The Commission considers that those sales closely approximate sales in the national retail market.

181 The Commission's analysis of these figures shows that the sales volume attributable to the merged entity is 4% of total sales volumes to the commercial and industrial sector.

182 Given the dynamic nature of the national retail market and the limited extent of any aggregation from the acquisition, the Commission concludes that the acquisition will have no significant effect in the market for electricity retailing to medium and large consumers and would not result, and would not be likely to result, in the acquisition of a dominant position by the merged entity in the national retail market.

³² Published by ANZ Securities (NZ) Ltd.

Market for the Supply of Delivered Natural Gas to Small Commercial and Domestic Consumers Connected to the Natural Gas Distribution Network of Powerco in South Taranaki

183 The Commission notes that it concluded in the Enerco/Capital Power Draft Determination that natural gas distributors and retailers (and in particular Enerco) are likely to be dominant in their existing supply areas. As with electricity retailing, it is likely that natural gas supply will become more contestable over time as natural gas contractual and network access issues are addressed. However, the Commission believes, for the following reasons, that the supplier of delivered natural gas to small consumers has substantial market power:

- In most cases, it is not economically viable to duplicate existing pipes due to the sunk costs associated with the existing pipes and scale economies derived from the operation of a natural gas network. Consequently, suppliers of delivered natural gas to small consumers are unlikely to be constrained by direct competition or by the likelihood of significant new entry.
- NGC's market power in the natural gas wholesaling market and the relative lack of alternative suppliers of natural gas³³;
- the slow development of effective open access to the natural gas distribution networks of the natural gas companies;
- the existence of long term contracts tying large users to existing retailers; and
- the view of some retailers that their supply contracts with NGC prevents them from supplying consumers outside their former franchise areas³⁴.

184 However, suppliers of natural gas to small consumers are likely to face some constraints on their behaviour. These arise from the following factors:

- from potential cross border natural gas network competition bypassing the incumbent's natural gas network. However, the Commission does not know of any examples where this has occurred in the two years since deregulation made it possible. This is probably because, unlike electricity distribution networks, natural gas distribution networks do not generally abut one another. This effect in the Taranaki area can be seen on the map in Appendix one. The other possibility of by-pass directly from a NGC

³³ Other than in special situations such as that when Powerco lost a large part of its natural gas sales to Kiwi as a result of competition from the KMCs. This left Powerco with surplus natural gas and the ability to sell this to other parties such as Affco Ltd and Pacific Energy.

³⁴ NGC is in the process of negotiating new wholesale natural gas supply contracts with its utility customers. In the interim, NGC claims to have waived the exclusivity provisions in the current contracts.

transmission pipeline to a consumer³⁵ appears to the Commission only to constrain natural gas suppliers in respect of large users situated close to a natural gas transmission line;

- the proposed natural gas information disclosure requirements, which will provide public information to allow yardstick comparisons of the distribution charges and gross margins of each tariff category of each natural gas company in New Zealand. It is still uncertain when the natural gas information disclosure regulations will take effect;
- potential government regulation of unreasonable pricing by power companies; and
- competition from other fuels.

185 The Commission is of the view that while Egmont and Powerco are respectively dominant in the local markets for the supply of electricity and natural gas to small consumers, there is the potential for the market power of Powerco and Egmont to be constrained by inter-fuel competition in South Taranaki³⁶ in those areas where Powerco supplies natural gas to consumers connected to the electrical network of Egmont. This matter is dealt with in the following section of this report.

INTER-FUEL COMPETITION

Introduction

186 In the Draft Determination, the Commission expressed its view that competition between electricity and natural gas provides some constraint on market power. When considering inter-fuel competition, the Commission believed it was necessary to recognise that:

- applications in which electricity and natural gas are particularly substitutable include water heating and space heating;
- applications in which electricity and natural gas are not substitutable include motive power, electronic equipment and the provision of bulk industrial drying or heating;
- in many instances, energy consumers have a choice of fuel only within the limited time frames during which decisions about the replacement of domestic appliances or industrial energy using equipment are being made. However, consumers may be protected against the use of market power

³⁵ [Something of this type occurred when Powerco arranged to supply Affco Ltd's Imlay works near Wanganui. Access to Wanganui Gas's supply pipe was negotiated at the discounted cost of a new pipeline].

³⁶ The relevant areas are shown on the map contained in Powerco's application for authorisation and are Hawera, Normanby Okaiawa and Manaia.

by an energy utility at other times by competition for new customers, or by long term supply contracts;

- electricity is essential fuel for some applications. Consequently, all energy consumers are required to meet the fixed costs of electricity supply. Therefore, consumers considering switching to natural gas for part of their energy requirements are likely to compare the total costs of natural gas with the variable cost of electricity;
- where power companies have a variable or partly variable line charge, inter-fuel competition impacts on both distribution and retail markets.

Examination of Inter-fuel Competition Issues

187 In examining the inter-fuel competition issues, the Commission has considered the nature of natural gas and electricity supply in the South Taranaki region. In addition to the industry participants listed above, Commission staff have spoken to a number of other industry participants, particularly on the issue of inter-fuel competition between electricity and natural gas. In particular, NGC, Enerco, ECNZ, Todd, the Electricity Distribution Association, Yarrow's Bakery Ltd and the Taranaki District Council have provided Commission staff with information during the course of the examination of last year's proposed acquisition and this acquisition.

Potentially Affected Consumers

188 The consumers potentially affected by any diminution of inter-fuel competition resulting from the acquisition are those who have the potential to connect both to the Powerco natural gas reticulation system and to the Egmont electricity distribution network.

189 Powerco distributes and retails natural gas to 3,500 domestic and commercial connections in South Taranaki. Within the area of Powerco's South Taranaki natural gas reticulation network, there are about 4,000 domestic and commercial electricity connections to Egmont's electricity network.

Other Natural Gas Suppliers in the Region

190 NGC also distributes and retails natural gas to consumers in the towns of North and South Taranaki, excluding those areas supplied with natural gas by Powerco. NGC therefore supplies natural gas to consumers in the region who are connected to the electrical networks of both Powerco and Egmont.

191 Wanganui Gas distributes and retails natural gas to consumers in the Wanganui and Rangitikei regions. That is Wanganui Gas supplies natural gas to consumers who are connected to the electrical network of Powerco.

Powerco's Arguments Regarding Inter-fuel Competition

- 192 Powerco notes, in its application, that while the Commission formed the preliminary conclusion in its Draft Determination of the Enerco/Capital Power case that inter-fuel competition provides some constraint on market power, it believes there are significant differences between the Enerco/Capital Power case and the acquisition. The key differences which Powerco notes are:
- Powerco distributes and retails natural gas in only part of the Egmont area whereas Enerco distributed and retailed over the whole of the area of Capital Power's electrical network. In this case NGC is also active as a natural gas supplier in the Egmont area supplying about 30% of the natural gas supplied to domestic and small commercial consumers connected to Egmont's network;
 - the penetration of natural gas in Powerco's South Taranaki natural gas supply area is the highest in New Zealand. That is, more than 90% of consumers whose properties front onto Powerco's natural gas mains are connected to those mains. Powerco argues that most of the competition between electricity and natural gas occurs when consumers make fuel switching decisions, and that the high penetration described above implies that almost all of that kind of competition has occurred in the past. Almost all consumers who are likely to switch from electricity to natural gas have already done so and therefore the acquisition will not affect inter-fuel competition in the future; and
 - Egmont is a largely rural area. Accordingly, in contrast to the former Capital Power, only 58% of Egmont Electricity's domestic customers have access to natural gas as an alternative fuel.
- 193 In its application, Powerco concludes that, to the extent that natural gas imposes any constraint on electricity, that constraint will remain after the acquisition. Powerco notes NGC will continue to supply consumers in the Egmont area and, after any merger, Powerco would be unable to adopt differential electricity pricing in the Taranaki area between those areas where it supplied electricity to consumers connected to its own natural gas network, those areas where it supplied electricity to consumers connected to the natural gas networks of either Wanganui Gas or NGC and those areas where natural gas was not reticulated at all.
- 194 Powerco believes it would be unable to differentially price in those three situations due to the administrative costs and potential consumer resistance which would arise. While Powerco currently has different electricity prices for each of the three electricity networks it operates, as a result of historically different cost and price structures, Powerco says its intention is to eventually standardise electricity prices to consumers connected to each of its networks.

195 In this respect, Powerco provided evidence as follows:

- it has carried out such standardisation of prices between its North and South Taranaki natural gas networks where natural gas pricing is identical and this required large price rises in South Taranaki where it faces such competition from electricity as exists; and
- it does not, for example, differentially price electricity supplied to those consumers in Waitara where Powerco also supplies natural gas and those in Inglewood where NGC supplies natural gas. Nor does it price natural gas differentially between North Taranaki where it supplies electricity and South Taranaki where Egmont supplies electricity.

196 Powerco further argued:

- that there is a lack of evidence of any substitution of one fuel for another in response to price movements. Powerco claims there was no movement of Powerco's South Taranaki natural gas customers to electricity when faced with a 35% increase in natural gas prices in October 1994;
- it never considers inter-fuel competition when it sets either natural gas or electricity prices. All it considers is the need to obtain a return on its investment equal to its weighted average cost of capital. This requires gradual price increases for both fuels it supplies. Powerco provided internal board reports which appear to show that its natural gas and electricity pricing decisions are not influenced by the price of the alternative fuel. Independently, Egmont and Wanganui Gas tended to support that view in respect to their own pricing decisions;
- while it does promote conversion to natural gas as a fuel, it does so only in the interests of maximising the use of its natural gas and electricity assets. While domestic consumers do convert from electricity to natural gas, they do so only because of the pleasant and convenient nature of natural gas as a fuel and in many cases there were very long payback periods for the consumer concerned; and
- there is too great a price difference between electricity and natural gas for one ever to constrain the other.

197 Consequently, Powerco believes that the continued presence of Wanganui Gas and NGC in the area of its existing and future (if the acquisition proceeds) electrical networks and Powerco's inability to price electricity differentially depending on the presence or otherwise of natural gas, will ensure that such limited constraints as may be exerted by natural gas on electricity remain after the acquisition.

198 In its written and oral submissions on the Draft Determination, Powerco additionally argued that there were no inter-fuel constraints because:

- although there have been isolated examples of similar pricing between electricity and natural gas, the evidence does not point to price interaction over time leading to demand responsiveness. While there has been a significant rise in the price of electricity to small consumers as a result of tariff rebalancing, this has not been accompanied by a move of such consumers' energy load from electricity to natural gas;
- in South Taranaki, little scope remains for further natural gas conversions. There is a static population base. The suppliers are monopolists and are not required to be market share driven.
- there were only a limited number of applications where electricity and natural gas were substitutable;
- power companies were unable to increase fixed charges in order to compete with natural gas because of the Information Disclosure legislative regime;
- any inter-fuel constraints are de minimis because inter-fuel competition applies only to 3,500 of the 84,500 connections in the Powerco and Egmont areas;
- as a result of the formation of the NZEM, any previously existing competition between electricity and natural gas for domestic hot water heating and night store heating as a result of low night time electricity prices has disappeared along with night to day price differentials;
- the ABARE study referred to below is based on Australian conditions and does not apply to New Zealand. It should not be accepted simply because there is nothing better available;
- given the increase in domestic electricity prices as a result of the tariff rebalancing which has occurred in recent years, the fact that there has been no move of electricity demand to natural gas indicates that there is no competition between the two fuels;
- the very high uptake of natural gas connections by consumers in South Taranaki is due not to very low natural gas prices but first the high profile natural gas has with the populace of the South Taranaki region and secondly because consumers were subsidised into natural gas conversions by interest free loans from the Government; and

- there has been an absence of advertising which made comparisons between electricity and natural gas in recent years and that which has occurred has been advertising of either appliances or energy efficiency services.

Measuring the Degree of Inter-fuel Competition

199 The Commission has recognised that great assistance would be provided by reliable cross-elasticity information as an aid to the assessment of the degree of inter-fuel competition. Although considerable effort was spent by the Commission and the parties to the NGC/Enerco proposal (Decision 270) to find reliable cross elasticity information, such was not forthcoming. While noting the difficulty in finding reliable cross-elasticity information, the Commission concluded that the econometric studies indicate that there is some degree of substitutability. The Commission is aware of a June 1996 study by the Australian Bureau of Agricultural and Resource Economics (ABARE) which, under in a study of price elasticities of Australian energy demand found³⁷

“for the residential market, a key feature is the relatively high responsiveness of natural gas demand to changes in electricity prices (estimated elasticity of 0.83). If electricity prices fall, residential consumers are quite willing to substitute out of gas. In contrast, they are less willing or able to reduce their consumption of electricity if natural gas prices fall (estimated elasticity of 0.15). This is most likely the result of the relatively limited substitution possibilities - that is, there are some applications for which electricity will continue to be used even if gas prices fall.”

200 The Commission believes this study tends to confirm (albeit under Australian economic, fuel price, climatic and social conditions) the views of the Commission as expressed in the Enerco/Capital Power Draft Determination.

201 Powerco suggested:

- that Australian energy markets are heavily influenced by seasonal air conditioning loads;
- that during the period of the ABARE study Australian electricity generating companies were manipulating the market price; and
- because of these factors the ABARE study was not applicable to New Zealand.

202 The Commission considers, however, that the ABARE study tends to support what it would intuitively expect in respect of the influence changes in natural gas and electricity prices have on the demand for the other fuel under New Zealand conditions. There may be different supply and demand side characteristics in the Australian energy markets to those of New Zealand and such differences may result in disparities between the exact cross-elasticity figures determined by the

³⁷ At page 10.

ABARE study and those which would apply in South Taranaki. However, the Commission takes from the study the important fact that suppliers of natural gas and electricity in Australia can expect a measurable consumer response to price changes in the two fuels. There is enough similarity between the societies and economies of Australia and New Zealand for the Commission to deduce from the ABARE study that there is likely to be a similar but not exact relationship between the price and demand for natural gas and electricity in Victoria and in South Taranaki. In the event, none of the parties were able to point to more accurate elasticity estimates.

203 Other information which has been of assistance in determining the degree of inter-fuel competition is:

- details of changes in price and demand in the South Taranaki region, the reasons for those changes and the extent to which those are likely to reflect long term patterns; and
- evidence of expert opinions or internal reports prepared by the participants relating to pricing decisions.

Inter-fuel Constraints on Natural Gas

204 The Commission sought comment from other industry participants. NGC believes that it is constrained in its natural gas business by competition from electricity. While NGC predominantly markets natural gas to domestic consumers on the basis of “lifestyle” advantages, it believes it is necessary to maintain a margin between the prices of electricity and natural gas in order to encourage new natural gas connections. However, the Commission notes that NGC’s retail prices to some consumers have increased significantly in recent years (for example NGC posted a 10% price rise for its Taranaki domestic consumers on 1 December 1996).

205 There is some evidence of non-price competitive activity from natural gas. Powerco, NGC and Wanganui Gas all described promotions they had recently undertaken to overcome the capital and installation cost of a conversion from electricity to natural gas³⁸. For example, NGC offers a finance package and Enerco contributes to the cost of new appliances in return for a higher natural gas price over several years. Wanganui Gas is currently offering consumers a natural gas water heater for 99 cents per day with a 29% reduction from the standard tariff without any fixed line charge element. Powerco has recently offered, as a promotion in South Taranaki only, discounted³⁹ natural gas water heaters to customers without existing natural gas water heaters. Further, natural gas suppliers generally offer residential tariff structures which encourage consumers to acquire additional natural gas appliances to increase volume sales.

³⁸ Including the cost of appliances which are generally significantly above the price of an equivalent electrical device and the cost of natural gas piping from street mains to house and within the house.

³⁹ To 65% of the original price.

- 206 Overall, there is evidence to suggest that price is a factor when consumers consider whether to use electricity or natural gas. The South Taranaki region has had a very high proportion of consumers connected to natural gas. Of consumers able to connect to the natural gas reticulation in South Taranaki, 90% have done so. The Hawera Gas Company historically had very low natural gas prices.
- 207 Factors, other than historically low prices, which Powerco suggested, may have led to the high uptake of natural gas in South Taranaki and the Commission's views on those factors are::
- South Taranaki has been reticulated for many years. However, parts of Hamilton have also been continuously reticulated (initially with coal gas) for over 100 years, and the penetration rate for that area is only about 60%⁴⁰;
 - natural gas had a high public profile in the area. However, the same argument should equally apply to North Taranaki where media interest in energy matters is similar to that in South Taranaki and where, as for South Taranaki, natural gas production, transmission and distribution makes a significant contribution to the region's economy. However, the same high uptake of natural gas in, for example, New Plymouth does not appear to be present; and
 - The Hawera Gas Company and local consumers received Government subsidies to encourage natural gas consumption. However, in the Commission's view this argument merely reflects the fact that for one reason or another, the price of natural gas in South Taranaki was historically very low.
- 208 NGC also has a relatively high natural gas penetration rate in the Taranaki region. NGC notes there are a number of factors which may influence the degree of penetration in the region, for example, the relatively low costs of transmission and distribution in Taranaki, along with climatic conditions and local preferences.
- 209 NGC also notes that natural gas sales to domestic consumers may be influenced by electricity company tariff structures. In Eltham, for example, there is a high penetration rate of natural gas connections, but a relatively low incidence of natural gas hot water heater use. NGC attributes this to the relatively aggressive tariff structure of Powerco (former Taranaki Electric Power Board zone) which has a favourable water heating tariff.
- 210 While there are a number of variables present, it is the Commission's conclusion that a low natural gas price has influenced the high degree to which natural gas has been taken up by consumers in South Taranaki.

⁴⁰ NGC noted it is extremely difficult for it to obtain a greater penetration rate than 60% by consumers converting to natural gas in established urban areas. This applies to each of its gas supply areas in the rest of the North Island.

- 211 Further, although there are only 300 consumers (Powerco's estimate) who have the potential and who have yet to convert to natural gas in South Taranaki, in the Commission's view competitive opportunities remain. While a significant number of consumers are committed to consuming natural gas, that commitment remains only for the life of the appliances and, to the extent that there is inter-fuel competition, the competition will be apparent at the time that natural gas equipment is replaced.
- 212 Additionally, competition for new connections is not the sole manner in which competitive conduct can occur. For example, there may be competition for a customer's incremental load as not all consumers have natural gas space heating combined with natural gas water heating and natural gas cooking. Evidence from Powerco and Wanganui Gas suggests that natural gas suppliers and power companies are able to compete for a customer's incremental load through tariff options and by providing subsidies on the purchase price of appliances.
- 213 At the industrial level, Commission staff have interviewed a number of large natural gas users. For large natural gas consumers a number of other factors come into play which suggest the acquisition will have limited competitive effect. Generally, very large customers either have other alternative fuels available⁴¹ or have the option of direct connection to NGC's natural gas transmission pipelines⁴². These factors appear to place a greater constraint on Powerco's South Taranaki natural gas business than competition from electricity. Alternatively, electricity is not a viable fuel for their industrial processes and conversion between the two fuels is not practically possible.
- 214 One instance of inter-fuel competition which Commission staff investigated was that for the energy supply to the Hawera Aquatic Centre. The Commission understands that, the heating of swimming pools is often provided for by coal or natural gas fired boilers or natural gas fired co-generation plants. However, the South Taranaki District Council reports that competition between electrical and natural gas heating for the centre occurred and the work was ultimately won by Egmont (with heat pump technology) over Powerco's natural gas tender. The choice was predominantly on the basis of price and the Council's ownership of both the Aquatic Centre and Egmont was not a factor.

Summary - Inter-fuel Constraints on Natural Gas

- 215 The above material has led the Commission to the view that:
- electricity places a constraint on the activities of natural gas companies;
 - this constraint applies to both the energy and distribution business of natural gas companies;

⁴¹ Lowe Walker informed staff it may convert from natural gas to coal firing of its boilers.

⁴² Kiwi and Lowe Walker both informed staff this option was open to the two companies.

- the degree of that constraint varies by application. The Commission believes that the acquisition will have only minimal competitive impact on the supply of natural gas to large industrial users. For large industrial users, this is based on the degree of possible substitution with electricity, proximity to the natural gas transmission system and the viability of other fuels such as coal. However, for domestic and commercial users where, generally, electricity is a viable alternative for natural gas applications, the situation is less clear; and therefore
- on balance, the Commission believes electricity is likely to provide a constraint on the supply of natural gas to domestic and commercial consumers.

Inter-fuel Constraints on Electricity

- 216 In the electricity industry there has been a focus on tariff reforms, generally to remove cross subsidies and achieve required returns. It is a common perception in the industry that the Government (and Commission) are prepared to allow power companies to make a profit on assets employed (valued at ODV) based on their cost of capital. Accordingly, power companies appear to be moving to that level of return. Powerco and Egmont have informed the Commission that they are doing just that. Powerco has informed the Commission that once its revenue is such that it receives a return equal to its weighted average cost of capital, real price increases for its services will cease.
- 217 Again there is little pricing and demand information which would be of assistance to the Commission. In Enerco/Capital Power, the Commission noted that the benchmark for natural gas competition is the variable element in the delivered price of electricity. This is because there are some applications for which there is no substitute to electricity. This would suggest, in the absence of other constraints on tariff structures (such as resistance to fixed charges), that power companies are able to structure tariffs in way which protects their revenues irrespective of potential competition from natural gas. The Commission has received complaints from natural gas suppliers that power companies have implemented tariff structures which target natural gas consumers by, for example, setting a higher unit charge for residential users without electric hot water heaters.
- 218 Mr M Reid, of the Electricity Development Association (EDA) has informed Commission staff that the electricity industry has been slow to respond to competition from natural gas. He believes this may be, in part, due to power companies focusing on structural/ownership issues rather than considering marketing issues. Power companies without natural gas interests are reported to be taking more of an interest in the issue. At the residential level, Mr Reid noted that the loss of load to natural gas can be significant. This is because of the extended period for which the customer is committed to natural gas, the proportion of the load (a typical residential consumer uses about 40% of energy for water heating and 40% for space heating), and the type of load lost. In

particular, he noted that natural gas tends to target water heating which can be used by power companies to control load. The Chief Executive of WEL Energy Group confirmed these statements⁴³ from the perspective of the day to day operations of a large power company competing with natural gas (see below).

- 219 A number of factors determine what response power companies can take to electricity. For example, Mr Reid noted that the EDA had undertaken some work for Egmont. However, no project implementation was possible due to the historically very low prices of natural gas in Hawera. Egmont notes that it has not attempted to target natural gas in the past due to the low price of natural gas. However, recent increases in the price of natural gas has resulted in Egmont intending to address the issue again. In the past, Egmont has participated in comparative advertising and has provided reports to the Commission addressing the marketing issues involved.
- 220 ECNZ believes there little evidence of inter-fuel competition, and electricity prices have been driven by other factors rather than the intensity of inter-fuel competition. However, ECNZ has provided market related information to its customers which attempts to assess and quantify the threat imposed by competing fuels. ECNZ was involved in the comparative advertising campaign mentioned above.
- 221 WEL Energy Group takes account of the price of natural gas when making electricity pricing decisions and believes natural gas is the main constraint it has on its activities. This is particularly so in the case of the vigorous new subdivision activity in the Hamilton region where the 100% reticulation of new subdivisions by NGC is limiting WEL Energy Group's growth. []

Summary -Inter-fuel Constraints on Electricity

- 222 The above material has led the Commission to the view that:
- natural gas places some constraint on power company activities;
 - such constraint is less than the constraint that electricity places on the activities of natural gas companies; and
 - there is minimal constraint on the distribution business of power companies.

⁴³ This information was obtained after the release of the Draft Determination and during the Commission's examination of the Mercury/Utilicorp application for clearance to acquire Power New Zealand.

Assessment of Inter-fuel Competition Issues

- 223 Powerco has argued that it cannot, and will not, adopt differential pricing to consumers connected to Egmont's network if the acquisition proceeds. It says that this could not happen because of the potential for consumer resistance. It argues that, because of this, it cannot increase electricity prices to those of Egmont's consumers who do not have access to natural gas reticulation.
- 224 The Commission agrees that the administrative costs may make it difficult for power companies to target differential prices to a low level. However, in general, the Commission believes that power companies can and do adopt differential prices targeted at the geographic location or intended electricity usage of the customer. Powerco itself operates different prices for each of its three electricity networks, and has several tariff options based on supply conditions (ie interruptible, space heating, night rate) or customer group (residential, community services, farming or commercial). In this case, the significant number of consumers affected by the acquisition and their geographical grouping suggests that maintaining price differentials in response to varying levels of competitive constraints is possible. For example, given the absence of natural gas reticulation in South Taranaki's rural areas, it would be quite possible for Powerco, should the acquisition proceed, to increase electricity prices to consumers in those areas under the guise of a cost-based price increase to those consumers on the farming tariffs.
- 225 Accordingly, the Commission believes that Powerco and Egmont are able, if necessary, to price in response to varying competitive conditions. To the extent that a significant group of consumers enjoy any benefit of inter-fuel competition, that benefit will be removed by the acquisition.
- 226 The Commission believes that the debate over comparative prices is not as clear cut as Powerco's arguments would suggest. It is not at all clear that the price difference between natural gas and electricity is as marked as Powerco suggests. Given such matters as different efficiencies of conversion of natural gas and electricity into useful heat and work, and the cost of installing natural gas pipework, foundations, flues, and the high costs of natural gas appliances for a small natural gas consumer, there has been considerable debate over the true comparative costs of natural gas and electricity.
- 227 The Commission has been provided with copies of some of the advertisements which were part of the comparative advertising campaign organised by ECNZ and a number of North Island power companies in 1994. These advertisements contained direct price comparisons between the two fuels and led to acrimonious debate and threats of Fair Trading Act action by each side. In addition, the Commission has copies of Powerco's "Deal of the Century" natural gas water heater promotion of 1996 which discounted natural gas water heater installations from about \$2,000 to \$689. The Commission notes that during 1996 and 1997, Egmont was promoting electricity in newspaper advertising for consumers who were building or renovating.

- 228 In the Commission's view, this advertising is evidence of competitive behaviour between electricity and natural gas. The promotion of natural gas appliance installations at below cost is clearly to induce consumers to convert to natural gas and consume natural gas rather than electricity. Egmont's concentration on builders or renovators is clearly because it is at that time that consumers make decisions about which of the two fuels they will use and it is an effort to resist competition from natural gas.
- 229 In any event, a margin between the prices of two products does not, in itself, indicate the existence of separate product markets or the absence of competition between the products. Rather, it is the interaction of prices over time and the degree of constraint which the prices of the two products place on each other which are the important considerations.
- 230 Even in a highly competitive market, a margin may be maintained between natural gas and electricity which may reflect, for example, the costs of more expensive burning equipment and the costs of installation and connection to the relevant network. NGC has informed the Commission that it believes a margin is required between electricity and natural gas prices to encourage consumers to connect to natural gas. The General Manager of NGC retailing, Mr Robert Peterson, noted that Australian research suggests that if the price of natural gas is greater than 60% of the price of electricity, reduced demand for new natural gas connections occurs.
- 231 While Powerco has provided details of changes in natural gas prices and sales, the Commission believes that caution should be used in interpreting the information due to the period of the data and other factors which have a major impact on sales (such as economic growth and climatic conditions).
- 232 There have been significant movements in prices of natural gas and electricity since the regulatory reforms began. The Commission is aware that power and natural gas companies have put some emphasis on making tariff changes to domestic consumers. This has been attributed, in part, to rebalancing of tariffs between the domestic and commercial/industrial sectors and the desire of power and natural gas companies to increase their return on assets.
- 233 From the information provided by Powerco, there is little to suggest that Powerco has been constrained in its domestic and commercial pricing by inter-fuel competition concerns.
- 234 As noted above, it is difficult to fully assess the implications of the acquisition based on past and current pricing decisions and consumer reactions. Historically, there have been significant anomalies in the setting of both gas and electricity prices, and those anomalies are still being eliminated by power and natural gas companies. For example, the Commission understands that in the past, domestic natural gas consumers in South Taranaki received a large cross-subsidy from the former Hawera Gas Company.

Conclusion on Inter-fuel Competition

- 235 In the past, the Commission has concluded that inter-fuel competition provides some constraint on natural gas suppliers and to a lesser extent on electricity suppliers. In part, this was based on some cross price elasticity data, although the Commission was unable to give substantial weight to this information because of doubts about its reliability. The Commission has received information from Powerco, Egmont and, to a lesser extent, Wanganui Gas which conflicts with the cross-elasticity data. However, this conflict can be explained by some of the historical pricing differentials between natural gas and electricity in the region.
- 236 Powerco argued that because the acquisition will only affect inter-fuel competition in respect of 3,500 connections in South Taranaki and that because this is a small proportion of the 84,500 connections in the post-merger electricity distribution market, the inter-fuel competition effects of the acquisition are de minimis and should not be considered by the Commission. The Commission considers that it is the actual number of connections which may be affected which is relevant to the de minimis issue and not (as suggested by Powerco) the ratio of the number of such connections to the total number of electricity connections to the merged entity's four electrical networks. The Commission does not believe that the 3,500 connections deprived of inter-fuel competition fall within the de minimis category. The Commission also notes that power companies are able to adjust their returns on capital by asset revaluation.
- 237 Powerco further argued that it was about to become constrained in its pricing behaviour by a self imposed regulation of its rate of return based on a perception of levels of return which the Government would permit. Powerco argued that it therefore had no further ability to increase prices due to any removal of inter-fuel competition resulting from the merger. The Commission acknowledges that the Government has been making statements about the high returns of power companies. Lists of rates of return obtained from information disclosure material have been released by the Ministry of Commerce. While the Commission has no doubt that such behaviour has had the effect of constraining the pricing behaviour of power companies, it notes that calculations of weighed average cost of capital are able to be manipulated by the subjective determination of several elements of the relevant formulae. In any event, the Commission does not believe that such a constraint based on weighted average cost of capital self regulation is on its own necessarily sufficient to prevent Powerco from exercising its market power.
- 238 In this case there are several indicators which tend to confirm the Commission's earlier views. These are:
- the very high up-take of natural gas connections in the South Taranaki area compared with other areas where natural gas prices were higher relative to electricity prices. The Commission does not accept Powerco's argument that such an up-take is not based on price but rather is based on time, social or other non-price considerations

- the continuing presence of promotions and advertising in the South Taranaki area which compare the relative merits of natural gas and electricity and induce consumers to change fuels or retain their existing fuel; and
- the most recent natural gas/electricity cross price elasticity study available to the Commission (the ABARE report) indicates that a degree of competition exists between natural gas and electricity.

239 Therefore, the Commission concludes that the acquisition removes the inter-fuel constraints identified above and that the effects of that removal in the delivered electricity and delivered natural gas markets are likely to be such that it is not satisfied that that removal would not result, or would not be likely to result, in a strengthening of the dominant position of the merged entity in those markets.

Conclusion on Acquisition or Strengthening of Dominance in the Relevant Markets

240 The Commission is satisfied that the acquisition, if implemented, would not result, and would not be likely to result, in the acquisition or strengthening of a dominant position in the:

- national market for the retailing of electricity to medium and large consumers; and
- the post-merger electricity distribution market.

241 The Commission is not satisfied that the acquisition, if implemented, would not result, or would not be likely to result, in the acquisition or strengthening of a dominant position in the:

- market for the supply of delivered natural gas to small commercial and domestic consumers connected to Powerco's South Taranaki natural gas distribution network; and
- market for the supply of delivered electricity to small consumers connected to the merged entity's electrical networks.

DETRIMENTS

Introduction

242 Given the conclusion that the Commission is not satisfied that the acquisition would not result, or would not be likely to result, in the merged entity acquiring or strengthening a dominant position in:

- the market for the supply of delivered natural gas to small commercial and domestic consumers connected to Powerco's South Taranaki natural gas distribution network; and
- the market for the supply of delivered electricity to small consumers connected to the merged entity's electrical networks;

the acquisition cannot be cleared under s 67(3)(a) of the Act.

243 The Commission must now consider whether the acquisition can be authorised under s 67(3)(b) of the Act. The authorisation procedure requires the Commission to identify, weigh and balance the detriments likely to flow from the acquisition or strengthening of a dominant position in the relevant markets as a result of the acquisition against any public benefits likely to flow from the acquisition. Only where the detriments are outweighed by the public benefits can the Commission be satisfied that the acquisition will result, or will be likely to result, in such a benefit to the public that it should be permitted, and be able to grant an authorisation for the acquisition. In this and the following sections, the issues of detriments, public benefits and the weighing and balancing of them, are addressed.

244 The principles the Commission undertakes these assessments are set out in: *Guidelines to the Analysis of Public Benefits and Detriments in the Context of the Commerce Act* (the Guidelines) which was released by the Commission in October 1994. The Guidelines state:

“The purpose of the Act is to promote competition in markets. This purpose reflects a desire to encourage the efficient allocation and use of resources. Competition in a market reduces the ability of a single or several firms, over a sustained period, to:

- make “excess” profits; and/or
- be inefficient; and/or
- cross-subsidise.

If a single or several firms are able to do one or more of these three things, then scope exists for the allocation of resources within the economy to be sub-optimal. In other words, lessening in competition/acquisition or strengthening of dominance is likely to reduce economic efficiency, since absence of competitive pressures means that firms can afford slackness of waste and still be profitable. For the same reason, there is an absence of pressure to be innovative in order to beat the competition. It is these reductions in efficiency against which public benefits must be balanced when an authorisation application is considered.”

245 The various issues raised have been enumerated and discussed in a number of decisions by the Commission (see below) and the courts in recent years. In assessing both detriments and benefits, however, the focus has increasingly been

on economic efficiency. The Court of Appeal stated in *Trutone Ltd v Festival Records Retail Marketing Ltd*⁴⁴ that the Act:

“is based on the premise that society’s resources are best allocated in a competitive market where rivalry between firms ensures maximum efficiency in the use of resources.”

246 Richardson J, sitting as one of five judges of the Court of Appeal, in *Telecom Corporation of New Zealand Ltd v Commerce Commission (AMPS A)*,⁴⁵ also remarked on:

“... the desirability of quantifying benefits and detriments where and to the extent that it is feasible to do so In this case certain major efficiency gains were quantified for Telecom at some \$75 million. While both the commission and the Court did not accept elements in that quantification, both bodies considered that there would be significant efficiency gains if Telecom had management rights over both AMPS A and AMPS B. In those circumstances there is in my view a responsibility on a regulatory body to attempt so far as possible to quantify detriments and benefits rather than rely on a purely intuitive judgement to justify a conclusion that detriments in fact exceed quantified benefits.”

247 In his judgment in the same case, Casey J noted and concurred with the comments of Richardson J on this topic.

248 The Commission’s approach to the quantification of detriments and public benefits was supported by the High Court in the recent decision of *Ravensdown Corporation Limited v The Commerce Commission and Others*.⁴⁶ After referring to the above passage from the *Telecom case*, the judge stated:

“We accept that the Commission did adopt an analytical framework from which it proceeded to an analysis of allocative, productive and innovative efficiency. We regard the use of such framework in the present case as a strength of the Determination. It was an approach which helped guard against the dangers of missing elements which required consideration on the one hand, and the double counting of elements on the other. Moreover, the framework as an economic model represented a mainstream approach suitable for the task in hand.”

249 Later in its decision the court said:

“We have considered the quantitative assessment of detriments undertaken by the Commission. What is notable about that assessment is its transparency ... Where evidence was available to arrive at a quantitative assessment, that was done, but equally in the absence of sufficient evidence no endeavour to quantify in dollar terms was attempted. It is also significant that the analysis included both a separate examination of the benefit and detriment elements, followed by a more holistic exercise. In other words, the Commission considered the individual issues but then stood back and looked

⁴⁴ [1987] 2 NZLR 352.

⁴⁵ [1994] 5 NZBLC 103,431.

⁴⁶ Unreported, High Court Wellington, AP 168/96, 9 December 1996, Panckhurst J and Professor R G Lattimore.

at benefits and detriments in the round. We are not persuaded the methods employed were inadequate or wrong.”

250 The Commission thus believes that it should attempt to quantify detriments and benefits wherever feasible, always recognising that given the difficulties inherent in such quantification, it may only be possible to establish the range within which the actual value of a particular detriment or benefit is likely to fall. This is not to say that only those gains and losses which can be measured in dollar terms are to be included in the assessment; those of an intangible nature may also be relevant. The Commission considers that a public benefit is any gain, and a detriment is any loss, to the public of New Zealand, with an emphasis on gains and losses being measured in terms of economic efficiency. However, changes in the distribution of income, where one group gains while another simultaneously loses, are generally not included either as a benefit or as a detriment. As noted in its decision in *Goodman Fielder Ltd/Wattie Industries Ltd*,⁴⁷ the Commission must assess detriment only in the market in which competition is lessened, but canvas for possible benefits to New Zealand both in that market and in all other markets in New Zealand. The extent to which competition in each market is reduced, and the amount of detriments flowing therefrom, are to be gauged against the counterfactual scenario.

251 While the recent cases of *Air New Zealand/Ansett (Decision 278)*, *Ravensdown/Southfert (Decision 279)* and *NZ Rugby Union (Decision 281)* provide a guide for the assessment of detriments and benefits, there are important differences in the current case. In *Powerco/Egmont*:

- it is not a case of going from a competitive market to a single firm market. It is merely the loss of one constraint (inter-fuel competition) on firms already in a dominant position in some markets. Other constraints (such as information disclosure regulations and the threat of regulation by the Government) remain;
- the information obtained indicates that the constraint provided by inter-fuel competition may be less in South Taranaki than elsewhere;
- the loss of the constraint is only in a small part of the relevant geographic electricity and natural gas markets. The inter-fuel competition issue would affect approximately 3,500 of the 84,500 consumers in the Egmont/Powerco area; and
- the merged entity will still face some inter-fuel competition (where NGC retails natural gas in Egmont’s area).

252 The assessments of the detriments, and the quantification of them, are set out below under the following headings:

⁴⁷ (1987) 1 NZBLC (Com) 104,108.

- allocative efficiency;
- productive efficiency;
- product and service quality;
- innovation efficiency; and
- distribution loss.

Loss of Allocative Efficiency

- 253 A company which, through a business acquisition, acquires or strengthens a dominant position in a market, will have a profit incentive to raise the price above, and reduce output below, the competitive level which prevailed prior to the acquisition. This use of market power will result in a harmful distortion in the allocation of resources in the economy, causing a loss of allocative efficiency. Required to pay higher prices for the good or service, buyers reduce their purchases, or even go without, and substitute goods or services which meet their requirements in a less satisfactory way. In consequence, resources are re-allocated to producing less socially valuable outputs.
- 254 The net loss to society from the elevation of price above the competitive level in the market in question is generally referred to as the 'dead-weight welfare loss'. In principle, it is measured as the difference between the maximum prices which unsatisfied buyers would be willing to pay for the units of the good or service no longer produced, less the value in other uses of the inputs no longer needed.
- 255 The post-acquisition rise in prices results not only in a loss of allocative efficiency, but also leads to a redistribution of income from those buyers who pay the higher prices, to the producer and its shareholders, who gain the higher revenue. Since the dollar magnitudes of these losses and gains cancel out, the Commission has accepted in previous decisions that social welfare as a whole is generally unaffected, and therefore that those distributional changes can generally be ignored.
- 256 The size of the dead-weight loss is influenced potentially by several factors:
- the magnitude of the price increase caused by the acquisition;
 - the price elasticity of the demand curve in the region of the pre- and post-acquisition prices;
 - the extent of any economies of scale lost from the acquisition-induced reduction in output; and
 - the extent to which the pre-acquisition price already may be elevated above the competitive price.

- 257 As a general rule, the dead-weight loss is likely to be only a small proportion of industry revenue, unless the post-acquisition reduction in output is large, or the pre-acquisition price is significantly uncompetitive.
- 258 The magnitude of each of the above factors is now considered.

The Post-acquisition Price Increase

- 259 When deciding on the allocative efficiency loss from the acquisition, the Commission must decide what additional price increases may be possible because of the loss of gas/electricity competition in Hawera, Normanby, Manaia and Okaiawa. As discussed in paragraphs 204 to 215 above, electricity is considered to provide some constraint on the supplier of natural gas to domestic and commercial consumers. Also, as discussed in paragraphs 216 to 222 above, natural gas is considered to provide a constraint on the electricity supplier, although this is less than the constraint placed on gas by electricity. The supplier of each product currently sets its prices taking into account a range of factors, including costs incurred, the impact on demand, the projected rate of return, likely consumer reaction, and the possibility of Government intervention, as well as the level of inter-fuel competition.
- 260 The Commission believes that the removal of one of these factors, inter-fuel competition, will have some impact on the level of potential price increases. It considers that the other factors which impact on pricing decisions will remain unchanged by the acquisition. In its Draft Determination, the Commission adopted a 5% increase in natural gas prices and a 3% increase in electricity prices as being the likely increases which could occur because of the loss of gas/electricity competition.
- 261 Dr A Stroombergen⁴⁸, on behalf of Todd, in his 26 June 1997 submission on the Draft Determination (page 6), and at the conference, suggested increases in natural gas and electricity prices of []
- 262 In considering this matter, the Commission emphasises that it is only those price increases which might be attributed directly to the loss of gas/electricity competition in Hawera, Normanby, Manaia and Okaiawa that should be considered, not those price increases which may have occurred without the acquisition.
- 263 On behalf of Powerco, Mrs K M Vautier⁴⁹ in her 26 June 1997 submission (paragraph 5.10), and at the conference, queried whether it was realistic to suggest that Powerco would be able to impose price increases on a small group of

⁴⁸ Dr A Stroombergen, independent economic expert for Todd, Economist, Business Economic

⁴⁹ Mrs K M Vautier, independent expert for Powerco, Research Economist.

consumers. Mrs Vautier pointed to paragraph 286 of the Commission's Draft Determination in which the Commission accepted that information disclosure regulations and the threat of competition act as constraints. However, as discussed above, the Commission does not believe that these factors are sufficient to rule out price increases in South Taranaki.

- 264 It is the Commission's view that the 5% price increase in natural gas prices and the 3% increase in electricity prices adopted in the Draft Determination remain realistic estimates of likely price increases which may be possible because of any increase in market power as a result of the acquisition. Nevertheless, it has undertaken a sensitivity analysis of its assessment of detriments allowing for varying price increases. The sensitivity analysis is attached as Appendix five.

The Price Elasticity of Demand for Natural Gas and Electricity

- 265 In its Draft Determination, the Commission applied price elasticities for natural gas and electricity from a Ministry of Commerce publication "An Energy Baseline Forecast to 2020: Supply and Demand Interactions in New Zealand's Energy Markets". This publication suggests own-price elasticities of -0.26 for electricity and -0.66 for natural gas. The Commission is satisfied that these price elasticities are the best estimates available for this case and these estimates are used in the calculations below.

Other Factors

- 266 There are two other factors which could, if they were present, affect the size of the dead-weight loss. First, the reduction in output associated with the post-acquisition price increase could result in a loss of scale economies. Second, the pre-acquisition price may be higher than the competitive price, in which case the output reduction would lead to a loss of producer surplus. The incorporation of both elements would enlarge the size of the allocative efficiency loss.
- 267 In this case, no adjustment has been made in the calculation below for the first factor. The expected reduction in output is so small as to render insignificant, the potential loss of scale economies.
- 268 In respect of the second factor, the Commission is uncertain as to how much current natural gas and electricity prices in Hawera, Normanby, Manaia and Okaiawa are above the competitive level as a result of goods and services being supplied by two natural monopolies. Nevertheless, in its analysis the Commission has assumed a figure of 10% above competitive levels. This was the figure used in the Draft Determination, and was not seriously challenged in any submission received.

Calculation of Loss of Allocative Efficiency

- 269 If competitive prices are assumed, the size of the detriment resulting from the loss of allocative efficiency (the dead-weight loss) is reflected diagrammatically by a triangle. The 'base' of the triangle measures the size of the output reduction, and the 'height' the size of the price increase. The area of the triangle measures the dollar value of the dead-weight welfare loss. However, in this case, as noted above, the Commission is assuming that prices are 10% above competitive levels. Accordingly, a further calculation is required which reflects the higher prices and lower outputs that already exist as a result of the lack of competition.
- 270 In its Draft Determination, the Commission applied price elasticities of demand of -0.26 for electricity and -0.66 for natural gas, together with the percentage price increases discussed above (5% for natural gas and 3% for electricity), and projected volumes of sales (\$[] million for natural gas and \$[] million for electricity). The losses of allocative efficiency were as follows:
- electricity \$5,000; and
 - natural gas \$9,500.
- 271 Based on the above assumptions, the Commission tentatively concluded that the likely loss of allocative efficiency in the electricity market would be \$5,000 per annum, and in the natural gas market \$9,500 per annum. The total loss of allocative efficiency in the relevant markets was considered to be \$14,500 per annum.
- 272 Dr Stroombergen, on behalf of Todd, in his 26 June 1997 submission on the Draft Determination (page 3), and at the conference, stated that additional detriments may arise due to:
- the potential for energy price rises to force dairy farmers into liquidation;
 - the effects of large energy price rises on Lowe Walker and Kiwi; and
 - reductions in employment arising as a result of reductions in output, whether by dairy farms, Lowe Walker or Kiwi.
- 273 It is the Commission's view that any possibility of the detriments discussed above occurring would arise only as a result of a price increase which is considerably greater than that which could be attributable to the acquisition alone. In any event, such impacts as were suggested by Dr Stroombergen would be second round or indirect impacts. As discussed in *Guidelines to the Analysis of Public Benefits and Detriments in the Context of the Commerce Act* (the Guidelines), the Commission does not generally take into account second round or indirect

impacts in its analysis of public benefits and detriments arising from an acquisition.

274 Although Egmont Electricity indicated that the average dairy farm consumption is in the range of 0.1 to 0.3 gigawatt-hours per annum, it is the Commission's view that the average dairy farm falls within the market for the supply of delivered electricity to small consumers, and any detriments to the average dairy farm have been counted in the Commission's analysis of the possible allocative efficiency loss.

275 At the conference, Mr Moutter stated that:

“there is no potential detriment to Lowe Walker whatsoever. The reasons being that Lowe Walker is potentially coal fired and have been considering an option to switch to coal for some time. They are of the size and of the type of heat load they have make substitution of gas with coal a viable option for them and they are less than two kilometres from the main electricity substation; that is, the TransPower substation. So they are actually a line bypass threat as well. So Lowe Walker has the potential to bypass both gas supply and electricity supply if necessary.”

Mr Moutter further stated that:

“\$1.4 million was identified as a potential detriment - Kiwi Dairy. Kiwi Dairy are on an eight year gas contract which they voluntarily signed with Powerco that includes price indexation. So they have no risk of price rise.”

276 It is the Commission's view that larger industrial consumers such as Lowe Walker and Kiwi do not fall within the markets for the supply of delivered natural gas and delivered electricity to small consumers and therefore would not face a detrimental impact from the acquisition.

277 With the exclusion of Lowe Walker, the Commission now considers that the likely loss of allocative efficiency in the electricity market remains at \$5,000 per annum, and the allocative efficiency loss in the natural gas market at \$7,000 per annum. The total loss of allocative efficiency in the relevant markets is considered to be \$12,000 per annum.

Loss of Productive Efficiency

278 The loss of productive efficiency arises from dominance because a company which does not face competition does not have the same incentive as a company in a competitive market to minimise costs and to avoid waste. ‘Slackness’ creeps into its operations. The extent to which the combined entity's costs would increase as a result of the acquisition is the measure of the detriments from the loss of productive efficiency, because the ‘wasted’ inputs could be used elsewhere to produce valued outputs.

- 279 The Commission accepts that there are factors affecting the combined entity which may mean that the loss of productive efficiency would be less than would otherwise be the case. For example, power companies are required under the Electricity Information Disclosure regime to state along with terms and conditions of supply and profitability certain efficiency measures.

Raw Materials

- 280 Natural gas and electricity prices are determined by the market, particularly electricity which is purchased through a wholesale market. In all the circumstances, it would probably take an unusually high level of 'slackness' for any company, even one facing no threat of competition, to pay significantly above market costs for raw materials.

Manufacturing, Distribution and Overhead costs

- 281 These are the costs which the Commission believes could be potentially affected to the greatest extent by the acquisition. Without effective competition, it is reasonable to conclude that the manufacturing, distribution and overhead costs of the combined entity will increase over time as the incentive to be efficient lessens.
- 282 As previously noted, the impact of the acquisition and its effect on manufacturing, distribution and overhead costs will be felt in respect of the supply of delivered natural gas and electricity to Hawera, Normanby, Manaia and Okaiawa.

Calculation of Loss of Productive Efficiency

- 283 The Commission considers that the acquisition is likely to result in some loss of productive efficiency. In *Decision 279, Ravensdown Corporation Limited and SouthFert Co-operative Limited*, the Commission estimated a loss of 1% to 5% of current costs and in *Decision 278, Air New Zealand Ltd/Ansett Holdings Ltd and Bodas Pty Ltd*, the Commission estimated a loss of 1% to 10%.
- 284 In the current case, the loss of competition is substantially less than in the above cases, as it relates to an area which accounts for approximately 4% of consumers in the Powerco/Egmont area, the acquisition of natural gas is subject to 10 year contracts recently entered into, while the purchase of electricity is unlikely to be affected by the loss of inter-fuel competition.
- 285 In its Draft Determination, the Commission considered that it was reasonable to conclude that the upper bound of the productive efficiency loss may be 0.1% of the merged firm's total costs or \$19,000 per annum. However, given that in *Decisions 278 and 279* a lower bound of 1% of current costs was considered appropriate as an estimate for the loss in productive efficiency, and taking into account that in this case the loss of competition is substantially less, the Commission considers that an upper bound of 1% of those costs relating to

Hawera, Normanby, Manaia and Okaiawa⁵⁰, or \$8,000 per annum is more appropriate.

Product and Service Quality

- 286 As both natural gas and electricity are homogeneous products, there appears to be limited scope to vary the quality of the products. There appears to be more potential to vary the level of service associated with the supply of the products, for example it may be possible that the acquisition will result in a slower response time to customer queries.
- 287 Overall, it is considered likely that there will be some loss of service quality, but this will be small. The loss of competition is not substantial and will be felt in only a narrowly confined area. To the extent that service declines, there will be some negative impact on the demand for electricity and gas in Hawera, Normanby, Manaia and Okaiawa with a corresponding loss in consumer welfare.
- 288 While it has not been possible to quantify any loss in service quality, the Commission's view is that any loss in service quality will likely be small. As discussed in the Public Benefit section below, there may also be some offsetting improvement in service from the greater access to technology and expertise as a result of the acquisition.

Innovation Efficiency

- 289 The removal of competitive pressures lessens the incentive for companies to innovate; they no longer need to develop either improved products ('product innovations'), or new and better ways of producing and distributing existing products ('process innovations'), in order to match or keep ahead of rivals.
- 290 In this case, neither company expends a significant amount on research and development. Rather, a tendency exists to follow others in the field, and the Commission therefore considers the detriment arising from a loss of innovative efficiency will be small.

Calculation of Loss of Innovation Efficiency

- 291 In *Decision 278, Air New Zealand Ltd/Ansett Holdings Ltd and Bodas Pty Ltd* the loss in innovation efficiency was assessed at 1% to 2.5% of costs, while in *Decision 279, Ravensdown Corporation Limited and SouthFert Co-operative Limited* the range was set at 0.5% to 1.5% of sales.

⁵⁰ Where costs are calculated on the ratio of connections in Hawera, Normanby, Manaia and Okaiawa to total connections to in the Powerco/Egmont networks.

- 292 As with losses in productive efficiency, the Commission considers that an upper bound of 1% of those costs relating to Hawera, Normanby, Manaia and Okaiawa, or \$8,000 per annum, is an appropriate estimate of the loss in innovation efficiency arising from the acquisition, rather than the 0.1% of the merged firm's costs used in the Draft Determination.

Distribution Loss

- 293 As is pointed out in the Commission's guidelines, the distribution of the benefits or detriments is largely irrelevant to their inclusion in the process of weighing public benefits against detriments. A business acquisition may lead to an income transfer from one group (eg consumers) to another group (eg shareholders). The transfer, in itself, is not a benefit or detriment.

- 294 However, as the High Court said in its decision on the AMPS-A case⁵¹:

“We reject any view that profits earned by overseas investment in this country are necessarily to be regarded as a drain on New Zealand. New Zealand seeks to be a member of a liberal multilateral trading and investment community. Consistent with this stance, we observe that improvements in international efficiency create gains from trade and investment which, from a long-run perspective, benefit the New Zealand public.

On the other hand, if there are circumstances in which the exercise of market power gives rise to functionless monopoly rents, supra-normal profits that arise either from cost savings or innovation, and which accrue to overseas shareholders, we think it right to regard these as exploitation of the New Zealand community and to be counted as a detriment to the public.”

- 295 Thus the Commission considers that where an acquisition would allow resulting increased market power to be used to increase prices above (or further above) competitive levels, a detriment arises if there is any transfer of the resulting supra-normal profits to overseas shareholders.

Calculation of Distribution Loss

- 296 As discussed above, the Commission considers that the acquisition may allow an increase in natural gas prices of 5% and in electricity of 3% in Hawera, Normanby, Manaia and Okaiawa. Further, the Commission has assessed foreign ownership in Powerco at 11%. In these circumstances, the acquisition has the potential to lead to the transfer of 11% of the net profit from the price increase, less tax, to overseas shareholders. This amount, assessed at around \$18,500, has been counted by the Commission as the detriment arising from the distribution loss.

⁵¹ *Telecom Corp. Of New Zealand Ltd. v Commerce Commission* (1991) 4 TCLR 473, 531; 3 NZBCL 102.340, 102.386.

Timing of Detriments

297 The Commission recognises that the detriments will not all occur immediately, but rather will build up over time. Equally, the public benefits discussed below will gradually rise to their anticipated levels over a period of two or three years. The Commission does not consider that any timing differences are likely to be such as to make it necessary to apply a time discount to either category to allow a proper weighing of one against the other.

Conclusion on Detriments

298 In summary, the Commission has given careful consideration to all the information it has received. The Commission has considered the detriments which are likely to flow from the combined entity acquiring or strengthening a dominant position in each of the relevant markets and, to the extent that it has been feasible and possible to do so, has attempted to quantify them.

299 The Commission considers that the annual detriments likely to flow from the combined entity acquiring or strengthening a dominant position in each of the relevant markets are as follows:

Summary of Approximate Detriments (Per Annum)	
Type of Detriment	Approximate Upper Bound
Loss of Allocative Efficiency	\$12,000
Loss of Productive Efficiency	\$ 8,000
Loss of Product and Service Quality	not quantified (not likely to be significant)
Loss of Innovation Efficiency	\$ 8,000
Distribution Loss	\$18,500

300 It should be noted that the assessment of detriments will be sensitive to certain assumptions made in regard to the acquisition. These include the:

- potential price increases which may be imposed as a result of the acquisition; and
- percentage of costs which might be attributed to losses in productive and innovation efficiency.

301 The Commission has adopted potential price increases which might arise as a result of the acquisition of 5% for natural gas and 3% for electricity. Further, it has assessed the maximum percentage of costs which might be attributed to losses in productive and innovation efficiency as 1% of the merged entity's costs for Hawera, Normanby, Manaia and Okaiawa. As stated in paragraph 264, the Commission has conducted a sensitivity analysis (refer Appendix five) which indicates that the minimum annual detriment from the acquisition would be around \$20,000 (where price increases for both natural gas and electricity of 3% and a

percentage of the merged entity's costs for Hawera, Manaia, Okaiawa and Normanby of 0.1% are assumed). The maximum annual detriment from the acquisition is assessed as around \$225,000 (where price increases for both natural gas and electricity of 20% and a percentage of the merged entity's costs for Hawera, Manaia, Okaiawa and Normanby of 1% are assumed).

- 302 In summary, the loss of competition from the acquisition will not be substantial and will occur in only a relatively small area. Nevertheless, some detriment will arise from the acquisition. In aggregate, the Commission's assessment of quantified detriments is in the region of \$50,000 per annum. In addition, the Commission believes that there would also be a loss of product and service quality, but that this loss will be small.

PUBLIC BENEFITS

Introduction

- 303 Although the concept of public benefit is not defined in the Act, it has been discussed in various decisions made by both the Commission and the courts. The Commission has set out its approach to the assessment of public benefit in the Guidelines. In general, greater weight is given to efficiency gains than to other claimed benefits.
- 304 In assessing the public benefit from an acquisition, the choice of the appropriate 'without' or 'counterfactual' scenario is crucial. This scenario establishes the benchmark against which the impact of the changes likely to be brought by the acquisition have to be measured.
- 305 Even where cost savings resulting from rationalisation can be attributed solely to the acquisition which made them possible, the savings might not be public benefits. In other words, some cost savings might simply represent a re-distribution of income to the merged company from other parties. In such cases there is no net benefit to the public.
- 306 In accordance with its decision in *Goodman Fielder Ltd/Wattie Industries Ltd* (1987) 1 NZBLC (Commission) 104,108, the Commission must take account of the benefits relating to the whole of the acquisition and not just those benefits relating to the market in respect of which there may be dominance concerns.

Surplus Capacity

- 307 In terms of s 3A of the Act, the Commission when assessing a benefit to the public:

“shall have regard to any efficiencies that the Commission considers will result, or will be likely to result, from the conduct.”

- 308 The term “conduct” is considered to refer in this case to the acquisition.
- 309 During the conference, Todd argued that if Powerco had existing surplus capacity, and if it was able to use that surplus capacity to operate Egmont at a lower cost than is faced by Egmont at present, then that cost saving should not be counted as a public benefit. Its view is that surplus capacity represents an existing inefficiency that would be removed in time with or without an acquisition and, therefore, there is no nexus between the acquisition and the removal of the inefficiency. It indicated that the Commission should accept only those efficiencies which could be achieved if prior to the acquisition Powerco was operating at optimal efficiency for its present level of output.
- 310 In response, Powerco rejected the argument that the claimed efficiencies would result from the use of existing surplus capacity. Rather, it claimed that the company was one of the better performing companies when assessed against the Ministry of Commerce’s benchmark.
- 311 In addition, Powerco argued that provided the efficiencies achieved are a result of the acquisition, it is immaterial whether they are achieved by economies of scale or scope or use of existing surplus capacity.
- 312 The Commission’s Guidelines state that it is a “with” and “without” comparison which must be made, not a “before” and “after” comparison. They go on to say:
- “It follows that public benefits cannot be ascribed to a particular business acquisition or restrictive trade practice if they are expected to occur even in the absence of the acquisition or practice. This does not mean that if there could be some less anti-competitive way of achieving the benefits the application will automatically be declined, but it does mean that in the normal course of events the benefits claimed must be shown to be dependent on the acquisition or practice being permitted to go ahead.”
- 313 The Commission accepts that if, in this case, Powerco has surplus capacity at present production levels, and it would have been likely to reduce that capacity without the acquisition, then as Todd points out, the resulting efficiency gain cannot be attributable to the acquisition and cannot be counted as a public benefit when assessing the benefit from the acquisition.
- 314 However, Todd has gone well beyond that. Todd has asked the Commission to adopt as a yardstick a Powerco which is currently optimally efficient, on the grounds that a competitive market will force Powerco to become optimally efficient.
- 315 It is the Commission’s view that s 3A and the Guidelines cannot be interpreted in the way Todd has interpreted them. The section and the Guidelines make no judgement on how efficient the parties are before the acquisition. Rather, they adopt the position that there are public benefits if, as a result of the acquisition, the same level of output can be achieved using fewer of society’s scarce resources.

- 316 If there was evidence that Powerco had resources which were under-utilised, and which would be likely to be sold or utilised in a more efficient way without the acquisition, then it would be appropriate to make an adjustment to the efficiency gains which would otherwise be attributed to the acquisition.
- 317 Powerco's view is that it is an efficient firm and it argued that the fact that its computer system, for instance, had surplus capacity did not mean that the company was inefficient.
- 318 The view that Powerco is relatively efficient by industry standards tends to be borne out by ANZ Securities 1996/97 report on the New Zealand electricity sector and by the Brent Wheeler and Co material presented to the conference by Powerco. The evidence does not suggest that Powerco has idle resources which would be sold if the acquisition does not proceed.
- 319 Accordingly, the Commission considers that it is not necessary to adjust any efficiency gains from the acquisition because of any present inefficiencies in Powerco's operations.

The Counterfactual

- 320 The Commission's Public Benefit and Detriments Guidelines state:

"...in identifying public benefits, it is a "with" and "without" comparison which must be made, not a "before" and "after" comparison. That is, the gain that is to be assessed is the difference between two hypothetical futures - one with the acquisition or practice, one without it - and not the difference between the present and the future."

- 321 The Commission in the EMCO case (Decision 280) stated:

"The counterfactual is not necessarily the arrangement which might be preferred by the Commission or by others with an interest in the industry. The Commission does not have the mandate, nor the expertise, to be the market designer. The counterfactual is simply the Commission's pragmatic and commercial assessment of what is likely to occur in the absence of the proposed arrangement."

- 322 The Commission believes that it is appropriate that the counterfactual it adopts be expressed in general terms.

- 323 The counterfactual options suggested to the Commission were:

- the status quo. That is, Egmont continues as a stand-alone entity 100% owned by the Council;
- a community trust as proposed by STEUA. This would leave Egmont as a stand-alone entity but, according to STEUA, would result lower prices;

- acquisition by another power company, for example South Eastern Utilities, which currently owns Wairarapa Electricity; and
- a joint venture between Todd and Kiwi and the Council.

- 324 In assessing what is likely to occur in the absence of the acquisition, the Commission has taken into account the current views of the Council, the economic incentives on the Council and, as far as it is able, the political pressures on the Council.
- 325 Mr Beaven of the Council advised the Commission that he believed that Egmont would not be sold in the short to medium (3 to 5 years) term if the acquisition did not proceed. Mr Beaven believed that the politics of a sale to another party in the short to medium term would make such a sale too difficult. Mr Beaven's views were shared by Egmont's Chairman, Mr Watson.
- 326 Nevertheless, the original rationale for the sale appears to the Commission to remain largely unchanged. This is that the Council could maximise the value of its investment in Egmont, and reduce the risk of a likely decline in the value of that investment, if it sold now. The electricity sector was seen to be becoming increasingly competitive and sophisticated, and a relatively small company would be likely to lose market share and face higher costs than other power companies.
- 327 The Commission recognises however that there is strong opposition to the sale of Egmont from ratepayers in the area, and that opposition appears to be intensifying. It also recognises the previous vote against sale, the close vote of the Council in favour of the acquisition (7-5), and that any alternative sale would require a new round of consultations and a new vote.
- 328 Of the options, Mr Beaven indicated that the Todd/Kiwi joint venture proposal was not acceptable, because it left the Council exposed to what it saw as unreasonable commercial risk. The option put forward by STEUA would appear to be unlikely to give the Council close to the amount being offered by Powerco. Mr Watson expressed his concern about the Todd/Kiwi joint venture proposal. He referred to the history of the negotiations and expressed the view that Todd had always overvalued the cogeneration project and undervalued Egmont. As with Mr Beaven, Mr Watson also referred to the risk in the joint venture proposal for the Council. In all the circumstances, the Commission concluded that neither the Todd/Kiwi nor the STEUA proposals are likely at this stage.
- 329 The Commission considers that if the acquisition does not proceed, then it is likely either that the Council will not sell in the short to medium term or that it will sell to another power company. If the latter option is chosen then it will of necessity be to a power company (or the owner of a power company such as South Eastern Utilities) which does not have a contiguous border. (No power company apart from Powerco currently has a common border with Egmont.)

- 330 If the price offered by another company for Egmont is significantly below Powerco's price, then the status quo seems likely, at least until the local authority elections next year. Equally, if the price is close to Powerco's price, then a sale to another power company seems likely. In the circumstances, the Commission proposes to assess the public benefits likely to arise from each of those options.

The Assessment of the Claimed Public Benefits

- 331 As described by Mr Moutter, the major public benefit arises from rationalisation. Egmont was said to be a marginal addition to Powerco's business. Egmont has 12,000 connections and \$32 million in network assets, while Powerco currently has 72,000 connections and \$200 million in network assets. Mr Moutter stated that Egmont currently costs around \$6 million a year in "controllable" costs to run, while it would cost Powerco only around \$2 million a year in direct costs to run Egmont as an addition to its business.
- 332 He said, for instance, that in South Taranaki, Powerco would not need any of the following functions: accounting functions, credit control, an office, a board, administrative functions, and some of Egmont's property. The [] Egmont staff which Powerco would retain would all be field staff. It would close its own Eltham depot and two of its line crews now based in Eltham would shift to Hawera.
- 333 Mr Moutter also noted that Powerco already had many of the systems, equipment and resources to run Egmont.

Rationalisation of corporate and operational activities

- 334 That there is potential to achieve considerable rationalisation of staff and other resources from mergers between power companies, particularly neighbouring companies, is borne out by evidence from recent power company mergers, including that between Powerco and Taranaki Energy.
- 335 Powerco has indicated that it will achieve efficiencies in the order of \$4 million from, in the main, reducing Egmont's staff from 55 at present to []. However, Todd had argued that the cost savings from rationalisation of staff were likely to be much lower than this. Its lower assessment was based on its view that [] Egmont staff will need to be retained following the acquisition.
- 336 The Commission notes that Powerco's claims of the efficiency gains in corporate and operational activities are broadly in line with gains achieved from other power company mergers. While it accepts that staff reductions are likely, it has accepted Powerco's assessment of the number of Egmont staff likely to be retained as being indicative only.

- 337 The Commission considers that it is appropriate to make some adjustments to the total savings claimed for corporate and operational activities for two reasons. First, the Commission recognises that it is impossible for anybody to be fully confident that all theoretical savings can be achieved in practice. Powerco's claims were not subject to intense scrutiny by other companies with an extensive background in the industry. Only Todd provided a detailed analysis, and while this was helpful, Todd has had only limited experience with power companies which it could draw upon. In these circumstances, it behoves the Commission to take a conservative view of Powerco's claims.
- 338 Secondly, the Commission recognises that staff reductions also bring with them social costs. In many cases, staff made redundant will require retraining or will be required to relocate to find alternative jobs. Some may be out of work for an extended period and this can cause stress to the families affected and can result in them facing increased health and other costs. (It is noted that in terms of the framework used by the Commission for measuring public benefits and detriments, items such as redundancy payments and unemployment benefits are regarded as transfer payments rather than as social costs, and accordingly do not come into the public benefit/detriment assessment.)
- 339 The size of the social costs, which are mainly one-off in nature, will be affected by the numbers requiring relocation, the amount of retraining required, and the period staff may be unemployed. In this case, it is noted that unemployment in Taranaki at 8.2% is higher than the national average of 6.4%, but offsetting that is the relatively well qualified nature of the staff likely to be made redundant. From the information available, it has not been possible to quantify the size of these one-off costs. Merely for the purpose of demonstrating the impact they may have on the public benefit assessment, if, on average, they amounted to \$10,000 per person made redundant, and there were for example, 40 people made redundant, the total would be \$400,000 in total, or \$40,000 in annualised terms (if a 10% discount rate is used).
- 340 In this case, the Commission proposes to recognise the redundancy cost, and the desirability of taking a conservative view of Powerco's total claims under this heading, by reducing those claims by \$0.5 million, leaving \$3.5 million as the annual amount of public benefit from rationalisation of corporate and operational activities.

Reduction in Depreciation

- 341 Powerco claimed as a public benefit \$300,000, being the annual saving in depreciation charges due to the sell-off of some of Egmont's assets.
- 342 The Commission accepts that the depreciation savings are a relevant public benefit. It is noted that Powerco's calculation is based on the accounting rate of depreciation and on the book value of the asset. In theory, the public benefit should be assessed on the current market value of the asset and on its anticipated

economic life. While there may be some variation between the calculations, the variation is not likely to be large. In addition, it is understood that Powerco has claimed depreciation on some assets, the sale of which is not yet certain.

343 The Commission proposes to allow \$250,000 annually under this heading.

Reduced Line Losses

344 The Commission accepts that the acquisition will permit a rationalisation between the electrical networks of Powerco and Egmont in the Kapuni and Waverley areas and that this will reduce line losses. The sum claimed of \$20,000 is considered to be reasonable and is allowed.

345 [] Because this aspect of the claim was considered to be confidential by Powerco, such a consultation was not possible.

346 Accordingly, the Commission does not propose to allow this claimed public benefit.

Increased Generation Mix

347 Powerco claimed that \$200,000 annually will be saved in transmission charges as a result of being able to provide a greater proportion of embedded generation to total output as a result of the acquisition.

348 The Commission accepts the claimed amount as reasonable and allows it.

Wholesale Purchasing

349 Powerco claimed that it will be able to undertake the function of acquiring Egmont's electricity on the wholesale market at no additional cost.

350 It is considered that wholesale purchasing is susceptible to economies of scale, and the annual amount claimed of \$100,000 is reasonable and is allowed.

Reduced Outage Costs for Consumers

351 Powerco maintained that, with relatively minor additional investment, it would be possible to link the subtransmission networks of Powerco and Egmont. This would improve the meshing of networks and enable operators to transfer load between points of supply to minimise the impact of planned interruptions and more rapidly restore service after a fault is located and isolated for repair.

- 352 The Commission accepts that this would bring about a real benefit to customers - one spoken to by the Commission said that he was experiencing up to 10 outages a year. The annual amount claimed, \$50,000 is not large, is considered reasonable and is allowed.

Other Less Tangible Benefits

- 353 Powerco states that the more efficient utilisation of human and material resources, which will be possible as a result of the acquisition, will benefit customers through improved service. It instanced more efficient inventory systems and greater access to technology.
- 354 Powerco has not attempted to quantify these claimed benefits.
- 355 The Commission accepts that large firms often have more immediate access to expertise than small firms, and may have more sophisticated inventory systems. However, on the other hand, the Commission notes that, as a result of staff redundancies, and the lower number of staff per customers, it is possible that some customers may find it more difficult to obtain the service they seek.
- 356 On balance, while the Commission believes that there is likely to be some net benefits in these areas, it is not able to quantify them.

Summary

- 357 In summary, the Commission allows the following annual public benefits arising from the acquisition:

Assessed Benefits	Amount per annum
Rationalisation of corporate and operational activities	\$3.5 million
Reduction in depreciation	\$0.25 million
Reduced line costs	\$0.02 million
[]	nil
Increased generation mix	\$0.2 million
Wholesale purchasing	\$0.1 million
Reduced outage costs for consumers	\$0.05 million
More efficient utilisation of resources	possible but not quantified
Access to enhanced technologies	probable but not quantified
Total quantified	\$3.92 million

Comparisons with the Counterfactual

358 If the counterfactual is the status quo, then all the above benefits can be ascribed to the acquisition.

359 However, if the counterfactual is a sale to another power company, it is recognised that efficiencies will also be achieved by that outcome. That is, some of benefits claimed by Powerco are benefits which would also be achieved by a sale to another power company.

360 The Commission recognises that most power companies will have expertise in electricity retailing and distribution and are likely to have existing facilities and capacity which will allow for economies of scale and scope.

361 Nevertheless, the Commission considers that other power companies will not be able to match the efficiencies Powerco will be able to achieve because they do not have a common border with Egmont. At the conference, Powerco submitted that 60% of the efficiencies which could be achieved by the acquisition were available to Powerco alone. It based this submission on several factors:

- only Powerco would be able to do without an Egmont operating base, and this has major implications for the number of staff other power companies would require to operate Egmont's network;
- other power companies may be smaller than Powerco and not have access to the technology and equipment available to Powerco; and
- other power companies could not obtain the reduction in line losses, savings in transmission charges, reduced outages and [] which are available only from a merger involving neighbouring power companies.

362 The Commission accepts the general validity of these factors. It agrees that it is likely that around 60% of public benefits are likely to be unique to Powerco. No party at the conference refuted this assessment.

363 On this basis, Powerco's quantified public benefits would be 60% of the \$3.92 million assessed above, or \$2.35 million.

The Quantum of Public Benefit

364 The Commission has given full consideration to the claimed public benefits and has measured them against the public benefits which could be achieved in the likely counterfactual situations (the status quo and sale to another power company).

- 365 The Commission concludes that the annual public benefit attributable to the acquisition is likely to fall within the range from \$2.35 million to \$3.92 million.

BALANCING OF BENEFITS AND DETRIMENTS

- 366 The determination of the application involves a balancing of the public benefits and detriments which will, or will be likely to, result from the acquisition. Only where the detriments are outweighed by the public benefits can the Commission be satisfied that the acquisition will result, or be likely to result, in such a benefit to the public that it should be permitted, and be able to grant an authorisation for the acquisition.
- 367 Having regard to all the factors, the Commission is satisfied that the detriments will be, or will be likely to be, outweighed by the public benefits.
- 368 Accordingly, the Commission is satisfied that the acquisition by Powerco Limited by itself (or a wholly owned subsidiary) of up to 100% of the shares in, or assets of, Egmont Electricity Limited will result, or will be likely to result, in such a benefit to the public that it should be permitted.

DETERMINATION

- 369 Pursuant to section 67(3)(b) of the Commerce Act 1986, the Commission determines to grant an authorisation to Powerco Limited (or a wholly owned subsidiary of Powerco Limited) to acquire up to 100% of the shares in, or assets of, Egmont Electricity Limited.

Dated this day of July 1997

Dr A E Bollard
Chairman

Dr K M Brown
Member

T G Stapleton
Member