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# Decision No. 340

Determination pursuant to the Commerce Act 1986 in the matter of an application for clearance of a business acquisition involving:

## TRANSALTA CORPORATION OF CANADA

and

## **CONTACT ENERGY LIMITED**

**The Commission:** K M Brown

E C A Harrison P R Rebstock E M Coutts

**Commission Staff:** A Mladenovic

M Pickford D R Ainsworth K F Smith A J Brice

**Summary of the Application:** TransAlta Corporation of Canada (or an interconnected

body corporate) has sought clearance to acquire a 40%

shareholding in Contact Energy Limited.

**Determination:** Pursuant to section 66(3) of the Commerce Act 1986,

the Commission determines to give a clearance for the

proposed acquisition.

**Date of Determination:** 12 February 1999

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## THE PROPOSED ACQUISITION

- Pursuant to section 66(1) of the Commerce Act 1986 (the Act), TransAlta Corporation of Canada (TransAlta) gave notice to the Commission on 15 January 1999 (the application) seeking clearance for the proposed acquisition by it or an interconnected body corporate of TransAlta of a 40% shareholding in Contact Energy Limited (Contact).
- The proposed acquisition by TransAlta follows the Government's decision in late November 1998 to proceed with the sale of Contact through a 60% public share float together with a share sale of 40% to a cornerstone shareholder. The Government aims to finalise the sale of Contact by mid 1999.
- 3 ABN-AMRO Rothschild is managing the sale process on behalf of the Crown. The sale process requires that parties with an interest in acquiring the cornerstone shareholding and which have a presence in the New Zealand energy sector must obtain clearance or authorisation from the Commission for the acquisition.

## THE PARTIES

#### **TransAlta**

- TransAlta's New Zealand operations are ultimately carried out through TransAlta New Zealand Limited (TransAlta NZ). TransAlta NZ was formed on 1 October 1996 as a result of the merger of EnergyDirect Corporation Limited and Capital Power Limited. TransAlta NZ is a public company listed on the New Zealand Stock Exchange. TransNewZealand Energy Limited is the immediate parent company of TransAlta NZ, which in turn is controlled by TransAlta Corporation of Canada. TransAlta NZ's parent company's shareholding is 66.5%. The balance of shares are owned by Hutt Mana Energy Trust as to 12.5%, and the general public and institutions as to 21%.
- 5 TransAlta is an energy company whose principal business activities are (also see Appendix 1):
  - the generation and wholesaling of electricity on a national basis;
  - the retailing of electricity in various regions;
  - the retailing of natural gas<sup>1</sup> in various regions; and
  - the distribution of gas in Lower Hutt.

#### **Contact**

- 6 Contact is also an energy company whose principal New Zealand<sup>2</sup> business activities are (also see Appendix 2):
  - the generation and wholesaling of electricity on a national basis;
  - the retailing of electricity in various regions;
  - the wholesaling of gas in the North Island; and

<sup>1</sup> The word 'gas' refers to natural gas when used in this Decision.

<sup>&</sup>lt;sup>2</sup> Contact also has investments in electricity generation in Australia. However, these are not relevant to the Commission's consideration of the application.

- the retailing of gas in various regions.
- Contact was established by the Government to introduce competition in electricity generation, and was formed when the existing monopoly supplier, Electricity Corporation of New Zealand Limited (ECNZ), was split into two competing entities. Contact was incorporated on 8 November 1995 and became a state owned enterprise on 18 November 1995 pursuant to the State Owned Enterprises Act 1986. With effect from 1 February 1996 Contact acquired certain assets, liabilities and staff from ECNZ in accordance with a Memorandum of Understanding dated 8 June 1995 between the Government and ECNZ and an Agreement of Sale and Purchase dated 13 November 1995 between ECNZ and Contact. Contact is wholly owned by Her Majesty the Queen in Right of New Zealand (the Crown). The Minister of Finance and the Minister Responsible for Contact Energy Ltd are the shareholding Ministers.
- 8 During 1998 Contact acquired the electricity retailing assets of 11 power companies and the natural gas retailing assets of Enerco New Zealand Ltd (Enerco). Contact sought and obtained a clearance from the Commission for the Enerco acquisition.<sup>3</sup>

## **Associated Persons**

9 If the proposed acquisition proceeds, TransAlta will own 40% of Contact. Given the intention of the Government to sell the remaining 60% by an initial public offering and ensure that there are many small shareholders amongst the public of New Zealand, no other large shareholder is on the horizon.

## 10 Section 47(2) and (3) of the Commerce Act provide:

- "(2) For the purposes of this section and section 48 of this Act, where 2 or more persons are interconnected or associated and together are in a dominant position in a market, each of them is deemed to be in a dominant position in that market.
- (3) For the purposes of this section and section 48 of this Act, a person is associated with another person if that person is able, whether directly or indirectly, to exert a substantial degree of influence over the activities of the other."
- The Commission's Business Acquisitions Guidelines<sup>4</sup> (Business Acquisitions Guidelines) state that:

"The Commission is of the view that a company which owns or controls 20 percent or more of the voting power in another has, prima facie, a substantial influence over that other company." (p9)

- Therefore, if the proposed acquisition proceeds the Commission concludes that TransAlta and Contact will be associated persons in terms of the Commerce Act.
- While the proposed acquisition will make TransAlta and Contact associated persons in terms of the Commerce Act, on the basis of the information provided to the Commission, they will not become interconnected bodies corporate. Part II of the Commerce Act, the Restrictive Trade Practice provisions, will therefore continue to apply to agreements, arrangements, or understandings between the two entities.

<sup>&</sup>lt;sup>3</sup> Decision No. 333, Contact Energy Limited and Enerco New Zealand Limited, 10 December 1998.

<sup>&</sup>lt;sup>4</sup> Commerce Commission, Business Acquisition Guidelines, 1996.

14 The Commission notes that while the incentives for collusive behaviour may be strengthened by the proposed acquisition, collusive behaviour which results, or is deemed to result, in a substantial lessening of competition will remain subject to the Commerce Act.

#### **PROCEDURES**

- 15 The application was registered by the Commission on 15 January 1999. Section 66(3) of the Commerce Act requires that the Commission, within 10 working days after the date of registration of the application, or such longer period agreed by the Commission and the applicant, gives, or declines to give, a clearance for the acquisition. The tenth working day after the registration of the application was 29 January.
- The Commission and TransAlta initially agreed to an extension of seven working days to 9 February. A further extension was agreed to 10 February, with a final extension agreed to 12 February.
- 17 TransAlta advised the Commission that it did not seek a confidentiality order for either the fact of the application or any specific information contained in the application.
- The Commission's determination is based on an investigation conducted by its staff and their subsequent advice given to the Commission.

#### Conference

19 Section 69B(1) of the Commerce Act states:

"Before making a determination under section 66(3) or section 67(3) of this Act in relation to an acquisition, the Commission may determine to hold a conference and shall appoint a date, time, and place for the holding of the conference and give notice of the date, time, and place so appointed and of the matters to be considered at the conference to the persons entitled to be present at the conference."

- During the consideration of the application the Major Electricity Users' Group (MEUG) and Hydro Energy Limited (Hydro Energy) separately called on the Commission to convene a conference in terms of section 69B of the Act.
- 21 MEUG argued that:

"In promoting competition as required by the Commerce Act, the Commission needs to weigh the competition aspects as they pertain to the applicants need for a quick decision, versus the risk of establishing poor regulatory precedents which will materially affect competition in the electricity market. The rigorous examination of all relevant issues during a conference will material (sic) assist the Commission." <sup>5</sup>

- 22 MEUG was particularly concerned that a conference be convened to consider:<sup>6</sup>
  - the relevant measure of market dominance in relation to generation, particularly in light of the Minister for Enterprise and Commerce's section 26 notice;
  - the impact of the proposed acquisition on a 'hedge market';

<sup>&</sup>lt;sup>5</sup> Letter to the Commission dated 5 February 1999.

<sup>&</sup>lt;sup>6</sup> Letter to the Commission dated 29 January 1999.

- the potential for the merged entity to dominate the market for power station gas feed-stocks:
- the unique factors that may enable a firm with a relatively low market share to be dominant in an electricity market; and
- the impact of a single owner of gas generators operating at the margin.
- Hydro Energy believed that a conference was necessary to enable competition issues to be "thoroughly aired". It considered the issues raised were "important to the long term development of electricity markets in New Zealand…".<sup>7</sup>
- 24 In response, the applicant argued that:
  - the Commission's normal investigation procedures, with clarification and corroboration being available through a number of interested and independent commercial and economic bodies, would be satisfactory;
  - the Government's sale timetable limits the time available;
  - the evidence provided does not raise issues of such complexity that the Commission cannot achieve a properly considered determination using its normal investigative methodology; and
  - the specific issues raised by MEUG and Hydro Energy have been addressed to the degree that the Commission can satisfy itself without requiring a conference.
- The Commission has circulated widely the application and subsequent submissions from the applicant and its advisors, as well as key submissions received from interested parties, to industry participants. The Commission has then received further comment.
- The Commission has given careful consideration to the arguments raised in support of and against a need for a conference. The Commission has concluded that, given the high level of expert analysis and opinion available, the Commission's experience in considering electricity matters, and in light of the time constraints associated with the Contact sale process and the clearance process, a conference was not necessary. Issues raised by MEUG, Hydro Energy, and others are dealt with within the body of this Decision.

#### STATEMENT OF GOVERNMENT POLICY

In applying the relevant provisions of the Commerce Act, the Commission is required to have regard to the economic policies of the Government, transmitted to the Commission in accordance with section 26 of the Commerce Act. Specifically, section 26(1) provides that:

"In the exercise of its powers under ... this Act, the Commission shall have regard to the economic policies of the Government as transmitted in writing from time to time to the Commission by the Minister."

The Minister for Enterprise and Commerce (the Minister) has transmitted in writing to the Commission, pursuant to section 26 of the Commerce Act, a statement, dated 21 December 1998, of the economic policy of the Government in relation to market power

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<sup>&</sup>lt;sup>7</sup> Letter to the Commission dated 3 February 1999.

in the electricity sector. A copy of the Minister's statement together with the covering letter of 22 December 1998 is included in Appendix 3.

- 29 The Minister advised the Commission in the covering letter:
  - "... that the Government has agreed that the offer documentation for the sale of Contact Energy Limited should include a requirement that all parties with an interest in acquiring Contact obtain a Commerce Commission clearance or authorisation, in the context of the attached section 26 statement, before formally entering their bids".
- 30 In respect of Government views on market power in electricity markets, the Government has concluded that a number of factors are important in considering market power issues in the electricity sector. These relate to:
  - competition in the "physical spot market";
  - competition in the "contracts market"; and
  - competition in retailing.

Competition in the "Physical Spot Market"

31 In respect of competition in the "physical spot market", the Government states:

"The effectiveness of competition in the physical spot market is determined in particular by:

- the number and physical characteristics of (generating) stations competing at the margin under various hydrological conditions;
- the portfolios of stations under common ownership and the ability and incentives this provides for manipulating the market;
- the extent to which electricity is not competitively dispatched through the wholesale market as a consequence of long term supply contracts and/or vertical integration of generation and retail businesses."
- Further, in optimally configuring the split of ECNZ to ensure effective competition, "... the Government considered that an assessment of market shares alone was unlikely to provide robust information on market power issues in the spot market". It therefore "... found it necessary to undertake modelling to test the effect on competition of different combinations of stations". Moreover, having "...determined that ECNZ should be split into three companies in order to achieve optimal outcomes, the Government would be concerned if any future aggregation of stations resulted in the ability to exercise market power in a material way".
- In a letter from the Minister of 18 January 1999, the Commission was advised "... that the Ministry of Commerce has commissioned a modelling study on market power in the electricity industry focusing on the sale of Contact Energy". A copy of the Minister's letter is included in Appendix 4.

<sup>&</sup>lt;sup>8</sup> The Commission was subsequently advised by the bid process managers (ABN AMRO Rothschild) that a clearance or authorisation from the Commission would need to be obtained only by those parties having a presence in New Zealand.

<sup>&</sup>lt;sup>9</sup> That is, competition for dispatch between generating stations in the wholesale electricity market.

## Competition in the "Contracts Market"

In respect of competition in relation to long term contracts for electricity, the Government states:

"Aggregation of vertically integrated generation and retail companies ... may affect the quality of price signals in the marketplace".

## Competition in Retailing

In respect of competition in retailing, the Government has raised a concern over "... the possibility that access to meters may be used by some retailers to frustrate competition". This follows the Government's requirement for ownership separation of line and energy businesses and the consequential recent acquisition of electricity retail businesses, which have generally included meter assets as part of the retail businesses. The Minister's statement suggests that any future anti-competitive behaviour in relation to access to meters could be dealt with under the Commerce Act, but also warns that the Government will take action to address any significant problems that emerge.

#### Consideration to be Given to Statements of Government Economic Policies

The implications of a section 26 statement have previously been considered by the Commission and the High Court.<sup>11</sup> The Commission has noted that:

"... having regard to the general policy discretion in the Act to promote competition sec 26 may be used to advise the Commission of Government policy or policies or to be more specific in relation thereto. It is not to influence or determine the decisions which the Commission must make. Thus, fully preserving the discretions given to the Commission in the Act, the Commission is required only 'to have regard to' such statements in reaching its decisions." <sup>12</sup>

37 The High Court (Wylie J) held that the issue of a section 26 statement: <sup>13</sup>

"... is the exercise of a statutory right specifically conferred on {the Minister} by the Legislature for the very purpose of influencing the outcome of applications under the Act. That is not to say that the Commission ... is bound to apply the policy so transmitted to it. The statutory injunction of section 26 is no greater than that the Commission 'shall have regard to' the Government's policy."

38 Further:

"As with any other evidence it is for the tribunal to assess the weight to be given to each item of evidence and in the case of a statement of this kind, which in our view is simply an evidentiary statement of Government policy - it is certainly not a direction – it remains for the tribunal to assess the weight to be given to it as an expression of official perception of, in this case, public benefit."

. . .

"The tribunal may not ignore the statement. It must be given genuine attention and thought, and such weight as the tribunal considers appropriate. But having done that, the tribunal is entitled to conclude it is not of sufficient significance either alone or together with other

<sup>&</sup>lt;sup>10</sup> The Minister's statement notes that most of these hedge against spot market prices.

<sup>&</sup>lt;sup>11</sup> Re New Zealand Kiwifruit Exporters Associations (Inc) – New Zealand Kiwifruit Coolstorers Association (Inc) (1989) 2 NZBLC (Com).

<sup>&</sup>lt;sup>12</sup> Ibid. 104,494.

<sup>&</sup>lt;sup>13</sup> New Zealand Co-operative Dairy Company Ltd & Anor v Commerce Commission (1991) 3 NZBLC 99-219, 102.067.

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matters to outweigh other contrary considerations which it must take into account in accordance with its statutory function: ... In the end, however weighty the statement may be as an expression of considered Government policy, it does not have any legislative effect to vary the nature of the duties which the tribunal must carry out." <sup>14</sup>

39 The Commission has given the section 26 statement of the economic policy of the Government, in relation to market power in the electricity sector, careful consideration. In reaching its decision as to whether an acquisition or strengthening of dominance would not result, or would not be likely to result, from the proposed acquisition, <sup>15</sup> the Commission has had regard to the section 26 statement. Issues raised by the section 26 statement are dealt with in the body of the Decision where considered by the Commission to be necessary.

#### THE INVESTIGATION

- 40 In the course of their investigation of the proposed acquisition, the Commission's staff have circulated the application widely within the industry, and have discussed the application with a number of parties, including:
  - MEUG:
  - ECNZ:
  - Transpower New Zealand Limited (Transpower);
  - Hydro Energy Limited;
  - the Law and Economic Consulting Group (advisors to Hydro Energy Limited);
  - Waikato SOE Limited;
  - Contact Energy Limited;
  - The Marketplace Company Limited (M-Co);
  - the New Zealand Institute of Economic Research Inc. (advisors to the applicant);
  - the Ministry of Commerce; and
  - Putnam, Hayes & Bartlett Asia Pacific Limited (advisors to the Ministry of Commerce).
- In addition, staff have sought and received comment and further information to that contained in the application from TransAlta.
- As noted earlier, the Commission has circulated widely the application and subsequent submissions from the applicant and its advisors, as well as key submissions received from interested parties, to industry participants. The Commission has then received further comment.

### MARKET DEFINITION

- 43 Section 3(1A) of the Commerce Act provides that:
  - "... 'market' is a reference to a market in New Zealand for goods or services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them".

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<sup>&</sup>lt;sup>14</sup> Ibid. 102,067-068.

<sup>&</sup>lt;sup>15</sup> As specified by section 66 of the Commerce Act.

- In considering a proposed business acquisition in terms of section 66 of the Commerce Act, market definition is an important step towards making an assessment of the competitive impact of the acquisition.
- 45 The Commission's Business Acquisitions Guidelines specify a relevant market to be:
  - "...the smallest space, defined in terms of:

the products or services bought and sold;

the geographic area from which those goods or services are obtained and supplied;

the functional level at which the transactions take place; and, where appropriate,

the time period;

within which a hypothetical profit-maximising sole supplier of a good or service would impose at least a small yet significant and non-transitory increase in price (ssnip), assuming all other terms of sale remain constant". (p14)

- 46 In determining relevant markets, the *Business Acquisitions Guidelines* states that "...the Commission will generally consider a ssnip to involve a five percent increase in price for a period of a minimum of one year". (p15)
- 47 The *Business Acquisitions Guidelines* draw a clear distinction between the processes of defining a relevant market and of assessing dominance:

"It is important to distinguish the process of defining a relevant market from that of assessing whether a business acquisition will lead to the acquisition or strengthening of a dominant position. This first step is a hypothetical exercise which assumes the creation of a total monopoly and estimates buyer reaction to a given level of price rise. The *ssnip* approach is relevant to that process. This does not presuppose or require that such a *ssnip* would result from the actual acquisition which is then to be evaluated in terms of the relevant markets identified through that process". (p15)

#### **Identifying Relevant Markets**

- 48 To identify the markets relevant to the application, it is necessary to consider the business activities undertaken by the merging firms and to assess whether, post-acquisition, dominance would, or would be likely to, result or be strengthened.
- 49 The principle business activities of TransAlta are:
  - the generation and wholesaling of electricity on a national basis;
  - the retailing of electricity in various regions;
  - the retailing of gas in various regions; and
  - the distribution of gas in Lower Hutt.
- 50 The principle business activities of Contact are:
  - the generation and wholesaling of electricity on a national basis;
  - the retailing of electricity in various regions;
  - the wholesaling of gas in the North Island; and
  - the retailing of gas in various regions.
- Accordingly, the Commission considers that the starting point for market analysis in the context of the application is the activities involving electricity generation and

wholesaling, electricity retailing, gas wholesaling, and gas retailing in the Auckland, Hawke's Bay, Manawatu, Horowhenua, Lower Hutt, and Wellington regions.

### **Separate Electricity and Gas Product Markets**

The Commission has previously adopted discrete electricity and gas product markets when assessing business acquisitions in the energy sector. The Commission stated in Decision 270:<sup>16</sup>

"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". (para129)

This approach is consistent with recent decisions of the courts. In the High Court judgment in *Power New Zealand Ltd v Mercury Energy Ltd* (1996) 1 NZLR 686, subsequently upheld in February 1997 by the Court of Appeal, the court said:

"It is common ground that gas is not in close competition with electricity. We see no reason to question this approach". (p.704)

54 In Shell (Petroleum Mining) Company Limited and Another v Kapuni Gas Contracts Limited and Another (1997) 7 TCLR 463, the High Court heard a substantial amount of economic evidence on market definition. It 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" (p.527)

- In Decision 333, the Commission considered it appropriate to adopt discrete product markets for electricity and gas. Although the Commission recognised that inter-fuel competition provided some constraint, it did not consider the constraint sufficiently strong to include electricity and gas in the same market. The Commission finds no reason to vary from this approach for the purposes of this analysis.
- Accordingly, while the Commission recognises that inter-fuel competition provides some constraint, it does not consider that the constraint is strong enough to place electricity and gas in the same market. The Commission will therefore adopt discrete product markets for electricity and gas in considering the application.

## **Defining Relevant Electricity Markets**

The National Electricity Generation and Wholesaling Market

In the application, TransAlta considers that there is a national electricity generation and wholesaling market, in line with previous Commission and court decisions.<sup>17</sup> The

Decision 270, Natural Gas Corporation of New Zealand Limited and Enerco New Zealand Limited, 22 November 1993.

In a subsequent memorandum dated 3 February 1999, TransAlta's solicitors, Bell Gully Buddle Weir, repeat the market definitions contained in the application, but split generation and wholesale into separate markets without making any reference to the change. This appears to be a mistake, as TransAlta states its belief that the markets cited "are the correct market definitions and are in alignment with the Commission's previous and well tested views." (footnote omitted).

Commission defined such a market in Decision 317,<sup>18</sup> and prior to that such a definition had been upheld by the High Court and Court of Appeal in *Power New Zealand Ltd v Mercury Energy Ltd* (1996) 1 NZLR 686.<sup>19</sup>

- The national electricity generation and wholesaling market is the market in which the generators (sellers) and buyers of wholesale electricity interact to determine the prices and quantities traded. The buyers are electricity retailers (some of whom are vertically integrated with particular generators) and large industrial users (or their agents) of electricity which buy at wholesale. This market comprises three interrelated forms of transactions: bilateral contracts, spot trading and reserves trading. Each is now dealt with in turn.
- Bilateral contracts occur between generators and individual retailers or large users outside the spot market. Apart from the special contract involving Comalco, some of the contracts may have arisen from the Memorandum of Understanding between the Government and ECNZ which obliges ECNZ to offer some of its capacity for this purpose. Such contracts may be attractive to both parties through the protection provided against the price volatility involved with spot trading. The two sorts of trading are clearly related, in that fixed prices in bilateral contracts will reflect participants' expectations about spot prices over the period of the contract. For example, if the prices in bilateral contracts become too 'high', electricity buyers will tend to buy more electricity on the spot market, and vice versa.
- 60 Spot trading of wholesale electricity began with the commencement of operation of the New Zealand Electricity Market (NZEM) in October 1996. This market operates as a pooling arrangement, under which generators and buyers make price/volume offers and bids for electricity supplied and demanded respectively for discrete half-hourly periods on a day ahead basis (although bids can be revised up to two hours prior). This offer process establishes a dispatch order for generation plant running from lowest bid to highest bid, and individual plants are generally dispatched in that order until demand in the relevant period is met. The spot price in that period is determined by the price bid by the last power station to be dispatched, called the "marginal station". When ECNZ produced 95% of the electricity generated the order was determined by each station's marginal cost; now it is determined by the owner's bids, which may deviate from marginal cost.
- Hydro Energy, in a report by The Law and Economics Consulting Group (LECG), note that about 70% of the electricity generated is exchanged through the NZEM, a figure which has declined from 90-95% in early 1998. The balance is traded through a second, smaller, clearing house (RMB), through bilateral contracts, and through vertical integration.
- 62 In practice, the wholesale and dispatch activities are more complex. A number of examples of relevance to this determination are now cited. Firstly, it would appear that individual power stations do not bid their entire capacity at a single price. Rather, a

<sup>&</sup>lt;sup>18</sup> Decision No. 317, Mercury Energy Limited and Power New Zealand Limited, 25 February 1998.

<sup>&</sup>lt;sup>19</sup> See paragraph 53 above.

<sup>&</sup>lt;sup>20</sup> ECNZ supplies Comalco New Zealand Ltd's aluminium smelter at Bluff under contract for approximately 4,500 GWh pa.

range of prices for different tranches of capacity may be bid, with that for the first tranche often being bid at zero to ensure operation of the plant. The actual price received for that output will be the market price, which is determined by the bid of the marginal station.

- 63 Secondly, the aggregate supply and demand patterns for each half-hour uncovered by the bidding process have to be reconciled with possible physical constraints arising from the structure of the transmission system. The most significant of these is the central North Island constraint, which carries power north to feed the major Auckland load centre. Such lines have a finite capacity which cannot be exceeded, and that capacity falls during the period of high summer temperatures. Moreover, when demand is high, voltages can fall when power is transmitted over long lines, which may have to be rectified by the 'forced' (constrained on) operation of power stations close to the load centre.
- A third example of the complexity in the operation of the generation and wholesaling market is that wholesale electricity is not priced on a national basis, but at approximately 180 grid exit points or 'nodes' throughout the country. The price at each node is calculated by starting with the optimal generation configuration for the half-hour period, and then separately for each node computing the increase in total cost of supplying a hypothetical additional MW of demand at that node. The cost will reflect the reconfiguration of generation and reserve capacity for the system as a whole needed to minimise the cost of supply to the country as a whole. Viewed in this way, the concept of the 'marginal station' becomes more diffuse. The marginal station may vary, depending upon the node at which the extra demand occurs.
- Trading in reserves is made necessary by the need to maintain a capability within the electricity supply system to meet inevitable but random plant failures or demand spikes. This capability is provided in two ways: by generators who operate plant which is either synchronised to the network but is not producing electricity (spinning reserves), or which is operating below maximum or efficient output; and by electricity consumers who are willing to shed load with no notice (interruptible load). In the current integrated system where generators can supply both electricity and (for a price) reserves, and where users can consume electricity and provide (at a price, by way of a discount on the retail price for electricity) interruptible load, the two areas of trading are closely interrelated. For example, generation capacity held back for reserves cannot be used to generate electricity, thereby reducing supply and potentially raising the spot price.
- The NZEM accepts bids from generators on reserves for each half-hourly period, and a supply curve is built up. This is equated with the demand for reserves, based on the biggest contingency in the system. This could be the failure of the HVDC link, or the emergency shutdown of a power station. Available reserves have to be large enough to cope with such an event in order to prevent the potential collapse of part of, or even the entire, supply system.
- As indicated, the trading in bilateral contracts, spot electricity and reserves is not conducted independently, such that they could be considered to fall into separate markets. Rather, given the very close interdependencies between them, with prices in one being influenced closely by trading activity in the others, the Commission considers

that the relevant market comprises all three. This market may be called the electricity generation and wholesaling market.

- The market is considered to be a national one. Although wholesale prices vary between nodes, the generation and transmission network connections between them ensures that none individually can be considered to constitute a separate market. Similarly, North Island prices are typically higher than South Island prices by 3-10%, reflecting the energy losses in transmitting electricity from south to north. However, this does not indicate separate markets in each of the Islands.
- 69 In terms of the temporal dimension of this market, pricing behaviour has to be viewed 'in the round' over a lengthy period, rather than on the basis of half-hourly pricing. In competition policy cases the objective of defining a market is as a first step in analysing the potential for dominance to be acquired or strengthened. Competition has to be considered over the long-run, during which time the potential for entry can be incorporated. The long-run period can vary widely between industries depending upon their particular characteristics. Because of the significant investments and resource consents needed for new generating capacity, the electricity industry is characterised by lengthy time delays before new entry can occur. Moreover, about one-third of generation capacity is provided by hydro stations with significant water storage reserves, which fill up in the spring and are typically held over to the following winter. Additionally, some users, such as those providing interruptible load, have an ability to switch demand between half-hourly periods. The Commission therefore considers it appropriate to define the temporal dimension of the market as being at least one year.
- Accordingly, in assessing the application, the Commission adopts the same market definition as in Decision 333 and has concluded that the relevant market in respect of electricity generation and wholesaling is the national electricity generation and wholesaling market.

#### National Electricity Retail Market

- The national electricity retail market is the market formed between retail suppliers on the one hand and end-users on the other. Until recently, the Commission considered that there were two such retailing markets: one for larger and medium-sized customers (ie: industrial and larger commercial) with half-hourly meters, which was regarded as contestable (users were not restricted to buying from the incumbent lines operator cum retailer); and one for small customers (ie: small commercial and households), with non-time-of-use meters, which was regarded as non-contestable. The former was thus a nation-wide market, while the latter was restricted to the area covered by the distribution network of the incumbent retailer.
- Most recently, in Decision 333, the Commission considered the changes which have occurred, and which are continuing to occur, with respect to electricity retailing, and the implications for defining the relevant markets. The Commission was, and remains, satisfied that:
  - "... there is clear evidence of electricity suppliers being able to switch supplies between different categories of consumers, including small consumers, depending on market opportunities. Suppliers do not appear constrained to supplying limited geographical areas or to supplying to consumers on particular networks only. Small consumers now have, or will

have in the near future, a choice of suppliers. This situation increasingly matches that of larger consumers. Therefore the Commission concludes that it is no longer appropriate to define discrete markets for the supply of delivered electricity to small consumers and to medium and large consumers. This view is based on the new dynamics in the marketplace arising from:

- the lowered barriers to new entry due to the separation by legislation of electricity lines businesses and supply businesses;
- the emergence of significant new players in the marketplace who have signalled their intention to compete against incumbent retailers; and, most significantly,
- the Government's stated commitment to ensuring that small electricity consumers benefit from competition, and its expectation that deemed profiling be introduced (either by the industry participants or, if necessary, by itself) in the near future.<sup>21</sup>
- Accordingly, in assessing the application, the Commission adopts the same market definition as in Decision 333 and has concluded that the relevant market in respect of electricity retailing is the national electricity retail market.

## **Defining Relevant Gas Markets**

- The business activities carried out by TransAlta and Contact which are related to gas and relevant to the application comprise:
  - TransAlta's distribution of gas in Lower Hutt;
  - TransAlta's wholesaling of gas;
  - TransAlta's retailing of gas;
  - Contact's wholesaling of gas; and
  - Contact's retailing of gas.
- In the past five years, the Commission has determined five significant applications involving the gas sector:
  - Decision 270, Natural Gas Corporation of New Zealand Limited and Enerco New Zealand Limited, 22 November 1993 (section 67 application);
  - Decision 272, Enerco New Zealand Limited and Progas Systems Limited, 22 December 1993 (section 67 application);
  - Decision 302, Powerco Limited and Egmont Electricity Limited, 21 July 1997 (section 67 application); and
  - Decision 330, Natural Gas Corporation of New Zealand Limited and Powerco Limited, 11 November 1998 (section 66 application); and
  - Decision 333, Contact Energy and Enerco New Zealand Limited, 10 December 1998 (section 66 application).
- 76 These Decisions have led to the Commission defining the relevant gas markets as:
  - the national gas production market; D270
  - the market for the transmission of natural gas in the North Island; D330
  - various gas distribution markets corresponding to the networks owned by various distributors; D270, D272, D302

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<sup>&</sup>lt;sup>21</sup> Decision No. 333, para 40

- the North Island gas wholesale market, encompassing sales to gas retailers and to medium and large consumers (ie: those consumers consuming more than 10 TJ per annum): D333 and
- various retail markets encompassing sales of gas to small consumers (ie: those consumers consuming less than 10 TJ per annum), geographically defined by the boundaries of the local gas distribution networks. D333, D330
- The applicant has adopted the Commission's market definitions, namely, the national electricity generation and wholesaling market, the national electricity retail market, the North Island gas wholesale market, and discrete geographic markets for the retailing of gas to small consumers.
- 78 The proposed acquisition does not materially impact upon the national gas production market, the market for the transmission of natural gas in the North Island or, directly, any distribution market. Therefore, these markets are not considered further.
- The Commission considered in Decision 333 whether changes occurring in the industry affected the remaining market definitions, and, particularly, whether discrete geographic markets were appropriate for considering acquisitions affecting retail gas sales. The Commission concluded that:

"At this time the Commission is not satisfied that supply-side substitutability for small consumers is sufficiently likely or sufficiently immediate to justify changing its previous view of defining discrete markets for the retailing of gas to small consumers. The Commission will monitor future developments closely to assess whether it will be appropriate to adopt different market definitions in the future." (para.57)

- The Commission does not consider that there have been material changes in the industry in the short time since Decision 333 was issued to warrant adoption of different market definitions.
- 81 TransAlta and Contact currently retail or distribute gas in:

Table 1	Incumbent Gas Retailer	Incumbent Electricity Retailer	Distribution Network Owner	
Auckland Central	Contact	Mercury Energy Ltd	NGC	
Auckland North	Contact	TransAlta	Qest NZ Ltd/ UnitedNetworks Ltd	
Manawatu	Contact	Contact	Qest NZ Ltd	
Hawke's Bay	Contact	Contact	Qest NZ Ltd	
Horowhenua	Contact	Contact	Qest NZ Ltd	
Lower Hutt	TransAlta	TransAlta	TransAlta	
Wellington	Contact	TransAlta	Qest NZ Ltd	

- 82 No aggregation of business activities will occur in Auckland Central. Therefore that region is not considered further.
- 83 Contact's position in gas retailing in the Manawatu, Hawke's Bay, and Horowhenua regions was considered in Decision 333. The Commission concluded that Enerco was dominant in these markets but that the acquisition by Contact resulted in a "bare

transfer" of that dominant position to Contact. The Commission considered additional issues raised by the acquisition, such as access to gas meters, reconciliation terms, and the loss of inter-fuel competition, but concluded that no acquisition or strengthening of dominance resulted in those markets. Therefore, these markets are not considered further.

Aggregation of business activities will occur as a result of the proposed acquisition in Auckland North (the North Shore), and in Wellington. While there is no aggregation of TransAlta's and Contact's business activities in the Lower Hutt region, there is potential for concern, for instance in respect of any loss of cross-border competition in the Lower Hutt/Wellington regions.

## Conclusion on Gas Markets

- The Commission concludes that the following gas markets need to be considered in terms of the application:
  - the North Island gas wholesale market, encompassing sales to gas retailers and to medium and large consumers (ie: those consumers consuming more than 0.01 petajoules per annum); and
  - two retail markets encompassing sales of gas to small consumers (ie: those consumers consuming less than 0.01 petajoules per annum), geographically defined by the boundaries of the gas distribution networks owned by Qest New Zealand Ltd (Qest) and UnitedNetworks Ltd in the North Shore region and by Qest in the Wellington region.

## **Relevant Markets - Summary**

- 86 The Commission has concluded that the following are the relevant markets for considering the application:
  - the national electricity generation and wholesaling market;
  - the national electricity retail market;
  - the North Island gas wholesale market, encompassing sales to gas retailers and to medium and large consumers (ie: those consumers consuming more than 0.01 petajoules per annum) (the wholesale market); and
  - two retail markets encompassing sales of gas to small consumers (ie: those consumers consuming less than 0.01 petajoules per annum), geographically defined by the boundaries of the gas distribution networks owned by Qest and UnitedNetworks in the North Shore region and by Qest in the Wellington region (the North Shore and Wellington gas retail markets).

#### **COMPETITION ANALYSIS**

- 87 The competition analysis assesses competition in the relevant markets in order to determine whether the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of **dominance**.
- 88 Competition in a market is a broad concept. It is defined in section 3(1) of the Commerce Act as meaning "workable or effective competition". In referring to this definition the Court of Appeal said:<sup>22</sup>

"That encompasses a market framework which participants may enter and in which they may engage in rivalrous behaviour with the expectation of deriving advantage from greater efficiency."

### 89 Section 3(9) of the Commerce Act states:

"For the purposes of sections 47 and 48 of this Act, a person has ... a dominant position in a market if that person as a supplier ... of goods and services, is or are in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market and for the purposes of determining whether a person is ... in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in a market regard shall be had to-

- (a) The share of the market, the technical knowledge, the access to materials or capital of that person or those persons:
- (b) The extent to which that person is ... constrained by the conduct of competitors or potential competitors in that market:
- (c) The extent to which that person is ... constrained by the conduct of suppliers or acquirers of goods or services in that market."

#### The Dominance Test

90 Section 47(1) of the Commerce Act prohibits certain business acquisitions:

"No person shall acquire assets of a business or shares if, as a result of the acquisition, -

- (a) That person or another person would be, or would be likely to be, in a dominant position in a market; or
- (b) That person's or another person's dominant position in a market would be, or would be likely to be, strengthened."
- 91 The test for dominance has been considered by the High Court. McGechan J stated:<sup>23</sup>

"The test for 'dominance' is not a matter of prevailing economic theory, to be identified outside the statute."

. . .

"Dominance includes a qualitative assessment of market power. It involves more than 'high' market power; more than mere ability to behave 'largely' independently of competitors; and more than power to effect 'appreciable' changes in terms of trading. It involves a *high degree* of market control."

<sup>&</sup>lt;sup>22</sup> Port Nelson Limited v Commerce Commission (1996) 3 NZLR 554, 564-565

<sup>&</sup>lt;sup>23</sup> Commerce Commission v Port Nelson Ltd (1995) 5 NZBLC 103,762 103,787 (HC)

Both McGechan J and the Court of Appeal, which approved this test,<sup>24</sup> stated that a 92 lower standard than "a high degree of market control" was unacceptable.<sup>25</sup> The Commission has acknowledged this test:<sup>26</sup>

> "A person is in a dominant position in a market when it is in a position to exercise a high degree of market control. A person in a dominant position will be able to set prices or conditions without significant constraint by competitor or customer reaction."

#### 93 The Commission's Business Acquisitions Guidelines state:

"A person is in a dominant position in a market when it is in a position to exercise a high degree of market control. A person in a dominant position will be able to set prices or conditions without significant constraint by competitor {or} customer reaction."

"A person in a dominant position will be able to initiate and maintain an appreciable increase in price or reduction in supply, quality or degree of innovation, without suffering an adverse impact on profitability in the short term or long term. The Commission notes that it is not necessary to believe that a person will act in such a manner to establish that it is in a dominant position, it is sufficient for it to have that ability." (p21)

#### 94 The applicant has stated:

"Accordingly, in determining whether or not the merged entity would be dominant, the lesser test of 'substantially lessening of competition', applicable to a section 27 investigation, is irrelevant. Neither would the increased possibility of collusion be relevant under section 47 since the Commission is required to consider whether or not the merged entity, or any other person, would be dominant as a consequence of the transaction, not whether the market would be more or less competitive as a result of the merger."27

- 95 The Commission concurs with the applicant's comments.
- 96 The role of the Commission in respect of an application for clearance of a business acquisition is prescribed by the Commerce Act. Where the Commission is satisfied that the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of a dominant position in a market, the Commission must give a clearance. Where the Commission is not satisfied, clearance is declined.
- The Commission applies the dominance test in the following competition analysis. 97

## The National Electricity Generation and Wholesaling Market

- 98 An examination of concentration in a market often provides a useful first indication of whether a merged firm may or may not be constrained by others participating in the market, and thus the extent to which it may be able to exercise market power.
- 99 The Business Acquisitions Guidelines specify certain "safe harbours" which can be used to assess the likely impact of a merger in terms of s 47 of the Act -

"In the Commission's view, a dominant position in a market is generally unlikely to be created or strengthened where, after the proposed acquisition, either of the following situations exist:

<sup>&</sup>lt;sup>24</sup> Commerce Commission v Port Nelson Ltd (1996) 5 NZBLC 104,142 104,161 (CA)

<sup>&</sup>lt;sup>25</sup> Commerce Commission v Port Nelson Ltd (1995) 5 NZBLC 103,762 103,787 (HC) and Commerce Commission v Port Nelson Ltd (1996) 5 NZBLC 104,142 104,161 (CA)

<sup>&</sup>lt;sup>26</sup> Business Acquisition Guidelines, Section 7

<sup>&</sup>lt;sup>27</sup> Memorandum to the Commission from Bell Gully Buddle Weir dated 3 February 1999.

the merged entity (including any interconnected or associated persons) has less than in the order of a 40% share of the relevant market;

the merged entity (including any interconnected or associated persons) has less than in the order of a 60% share of the relevant market and faces competition from at least one other market participant having no less than in the order of a 15% market share." (p 17)

100 These safe harbours recognise that both absolute levels of market share and the distribution of market shares between the merged firm and its rivals is relevant in considering the extent to which the rivals are able to provide a constraint over the merged firm. The Commission went on to state that:

"Except in unusual circumstances, the Commission will not seek to intervene in business acquisitions which, given appropriate delineation of the relevant market and measurement of shares, fall within these safe harbours."

Although, in general, the higher the market share held by the merged firm, the greater the probability that dominance will be acquired or strengthened (as proscribed by s 47 of the Act), market share alone is not sufficient to establish a dominant position in a market. Other factors intrinsic to the market structure, such as the extent of rivalry within the market and constraints provided through market entry, also typically need to be considered and assessed. Indeed, various electricity industry participants have suggested that special characteristics of the industry mean that market share alone is not an adequate indicator of market power. For example, the common ownership of certain power stations and transmission constraints may place a generator in a position of market power that is not evidenced by its market share. The Commission will consider traditional measures of dominance first, including market shares and barriers to entry, and then go on to examine possible scenarios within the context of the electricity industry in which market power approaching the high degree of market control required for dominance might emerge.

#### Market Concentration

Table 2 shows approximate market share data by generator based on generation capacity and output, and assuming the future split of ECNZ into Hydro Energy Ltd (Hydro Energy), Waikato SOE Ltd (Waikato SOE) and Genesis Power Ltd (Genesis Power). It shows the approximate shares that those generators would have held based on known plant capacities, actual generation volumes for the years ended March 1997 and March 1998, and assessed generation volumes as included at paragraph 9.7 in the application.

Table 2: Electricity Generation Market Share Data

Generator	Capacity MW <sup>28</sup>	%	NZIER's Assessed Volume <sup>29</sup> GWh	%	Output YE March 1997 <sup>28</sup> GWh	%	Output YE March 1998 <sup>28</sup> GWh	%	TransAlta Annual Assessed Volume <sup>30</sup> GWh	%
TransAlta	465	6	3000	7	317	1	968	3	4180	12
Contact	2034	25	11000	26	7257	21	9329	27	9512	27
Combined TransAlta/Contact	2499	31	14000	33	7574	22	10297	30	13692	39
Hydro Energy	2355	29	13000	31	12547	37	12237	35	12886	36
Waikato SOE	1056	13	5000	12	4934	15	3781	10	3562	10
Genesis Power	1552	19	7000	17	7015	20	6512	19	2652	7
TrustPower	279	4			1416	4	1145	3	1096	3
Others	357	4	3000 <sup>31</sup>	7	809	2	1038	3	1819	5
Total	8098	100	42000	100	34295	100	35010	100	35707	100

- 103 When comparing the actual output for the year ended March 1998 and the assessed volume included in the application, the increase in market share of the combined TransAlta/Contact and the decrease in market share of Genesis Power is accounted for by the introduction of Contact's Otahuhu B plant since the year ended March 1998. The production from these new gas fired plants has mostly affected the output from Genesis Power's Huntly plant.
- One important qualification to these estimates involves the inclusion of the long-term Comalco contract with Hydro Energy, which amounts to about 4,500 GWh per annum. It could be argued that this contract is special because it is a physical contract for a very large quantity of electricity of a very long duration with special transmission arrangements with Transpower. This contract will not be open to competition from any other generator, and therefore falls outside the defined market. If it were to be excluded from Table 2, the market share of the merged entity would, in terms of TransAlta's estimates, increase from 39% to 44%. The effect on the market share data of excluding Comalco's contract with Hydro Energy for approximately 4,500 GWh per annum is shown in Table 3.

<sup>&</sup>lt;sup>28</sup> Data collected directly from generators by the Commission.

<sup>&</sup>lt;sup>29</sup> Market share assessed by NZIER (see section 6.2.1 of the NZIER Report). Whereas the market share data provided in the application corresponds to current demands and outputs, NZIER's estimate represents its assessment of competition in the "medium" term as the surplus in generating capacity is absorbed as the economy grows. Contact and Genesis Power are both expected in the medium term to produce more thermal power.

TransAlta's market share assessment (at paragraph 9.7 of the application) is supplied by Energy Link Limited, an independent consultancy.

<sup>&</sup>lt;sup>31</sup> Includes TrustPower.

Table 3: Electricity Generation Market Share Data Excluding Comalco's Contract with Hydro Energy

Generator	Capacity MW	%	NZIER's Assessed Volume GWh	%	Output YE March 1997 <sup>3</sup> GWh	%	Output YE March 1998 <sup>3</sup> GWh	%	TransAlta Annual Assessed Volume GWh	%
TransAlta	465	6	3000	8	317	1	968	3	4180	13
Contact	2034	25	11000	29	7257	24	9329	31	9512	31
Combined TransAlta/Contact	2499	31	14000	37	7574	25	10297	34	13692	44
Hydro Energy	2355	29	8500	23	8047	27	7737	25	8386	27
Waikato SOE	1056	13	5000	13	4934	17	3781	13	3562	11
Genesis Power	1552	19	7000	19	7015	24	6512	21	2652	8
TrustPower	279	4			1416	5	1145	4	1096	4
Others	357	4	3000	8	809	2	1038	3	1819	6
Total	8098	100	37500	100	29795	100	30510	100	31207	100

- The market share figures in Table 3 indicate that, even using the most conservative post-acquisition scenario (that is, TransAlta's market share assessment included in the application and excluding the Comalco contract), the proposed merger is just outside the Commission's first safe harbour of 40%, but well inside the second of 60% (plus at least 15% for the next largest firm).
- 106 The market share figures, in themselves, do not suggest that the proposed acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position.

#### Barriers to Entry

- 107 Even where a firm has a large market share, its ability to exercise market power might be constrained if entry barriers are low, allowing new firms to enter should prices rise much above the competitive level. A number of factors need to be considered in relation to new entry in electricity generation. The consensus appears to be that substantial new entry is most likely to be in the form of gas-fired combined cycle plants, which can be built on a relatively small scale, relatively quickly and involving less capital-intensive technology than most other types of plants. The technology is widely available and the capital outlay involved is within the ability of many large firms or joint ventures to finance. Entry is thus relatively easy from a technical perspective, although the need to obtain resource consents is likely to delay the process.
- 108 However, such plants are unlikely to be built without the assurance of long-term gas supply and electricity off-take contracts, about which there is currently some doubt. Presently, gas prices appear to be too high to make entry attractive, given the recent level of electricity prices. The latter probably reflect the current substantial excess generating capacity, amounting to at least 5,000-6,000 GWh, or around 15% of the current output of about 35,000 GWh pa. In recent years there has been a significant amount of new generating capacity built, although this has not necessarily been profitable.

- 109 It seems unlikely that major new investments in generation will occur for several years at current and anticipated prices and demand levels. Prices are likely to be constrained to some extent by surplus capacity, albeit of relatively high cost marginal thermal stations.
- The extent to which the threat of entry would be likely to constrain the merged entity can be assessed using the 'LETS' test<sup>32</sup>, which considers the likelihood, extent, timeliness and sustainability of entry. Entry is likely once prices rise to equal the long-run marginal cost of new investment in generation. It is generally accepted that prices are currently below that level, at least partly because of existing substantial excess capacity. Nonetheless, if an existing participant were to succeed in exerting market power leading to a significant rise in prices, a new entrant would have an incentive to enter, given access to gas, and users would have an incentive to enter into long-term contracts with it to gain a lower priced source of supply. Entry is likely to be on a significant scale, given the "lumpy" nature of generation plant. Such entry is also likely to be timely in the context of the electricity sector, which is characterised by long-term investments to increase capacity in line with the secular growth in demand, and sustainable, given the "sunk" nature of such investments.
- Hence, the Commission concludes that the potential for new entry will act as a constraint on the exercise of market power by an otherwise dominant firm.

## The PHB Study

- A modelling study on the electricity industry carried out by PHB has attempted to estimate the potential market power impacts of a merger between TransAlta and Contact (the PHB report). The model examines the possible market power implications of such a merger in both the electricity wholesale and retail markets, although the principle focus is upon the wholesale spot market.
- The Commission notes that the proposed acquisition is a 40% shareholding in Contact, and as such does not amount to a merger between TransAlta and Contact.
- 114 To test the possible impact of a TransAlta and Contact merger on the spot price, the PHB report uses the "DUBLIN" model developed recently by ECNZ with the support of PHB and the Energy Modelling Research Group at the University of Canterbury. The model, currently in prototype form only, attempts to incorporate the structure and market interactions between participants in the New Zealand wholesale electricity market. Each participant owns a portfolio of generation plant together with a possible fixed price hedge contract for part of its output. Each is assumed to act independently to maximise its profit, subject to the outputs of the other participants, the level of market demand, capacity limitations over the HVDC link, and water inflow data for each hydro station. A difficulty (which the model shares with others) is that it is based on the split of ECNZ into three new entities, which is yet to occur.

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<sup>&</sup>lt;sup>32</sup> Business Acquisition Guidelines, p19

<sup>&</sup>lt;sup>33</sup> Market Power in the Electricity Sector – Final Report Prepared for NZ Ministry of Commerce, 1 February 1999. The PHB report is the product of the modelling study commissioned by the Ministry of Commerce to look at market power in the electricity industry focusing on the sale of Contact, as advised to the Commission by the Minister in his letter of 18 January 1999 (see Appendix 4).

- 115 In the model, a key feature of the wholesale market equilibrium where market demand equals market supply – is that it is a Cournot-Nash equilibrium. The Cournot pricing model is commonly employed by economists to analyse pricing outcomes in oligopoly markets. Because an oligopoly market comprises a small number of relatively equally matched firms, these firms are interdependent, in the sense that one firm's output or pricing decision has an impact on the others, who are likely to react in some way. The Cournot model makes the analysis of oligopoly market outcomes tractable by adopting the simplifying behavioural assumption that each firm sets its output in the belief that all of the other firms do not react by changing their outputs. If firms behave in this way (despite observations to the contrary) there is a single market price and quantity at which equilibrium will be achieved, in the sense that each firm will be maximising its profits, and its belief about the others' behaviour will be correct (Nash equilibrium). Compared to the outcomes in the same market under either competition or monopoly, this equilibrium will result in a price lower than under monopoly but higher than under competition, and a quantity in a similarly intermediate position between those two extremes. The market shares of the individual firms will be the same if their costs are the same; otherwise, the lower cost firms will have the larger market shares.
- The model's assumption of a Cournot-Nash equilibrium is critical to the ensuing merger analysis. In a Cournot pricing model the merger of two of the players automatically leads to a reduction in industry output and to an increase in market price. The PHB model reveals that there is nothing particular to the electricity industry in New Zealand which changes that result: when Contact and TransAlta merge, output shrinks and price rises by 4-5%. While this outcome might appear to suggest enhanced market power of a merged TransAlta and Contact, it actually reflects the interactions between the smaller number of players in the market, each seeking independently to maximise its own profits but, through the behavioural assumption, being unable to perfectly co-ordinate their output decisions. Hydro Energy, in a report prepared by the LECG calculates that, in the PHB model, profits for a merged TransAlta and Contact would decline. This is consistent with merger outcomes under the Cournot assumption.
- 117 Even if the model's predictions were proved to be accurate, this exhibition of enhanced market power by a group of oligopolists would not be evidence of a dominant position having been acquired or strengthened. As discussed above, dominance under the Act refers to single firm dominance, and a dominant position in a market refers to a firm being able to exercise a "high degree of market control". The outcome suggested by the PHB model seems to stop short of that threshold.
- The PHB also uses as a "simple indicator" of market power the firm's "generation at risk". This attempts to measure the ability of a firm acting alone to push up the wholesale price of electricity by withholding some of its generating capacity. A low level of generation at risk arises when all other generators are base-loading their plant, and a large proportion of the firm's capacity is needed to meet the resulting residual demand. In this scenario the firm is in a position to control the price on that block of capacity as the market has no other sources of supply available, and if demand is inelastic, only a small reduction in output may raise the price significantly. On the other hand, if the residual demand is very small in relation to the firm's generating capacity ("high" generation risk), the firm will have little market power because it would have to withdraw most of its capacity to have any impact on price.

- 119 A problem with this indicator is that it depends upon other generators operating at full capacity. In applying it to the merger, PHB assume that all plant aside from the controllable thermal stations operate at mean capacity. The merger causes the merged entity's market power to increase, possibly because of its control over certain critical thermal stations. All firms' market power rating tends to increase over the period to 2003/04, presumably as the result of market demand increasing. This illustrates a further problem with the measure: only one firm at any time can exert market power through generation risk, and it is not clear what factors determine which firm that will be, especially in the context of an oligopolistic wholesale market.
- The PHB report also attempts to infer an increase in market power by measuring the impact on seller concentration of a merger between Contact and TransAlta. Seller concentration is measured by the Herfindahl-Hirschman Index (HHI), which is computed by summing the squares of the percentage market shares of all of the firms in the market. The HHI reaches a maximum value of 10,000 with pure monopoly, and a minimum value of close to zero when there are an infinite number of tiny firms. A merger of TransAlta and Contact would cause the HHI to rise by 624 points from 2,370 to 2,994. Under the United States Department of Justice merger guidelines,<sup>34</sup> the pre-merger value of 2,370 puts the industry in the "highly concentrated" (most sensitive) category, and the merger-induced rise in the HHI by 624 points vastly exceeds the minimum increase of 100 points for that category beyond which the merger is likely to be challenged by the Department of Justice because market power becomes a concern.
- 121 Clearly, a merger between Contact and TransAlta would be very likely to trigger antitrust concern in the United States. However, the threshold for anti-merger policy in that country under the Clayton Act is a "substantial lessening of competition", which is a lower threshold than the dominance threshold under the Commerce Act.
- 122 The Commission is bound by the Commerce Act and by court precedents on dominance set under that Act. Comparisons with thresholds in overseas merger regimes are interesting but are not directly relevant to its decision making.<sup>35</sup>

## Market Specific Issues

Some industry participants have raised with the Commission features of the electricity generation and wholesaling market which may lead to a merged TransAlta and Contact eroding competition. They have argued that the market has certain characteristics which allow market power, if not dominance, to be exerted at market shares within the safe harbours. This possibility would appear to underlie the Government's concerns about aggregations in the industry, as expressed in its December 1998 statement to the Commission under section 26 of the Commerce Act. The Commission will now consider possible market specific issues which are not obvious from its analysis of market shares and barriers to entry, and which might lead to a merged entity gaining a

<sup>&</sup>lt;sup>34</sup> US Department of Justice, "Merger Guidelines - 1992", *Trade Regulation Reporter*, CCH, 1992, pp. 20,569-20,574.

<sup>&</sup>lt;sup>35</sup> Previous Commission merger decisions are examined within the framework of the HHI and the US merger guidelines in the following study: Nathan Strong, "A Study of the Commerce Commission's Evaluation of Applications for Business Acquisition Clearances and Authorisations, 1991-96", Occasional Paper No. 8, Wellington: Commerce Commission, 1998, pp. 22-23, 41-43.

"high degree of market control". The Commission notes that the proposed acquisition is a 40% shareholding in Contact and as such, does not amount to a merger between TransAlta and Contact.

## Gaming

- A key feature of behaviour in the market is the potential for generators to 'game', or to behave strategically. This potential appears to arise from the small number of players, the stepped nature of the electricity supply curve (which reflects the discrete volumes of output produced by different power stations at widely differing marginal costs), the inability of the industry to hold inventory, and the market demand curve which fluctuates through each day, week and season. If there were many plants and owners, the pricing outcomes through the NZEM would tend to mimic the competitive market outcome. The presence of only a few players bidding repeatedly under conditions which are at least partially predictable might be expected to give rise to strategies which lead to prices often exceeding the competitive level. Indeed, this would support the outcomes of the PHB modelling study.
- The New Zealand Institute of Economic Research (NZIER), advising the applicant, gives possible examples of gaming. A firm with generating capacity at different points on the stepped supply curve might, by withholding low cost capacity, push the demand curve to intercept supply on a higher step, thereby forcing up the clearing price. This would be profitable providing it was not undermined by another firm expanding its production, and the higher price on the lower output offset the revenue lost on the capacity withheld. Another possible strategy is where the firm is confident that its plant will be at the margin. It might then raise its offer to just below the level anticipated from the next most efficient plant on the dispatch order, thereby forcing up the clearing price. Again, this strategy might be frustrated by the owner of that plant anticipating such a move, and lowering its offer so as to move that plant to become the marginal station.
- Gaming appears to be a 'natural' feature of the NZEM, given its oligopolistic structure of supply. If the application involved a merger between TransAlta and Contact rather than the acquisition by TransAlta of a 40% shareholding in Contact, then the issue would be whether the potential for gaming, with consequential higher prices, would be enhanced, and if so, whether this would create dominance.
- 127 By way of background, it has to be recognised that power stations have different modes of operation. Base-load plant the geothermal and 'run of river' hydro stations are designed to run continuously. Peak demand during the winter, and the daily morning and evening peaks, are usually met by the other hydro stations together with the higher cost thermal stations. The fluctuating demand means that different stations are likely to be on the margin at different times.
- Some submissions contend that, given the current overall supply and demand conditions, the marginal station is often likely to be, in ascending order of cost, Taranaki Combined Cycle (TCC), Otahuhu B (currently being commissioned) and Huntly. This is particularly so during times of low demands or when water is abundant, because thermal stations lower down on the dispatch order are then able to set the marginal prices. The first two of these plants are modern, low cost operations with marginal costs said to be around \$10-12/MWh (although TCC suffers from its remoteness from major load

centres, which leads to significant line losses), whereas Huntly is an older plant with an estimated marginal cost of around \$28-32. This substantial difference in marginal costs is thought to provide scope for the owners of TCC and Otahuhu B to bid up the price to just short of Huntly's likely bid, but the fact that the two are currently owned by different players introduces a measure of uncertainty: if one bids too high, it could be undercut by the other, resulting in it not being dispatched.

- It has also been contended that as TransAlta owns one-third of TCC, and Otahuhu B is owned by Contact, a merger between the two could remove that area of uncertainty, allowing them more often to game up the price. However, this could only happen when primarily TCC is at the margin; at other times the opportunities for gaming through this mechanism would not be present. Even then, given the nature of the bidding process through the NZEM, and the scope for other bidders to behave in unpredictable ways, it appears to be difficult for one bidder to ensure that its plant is the marginal plant.
- Even if gaming is possible, it is necessary to consider by how much the price might increase as a result of gaming, and for what proportion of the year that price increase might apply. This involves comparing two hypothetical situations: the market after the split of ECNZ, and the market after the split of ECNZ and any merger between TransAlta and Contact. NZIER has attempted such a modelling exercise using an electricity market model from Energy Link Ltd. NZIER estimates that the wholesale price could increase by \$10/MWh for 6% of the year. It converts that to an average wholesale price increase through a typical year of \$0.60/MWh, of perhaps 2-3%. NZIER concluded that, in the context of overall prices, the effects of this enhanced gaming ability are "de minimus".
- In response to questions raised by Commission staff, NZIER has indicated that such a gaming scenario is probably a 'worst case' one, because it assumes that each power station submits all of its capacity at a single price through the bidding process. In practice, each station bids at different prices for different blocks of its capacity, often starting with one block at a very low (even zero) price to ensure that the station is dispatched and therefore kept running. This results in each power station's supply curve being stepped. It would be very risky for a marginal station to bid all of its capacity at what it hopes will be the margin, with the intention of pushing up the price, because it may in the event bid too high and have none of its capacity dispatched. But the 'stepped bidding' strategy also has the effect of making it even more difficult for a given station to position its bid at the margin because the block of capacity involved will be relatively small.
- Other parties have recognised the potential for such a price effect to flow from a merger between TransAlta and Contact, but due to the many uncertainties in making future projections, have stopped short of suggesting what the size of the price effect might be. The market is so complex that such affects are difficult to quantify without the help of sophisticated models, and even those may be hindered by the difficulty of predicting the behaviour of the yet-to-enter new players in the newly restructured market.

The 6% figure is an average over a three year period: 1999, 9%; 2000, 5%; and 2001, 4%. Thus, the price raising effect will be larger in 1999, but smaller in the subsequent two years.

On current prices that may reduce to  $1\frac{1}{2}$ -2%.

- A further consideration is the long-term growth in the demand for electricity. Over time this will lead to a reduction in the proportion of the typical year when TCC and Otahuhu B are the marginal stations, and increase the proportion of the time when Huntly is marginal (until the supply curve based on the dispatch order changes with the introduction of new capacity). In the event of an actual merger between TransAlta and Contact, the gaming possibilities associated with joint ownership of these two stations would thus gradually be eroded over a period of several years.
- 134 The Commission notes that any price increases can only be sustained by the tacit collusion of other generators who refrain from expanding their outputs in order to keep the higher priced plants at the margin. Regardless of the size of the price increase, such behaviour is not characteristic of a market dominated by a single firm.
- 135 The Commission notes that the proposed acquisition is not a merger and Part II of the Commerce Act would apply to any conduct which resulted, or was deemed to result, in a substantial lessening of competition.

#### **Transmission Constraints**

- Another issue relates to transmission constraints. The Transpower transmission network operates under various technical constraints which could be manipulated by generators through the bids they make through the NZEM, given the locations of certain critical power stations in relation to those constraints. The critical constraints are the capacity of the HVDC link, the thermal constraint on Huntly, and the capacity of the central North Island transmission line (especially in summer). Significant and non-transitory differences in prices between regions can occur because of such transmission constraints.
- 137 Transmission constraints might be exploited by strategies of generators, especially where one has generation plants on both sides of a constraint. A merged TransAlta and Contact would be the only generator to own substantial generating capability on both sides of all of these constraints. It might, therefore, be able to bid in such a way as to trigger a transmission constraint, which could thereby enhance its market power in electricity spot trading.
- One line of reasoning suggests that a merged TransAlta and Contact could expand output from TCC and New Plymouth, putting pressure on the central North Island transmission line supplying the Auckland load centre and excluding Hydro Energy. To alleviate that pressure, and restore reactive power (volts), a power station close to the load centre might have to be dispatched even though it offered a high bid price. Otahuhu B is a likely candidate, providing it bid below Huntly. Moreover, in summer Huntly might be constrained by its thermal restraint related to the Waikato River. Modelling by LECG, on behalf of Hydro Energy, suggests, however, that this ploy would likely be undermined by the competitive reactions of Genesis Power and Waikato SOE. It should also be noted that Transpower has undertaken investments which partially alleviate capacity constraints to Auckland.
- 139 The Commission again notes that the proposed acquisition is not a merger and Part II of the Commerce Act would apply to any conduct which resulted, or was deemed to result, in a substantial lessening of competition.

### Reserves

- 140 Further scope for exercising market power might arise through trading in reserves. As noted earlier, reserves are supplied both by generators holding plant in reserve and by electricity users willing to provide interruptible load. Transpower's grid security policy requires that sufficient reserves be available to meet the single largest contingency on the generation and transmission system. Hydro Energy cites the case of the HVDC link which, if it is to operate at full capacity, requires about 530 MW of reserve to be available in the North Island (assuming the usual south-to-north flow) in case the link should fail. It explores the possibility that a generator which became dominant on the North Island side of the reserves market could raise the reserves price, which could have the effect of preventing cheaper South Island hydro power from being dispatched because the combined electricity plus reserves price might exceed the North Island electricity price.
- 141 The argument essentially is that dominance in reserves could give rise to market power concerns in spot electricity. However, given that trading in reserves and spot electricity are closely integrated, it is difficult to conceive how dominance in one could be achieved without dominance in the other. In any case, Hydro Energy believes that a TransAlta and Contact merger is unlikely to have a significant impact on the supply of reserves, for two reasons. Firstly, Contact's North Island stations and TransAlta's stations are either not suitable or are too expensive to supply reserves. Secondly, while the interruptible load provided by the customers of such a merger would amount to about 35-40% of the North Island's reserves, this would appear to be much below that required for dominance. Moreover, half of that comprises interruptible load provided by major users, who would be unlikely to bow to pressure from the merged entity to reduce their supply of reserves.
- 142 The Commission again notes that the proposed acquisition is not a merger and Part II of the Commerce Act would apply to any conduct which resulted, or was deemed to result, in a substantial lessening of competition.

## Conclusion on Market Specific Issues

- As has been indicated in the preceding discussion, a number of parties have investigated various ways in which a TransAlta and Contact entity might be able to exploit market power, leading to an increase in price above the level anticipated in the deregulated market in the absence of a TransAlta and Contact merger. At least one party has emphasised that it is difficult to predict all of the possible scenarios which might arise, and that there may be situations as yet not thought of by which market power could be exerted.
- 144 Having reviewed the predictions of various models, considered the scenarios suggested by several parties, and taking into account the continued application of Part II of the Commerce Act, the Commission is satisfied that the proposed acquisition would be unlikely to result in the acquisition or strengthening of a dominant position by any person in the national electricity generation and wholesaling market.

## Conclusion on the National Electricity Generation and Wholesaling Market

145 The Commission has considered market concentration, barriers to entry, and the market specific issues of gaming, transmission constraints, and reserves. The Commission has concluded that the proposed acquisition would not result, and would not be likely to result, in the acquisition or strengthening of a dominant position in the national electricity generation and wholesaling market.

## The National Electricity Retail Market

- 146 The recent reforms in the electricity sector, led by the introduction of the Electricity Industry Reform Act 1998 (the EIR Act), have a major impact on the analysis of actual or potential competition for electricity retailing to small consumers. These reforms include the development of the wholesale market, the separation of electricity lines and supply (retail and generation) businesses, and the planned introduction of deemed profiling.<sup>38</sup> One result has been a significant change in the ownership of incumbent electricity retailer franchises.
- 147 In the past the Commission has considered that electricity retailing to small consumers took place in a number of discrete geographic markets corresponding with each local distribution network. For the reasons outlined in Decision 333, the Commission is now of the view that electricity retailers are no longer constrained to supplying small consumers connected to their particular networks only. Accordingly, it has been considered appropriate to define a national electricity retail market.
- 148 Both TransAlta and Contact have been active acquirers of incumbent electricity retailer franchises and are both now major participants in the national electricity retail market. Aggregation will occur in this market as a result of the proposed acquisition:

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<sup>&</sup>lt;sup>38</sup> For a full discussion see Decision 333.

Table 4: Total Retail Electricity Sales

Year Ended March 1997 (Does not account for customers who have changed supplier by choice)

Company	Sa	les	
o samples.		Wh)	
Power New Zealand Limited	3,110		
Southpower Limited	2,530		
TransAlta New Zealand Limited	2,174		
Citipower Limited	136		
TransAlta		7,950	28.8%
United Electricity Limited	1,945		
Hawke's Bay Power Distribution Limited	704		
Tasman Energy Limited	410		
Counties Power Ltd	348		
Mainpower New Zealand Limited	337		
Electra (Horowhenua Energy Limited)	319		
Top Energy Limited	243		
Eastland Energy Limited	210		
Contact		4,516	16.4%
Combined Entity (associated persons)		12,466	45.2%
Waikato SOE Limited		4,264	15.5%
Genesis Power Limited		1,972	7.2%
TrustPower Limited		2,211	8.0%
Hydro Energy Limited		1,079	3.9%
Natural Gas Corporation		790	2.9%
Todd Energy		496	1.8%
Waitomo/King Country		257	0.9%
Currently Independent		520	1.9%
Very Large Customers (excluding Comalco)		3,500	12.7%
TOTAL		27,555	100.0%

Source: ANZ Securities (NZ) Limited, The New Zealand Electricity Sector, February 1998 Also see Appendix 5

149 Contact has also been active in its attempts to gain additional customers in areas, such as Auckland and Wellington, where it is not the incumbent electricity retailer. However, volumes of switching customers have been low with Contact gaining approximately [ ] customers. ECNZ (through First Electric), has been more successful, gaining approximately 15,000 consumers in the Auckland, Wellington, Bay of Plenty and Christchurch regions.

## Current Competition in the National Electricity Retail Market

- 150 Prior to the announcement of the electricity reforms, power companies were only competing for medium-sized customers outside a company's traditional supply area. The reforms have enhanced actual and potential competition for these customers.
- There are some regions where actual competition at present is limited or non-existent for small consumers. Smaller regions around New Zealand have not seen the arrival of competing electricity retailers and no retailer has announced firm plans to supply small consumers in these regions. However, First Electric, for instance, has indicated that it is likely to extend its retail activities to these areas during the current year.

The emerging major participants have been investing in significant organisational restructuring to re-focus their businesses on the new market, and to adjust for their acquisitions of additional electricity retailing businesses. The evolution of corporate branding, investment in call-centres, significant hiring of retail marketing expertise, and more timely resolution (in most cases) of line access agreements, all signify that national retailing of electricity will occur on a timely basis.

## Potential New Entry

- 153 In the past it has been considered that the constraints on new entry to electricity retailing markets arose primarily from lack of competition in the wholesale market, difficulty in negotiating a satisfactory use-of-system agreement with a distributor who was the incumbent retailer, and the cost of time-of-use meters. These constraints were particularly significant for new retailers seeking to compete in the domestic segment of the market.
- 154 It is considered that these constraints on entry have been, or soon will be, substantially removed by the recent industry reforms. In particular, deemed profiling will remove the need for time-of-use meters, while the distributor will no longer have an incentive to deter new entry.<sup>39</sup>
- A number of those who have been successful in purchasing existing retail businesses to date (eg: TransAlta, Contact, ECNZ, and TrustPower Ltd) have substantial generation assets. They have indicated that they are seeking to reduce their forward risk as generators by acquiring retail customers, thereby securing predictable demand.
- The Commission believes that potential new entry will not be limited to electricity generators, although in the short term, they may be prepared to pay higher prices for existing retail businesses than non-generators. It has been widely reported that some in the industry believe that it is necessary to have at least 400,000 customers to operate a fully efficient national retail operation. Even if this is so, the Commission believes that there is still considerable scope for 'niche' retailers to enter the market to concentrate on particular classes of customers.
- 157 It has also been suggested that retailers could obtain economies of scope and other commercial advantages by being able to offer natural gas along with electricity. Contact, for instance, acquired Enerco's gas customer base in order to give it a significant entry point to retail electricity competition on a North Island-wide basis. The Natural Gas Corporation (NGC) has also entered the national electricity retail market with its acquisition of the electricity retail business of WEL Energy Ltd.

## Conclusion on Current State of Competition in the National Electricity Retail Market

158 The Commission considers that the electricity industry reforms have substantially removed the constraints on competitive activity, and on new entry to the national electricity retail market. Having regard to current and potential competitive activity in this market to consumers of all sizes, the Commission concludes that no firm is currently dominant.

<sup>&</sup>lt;sup>39</sup> See Decision 333 for a full discussion.

## Impact of the Proposed Acquisition on Competition in Electricity Retailing

- As associated persons, the combined entity will have approximately 45.2% market share, by GWh sales, of the national electricity retailing market. Waikato SOE Limited will become the second largest participant with an approximately 15.5% market share. Waikato SOE has hydro generation capacity and is the incumbent retailer in four, geographically diverse, regions.
- 160 TrustPower, holds approximately 8.0% market share and appears committed to being a major participant in the national electricity retail market. While its opportunities to grow through acquisition are becoming more limited, it has significant international backing, and has recently significantly increased its generation capacity with the purchase of the Coleridge, Matahina, and Highbank power stations from ECNZ. Genesis Power holds approximately 7.2% market share and also has significant generation assets (primarily the Huntly gas powered generator). It has a strong regional retail presence in the New Plymouth and central North Island regions.
- The proposed acquisition will result in the largest market participant, TransAlta, being associated with the second largest market participant, Contact. While the combined entity's market share is within the 'safe harbours' as specified in the *Business Acquisitions Guidelines*, low barriers enable the entry of new competition, and constraint from current competitors exists, additional consideration must be given to:
  - the effect of vertical integration;
  - constraints from suppliers;
  - constraints from acquirers; and
  - the loss of TransAlta/Contact competition.
- As associated persons, TransAlta and Contact will have a generation capacity well matched to their expected retail sales. While it will still be necessary for TransAlta to purchase electricity from other suppliers, TransAlta will potentially gain a degree of independence by, for example, entering into supply contracts with Contact. Thus some degree of vertical integration can result from the proposed acquisition. However, if supply of electricity is readily available to other entities, TransAlta will remain exposed to market competition in the national electricity retail market. The level of vertical integration it can achieve will assist in controlling some business risk, but will not isolate or protect it from vigorous retail market competition. The proposed acquisition does not vest enough additional market power in TransAlta to see it approaching a level of dominance in the national electricity retail market.
- Hydro Energy has a significant imbalance between its generation capacity (≈8,500 GWh pa) and expected retail sales (≈1,100 GWh pa). While it may or may not choose to compete strongly in the national electricity retail market, it is available to supply electricity to other parties who may wish to do so. Genesis Power is in a similar position with generation capacity of approximately 7,000 GWh pa and expected retail sales of approximately 2,000 GWh pa. Together they represent generation capacity of

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<sup>&</sup>lt;sup>40</sup> Its annual generation capacity (≈1,400 GWh pa) represents approximately 64% of its expected retail sales (≈2.200 GWh pa).

<sup>&</sup>lt;sup>41</sup> Both generation and retail numbers exclude Comalco.

approximately 12,400 GWh pa, well in excess of TransAlta's total expected retail sales of approximately 8,000 GWh pa. Clearly, suppliers to the national electricity retail market are in a position to constrain TransAlta by either competing directly themselves, or by providing supply to others who choose to do so.

- Traditionally, individual acquirers (consumers) have had virtually no ability to constrain their electricity supplier. With the arrival of competition in the national electricity retail market, and particularly with the advent of deemed profiling, are individual consumers will have choice. While it appears that, currently, consumers are reluctant to switch suppliers (ie: 'sticky'), this may be due to their concern over entrusting supply of such a critical product as electricity to new, 'unknown', companies. As public awareness and confidence in suppliers increases, and competition arrives at the consumers 'door-step', they are likely to be less reluctant to exercise their ability to switch suppliers.
- 165 Contact has entered the Wellington and Auckland regions, competing for customers against the incumbent electricity retailer, TransAlta. Such competition is likely to continue, notwithstanding the acquisition by TransAlta of a 40% shareholding in Contact. Additionally, it is likely that further competition in these regions will develop as other participants in the national electricity retail market (for example, First Electric) enter these regions. Therefore, no significant concerns arise in the national electricity retail market as a result of the proposed acquisition.

Conclusion on The National Electricity Retail Market

166 The Commission has concluded that the proposed acquisition would not result, and would not be likely to result, in the acquisition or strengthening of a dominant position in the national electricity retail market.

<sup>&</sup>lt;sup>42</sup> See Decision 333 for a full discussion.

#### The North Island Gas Wholesale Market

- Transactions in this market involve the acquisition of natural gas by resellers and by medium and large end users (ie: those who take in excess of 0.01 petajoules per annum). In some instances resellers on-sell to other resellers. In other instances those who acquire gas principally for their own use sell any gas which is surplus to their requirements to other end users or resellers. It is considered that the potential for buyers in this market to switch suppliers and to trade amongst themselves means that they all face common market conditions and can be considered within the one wholesale 'market'.
- 168 TransAlta states that it is not engaged in selling gas to re-sellers, but does sell gas to large consumers. Contact sells gas to re-sellers but has limited involvement in sales to large consumers. When Contact acquired the gas retailing assets of Enerco (Decision 333), contracts with large consumers (ie: those who take in excess of 0.05 petajoules per annum), were excluded and were retained by Qest.
- The Commission considered the level of competition in this market in Decisions 330 and 333. In Decision 330 the Commission assessed separately total sales in the market and also divided those sales into sales to resellers and sales to large end users, and took into account anticipated changes in the forthcoming year. The information in the following tables updates the information used in Decisions 330 and 333 and takes account of the mergers of NGC and Powerco and Contact and Enerco's retail natural gas interests. The table shows sales in the wholesale market but exclude sales to subsidiaries and associated companies.

Table 5: Combined Sales	Petajoules	%
TransAlta	[ ]	[ ]
Contact	[ ]	[ ]
<b>Combined Entity</b>	[ ]	[ ]
NGC	[ ]	[ ]
Shell/Todd	[ ]	[ ]
ECNZ	[ ]	[ ]
Qest	[ ]	[ ]
Year ended 30 June 1998	70.6	100.0

- 170 The proposed acquisition would result in some minor market aggregation in the wholesale market. However, the combined entity's market share would place it well within the 'safe harbours' specified in the *Business Acquisitions Guidelines*. Apart from TransAlta and Contact, NGC, Shell/Todd, ECNZ, and Qest (within the constraints contained in its agreement with Contact on the sale of Enerco to Contact) will continue to compete in the market.
- New entry to the market will be principally dependent on access to gas and satisfactory access to transmission and distribution networks. As discussed in Decisions 330 and 333, these are not considered to be substantial barriers to entry.

172 The Commission concludes that the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of a dominant position in the North Island gas wholesale market.

### The Retailing of Gas in the North Shore and Wellington Markets

### **Current Competition**

- 173 At present Contact is the only supplier in the market for the retailing of gas (ie: the selling of gas to small consumers) in the North Shore region. TransAlta, through its acquisition of Power New Zealand's electricity retailing assets, is the incumbent retailer of electricity in the same region.
- 174 Contact is the incumbent supplier of gas in the Wellington region, though TransAlta is also a supplier to some Wellington consumers. TransAlta is the incumbent electricity retailer in Wellington. In the neighbouring Lower Hutt region, TransAlta owns the gas distribution network (which it is currently in the process of selling), is the incumbent supplier of gas, and is the incumbent supplier of electricity.
- 175 In Decision 330 the Commission considered that the relevant gas retail market was not then competitive. The Commission reassessed the level of competition in Decision 333, albeit in a different set of retail markets and, similarly, considered them not to be competitive.

"At this time however, the development of competition is less certain in respect of gas than with electricity. Competition for small gas consumers is in its infancy. The split between distribution and retailing, which might encourage the entry of new retailers, is not as certain as it is with electricity. The Government has not placed the same pressure on the gas sector to put in place a deemed profiling regime (although there are signs that one is being developed anyway). At present there are fewer firms indicating an interest in competing for gas retail customers, possibly because of the smaller size of the market."

176 There is no material evidence to distinguish the North Shore and Wellington retail gas markets from those considered in Decisions 330 and 333. Therefore, Contact, as the incumbent supplier of gas, is considered to be dominant in both these retail gas markets.

## Impact of the Proposed Acquisition

177 Contact is currently the dominant participant in the North Shore and Wellington retail gas markets, as is TransAlta in the Lower Hutt retail gas market. Contact ([ ]% market share) and, to a significantly lesser extent, TransAlta ([ ]% market share) are also participants in the upstream wholesale gas market, but as neither have dominance in that market, vertical integration concerns are not raised by the proposed acquisition.

178 TransAlta has stated it is in the process of selling its gas distribution business in the Lower Hutt region. If such a sale were completed, the proposed acquisition would not create any concerns in relation to vertical integration between gas retailing and gas distribution activities. If the sale did not occur, TransAlta's dominant position in both

<sup>43</sup> Delivered natural gas to small commercial and domestic consumers connected to Powerco's natural gas distribution network.

<sup>&</sup>lt;sup>44</sup> Sales of gas to small consumers geographically defined by the boundaries of the gas distribution networks owned by Enerco in the Hawke's Bay and Horowhenua regions.

gas retailing and gas distribution activities in the Lower Hutt region would be unchanged. The proposed acquisition of Contact, with its greater role in the upstream wholesale gas market, would not add materially to TransAlta's position such as to strengthen or be likely to strengthen the combined entity's dominant position in the Lower Hutt retail gas market or the Lower Hutt gas distribution market.

There are three other matters which have been considered closely when assessing the competitive impact of mergers affecting retail gas markets that should also be considered in relation to the proposed acquisition. These are the ability of competitors to access TransAlta's or Contact's meters, the ability of TransAlta or Contact to prevent new entry by not agreeing reconciliation terms, and the possible lessening of inter-fuel competition. Additionally, it is necessary to consider any loss of cross-border competition for retail gas sales between the Lower Hutt and Wellington regions.

#### Access to Gas Meters

- 180 Contact owns the gas meters in all regions (including the North Shore), in which it retails gas. TransAlta owns the gas meters in the Lower Hutt region. The Commission considers that if terms of access to an existing meter were unreasonable, it is possible that it could lead to that meter being stranded, at a cost to the owner. It is more likely that the competitor would be deterred by the cost of a replacement meter, at a cost to competition in the market. Accordingly, if TransAlta or Contact imposed unreasonable access terms, it would be at risk under Part II of the Commerce Act.
- Neither TransAlta nor Contact would have a greater incentive or ability to deny access to its meters as a result of the proposed acquisition than at present. Accordingly, access to meters is not considered to be materially affected by the proposed acquisition.

## Reconciliation Terms

With its acquisition of the gas retailing assets of Enerco by Contact, Enerco (now Qest) agreed not to provide distribution services to another retailer until the terms of reconciliation have been agreed with Contact. At the time of Decision 333, Contact stated:<sup>45</sup>

"It is a condition of Enerco's Distribution Agreement that all gas retailers (including Contact) also execute the Reconciliation Agreement.

The Distribution and Reconciliation agreements require installation of time of use meters for customers using greater than 10 TJ per annum. For customers using less than 10 TJ, time of use meters can be installed, or the 'Reconciliator' can grant approval of a usage profile for those customers. The Reconciliator is the network company.

The requirement to install time of use meters does not apply to the incumbent retailer (Contact) who will assume the residual network connection point demand.

The agreements do not provide Contact with the right to veto the application of a reconciliation profile. The acceptance or otherwise of a profile is made by the Reconciliator who will need to be satisfied the usage profile proposed substantially reflects the customer's actual gas take."

183 If a reconciliation agreement unreasonably deterred competition, it would be at risk under the Commerce Act whether the responsibility for such an agreement lay with Contact, TransAlta, or Qest. However, as with the matter of access to meters, it is not

<sup>&</sup>lt;sup>45</sup> Letter from Contact to the Commerce Commission dated 7 December 1998.

considered that TransAlta or Contact would have a greater ability or incentive to impose anti-competitive reconciliation terms than would Contact if the proposed acquisition did not proceed. Accordingly, it is not considered that anti-competitive access terms are made more likely by the proposed acquisition.

## Loss of Inter-fuel Competition

- Following on from the Commission's conclusion in Decision 333, it is considered that as TransAlta and Contact are operating in a competitive national electricity retailing market, they would, as gas retailers, face inter-fuel competition from independent electricity retailers in the same way as at present.
- 185 The Commission also considered in Decision 333 a further issue relating to inter-fuel competition. That was, the use of the superior information on the demand characteristics of individual consumers which may be available to a retailer who services the gas and electricity requirements of the same consumers.
  - "A firm which has a dominant position in gas retailing, and is then acquired by an electricity retailer operating in the context of low substitutability between gas and electricity, may, through the information gained from customers' electricity demands, be able more effectively to exploit its market power in gas retailing. Theoretically it would be possible to use this information to extract larger monopoly profits and in the process create a loss of allocative efficiency in the market. However, the Commission considers that such additional information is unlikely to create more than the potential for a *de minimus* increase in dominance from the proposed acquisition."
- 186 The Commission considers that, similarly, there would be no loss of the constraint of inter-fuel competition on dominance in gas retailing as a result of the proposed acquisition.

## Cross-Border Competition

- TransAlta is the owner of the gas distribution network and the incumbent gas retailer in the Lower Hutt region. Contact is the incumbent gas retailer in Wellington. It is possible that, as a result of the proposed acquisition, TransAlta would no longer have the incentive to attempt to extend its gas distribution network from Lower Hutt into the Wellington region. This could result in the loss of cross-border competition between TransAlta and Qest, the owner of the gas distribution network in Wellington. However, any collusive behaviour between TransAlta and Contact which resulted, or was deemed to result in any substantial lessening in competition, would be subject to Part II of the Commerce Act.
- 188 If TransAlta completes the sale of its Lower Hutt gas distribution network, this concern would be satisfactorily addressed.
- 189 TransAlta's position in the Lower Hutt region is not affected by the proposed acquisition. It remains the dominant gas distribution network owner and the dominant gas retailer.
- 190 The Commission considers that there would not be or would not be likely to be any strengthening of a dominant position by any person as a result of any loss of cross-border competition if the proposed acquisition were to proceed.

# Conclusion on the Retail Gas Markets

191 The Commission concludes that the proposed acquisition would not result, or would not be likely to result, in an acquisition or strengthening of a dominant position in the North Shore or Wellington retail gas markets.

## **CONCLUSION**

- 192 The Commission has considered the impact of the proposal in five relevant markets:
  - the national electricity generation and wholesaling market;
  - the national electricity retail market;
  - the North Island gas wholesale market, encompassing sales to gas retailers and to medium and large consumers (ie: those consumers consuming more than 0.01 petajoules per annum); and
  - two retail markets encompassing sales of gas to small consumers (ie: those consumers consuming less than 0.01 petajoules per annum), geographically defined by the boundaries of the gas distribution networks owned by Qest and UnitedNetworks in the North Shore region and by Qest in the Wellington region.
- 193 Having regard to the factors set out in section 3(9) of the Commerce Act and all the other relevant factors, the Commission is satisfied that the proposal would not result, or would not be likely to result, in TransAlta or any other person acquiring or strengthening a dominant position in a market.

# DETERMINATION ON NOTICE OF CLEARANCE

Accordingly, pursuant to section 66(3) of the Commerce Act 1986, the Commission gives clearance for the acquisition by TransAlta Corporation of Canada, or any interconnected body corporate, of a 40% shareholding in Contact Energy Limited.

Dated this 12 <sup>th</sup> day of February 1999
The Commission

# APPENDIX 1: PRINCIPAL BUSINESS ACTIVITIES OF TRANSALTA NEW ZEALAND LTD

<b>Electricity Generation and Wholesaling</b>	Electricity Retailing	Electricity Distribution Network	Natural Gas Retailing	Natural Gas Distribution Network
TransAlta owns a 47.5% interest in the Southdown Co-generation Joint Venture which owns the 131 MW Southdown gasfired power station in Auckland.  The output from Southdown is sold under long-term fixed price contract to Mercury Energy Limited.  TransAlta owns a 33½ interest in the "Taranaki Combined Cycle Partnership", which has built, and now owns and operates, a 376 MW gas fuelled power station in Stratford, Taranaki. The output from TCC is sold at long-term fixed prices to Mercury Energy (176 MW), Fletcher Challenge (76 MW), and TransAlta (76 MW). TransAlta has the right to purchase the remaining two-thirds of TCC and is currently talking to the other two parties involved (Mercury Energy and Fletcher Challenge).  TransAlta owns a 46.5% interest in the 1.7 MW Silverstream landfill site in the Hutt Valley which uses landfill gas to produce electricity.  TransAlta has entered into a conditional contract to acquire the Rotokawa Geothermal Power Station from United Networks Limited (formerly Power New Zealand Limited).	TransAlta has electricity retail contracts with a number of large use, half hourly metered customers throughout New Zealand.  TransAlta is the incumbent supplier of electricity to non half hourly metered customers in the Wellington region, being Lower Hutt, Upper Hutt, Porirua and Wellington cities, formerly owned by EnergyDirect Limited and Capital Power Limited. In addition, TransAlta has recently purchased electricity retailing businesses, including meters and metering equipment and trade marks from Southpower Limited (Christchurch region) and Power New Zealand Limited (North Shore and Waitakere in the Auckland region).	· ·	TransAlta supplies gas to customers, mainly in the Lower Hutt area of the Wellington region.	
TransAlta owns 25% of Pacific Energy Limited which purchases and sells electricity on behalf of its customers at the wholesale level.				

# APPENDIX 2: PRINCIPAL BUSINESS ACTIVITIES OF CONTACT ENERGY LTD

(New Zealand based only)

Electricity Generation and Wholesaling	Electricity Retailing	Natural Gas Wholesaling	Natural Gas Retailing
Wholesaling  Contact owns and operates the Clyde and Roxburgh hydro stations, the Wairakei and Ohaaki geothermal stations, and the New Plymouth, Stratford, Otahuhu and Whirinaki gas-fired power stations.  Contact sells the electricity generated from these stations (approx. 8,000-9,000 GWh per annum) into the New Zealand Electricity Market (NZEM).  Contact trades hedge contracts (contracts for differences) referenced to the NZEM electricity clearing price. These contracts are typically with existing electricity retailers and large electricity consumers connected directly to and supplied from the Transpower grid.  Contact is also the joint venture partner with the New Zealand Co-operative Dairy Company to develop at Te Rapa one of the largest co-generation gas-fired electricity plants (45 MW) in New Zealand. The joint venture agreement also covers supply of electricity and gas to other New Zealand Co-operative Dairy	Contact has electricity retail contracts with a number of large use, half hourly metered customers.  Contact has recently purchased or has contracted to purchase electricity retailing businesses from the following companies, including both non half hourly metered customers and half hourly metered customers:  United Electricity Limited;  Hawke's Bay Power Distribution Limited;  Tasman Energy Limited;  Mainpower New Zealand Limited;  Horowhenua Energy Limited;	Contact has the rights to approximately 43% of the contracted gas from the Maui field, and rights to 100% of the contracted gas from the Tariki, Ahuroa and Waihapa ("TAW") fields.  Contact has supply contracts with Fletcher Challenge Gas Investments Limited and Fletcher Challenge Limited (for the Taranaki Combined Cycle power station), ECNZ, Enerco and Powerco.  Contact has one contract with a major end-user customer (supplying above 10TJ) supplied directly from the transmission system, being the New Zealand Dairy Group.	On 28 October 1998, Contact and Enerco New Zealand Limited entered into an Agreement for Sale and Purchase of Business Assets whereby Contact agreed to acquire Enerco's gas retailing business in the Auckland, Hawke's Bay, Manawatu, Horowhenua and Wellington regions. The acquisition included customer contracts for approximately 112,500 connections, installed meters, book debts, trade marks (including "Enerco"), and business records and telephone numbers.  However, Enerco (now Qest) retained its large retail customer supply contracts; that is, customers who consume over 50 TJ of gas per annum.

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Commerce Commission, PO Box 2351 Wellington, New Zealand, or direct dial +64 4 498 0929 fax +64 4 471 0771.

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# **APPENDIX 3: SECTION 26 STATEMENT**

# **APPENDIX 4: MINISTER'S LETTER**

# **APPENDIX 5: ELECTRICITY RETAILING COMPANIES**

## **Total Electricity Sales and Customer Numbers**

Year Ended March 1997 (Does not account for customers who have changed supplier by choice)

Company	Sales		Number of	
	(GWh)		Customers	
Power New Zealand Limited	3,110		226,529	
Southpower Limited	2,530		156,227	
TransAlta New Zealand Limited	2,310		142,358	
TransAlta New Zealand Limited	7,950	28.9%	515,900	31.6%
Mercury Energy Limited	4,264		251,155	
ECNZ (Waikato)	4,264	15.5%	251,155	15.1%
United Electricity Limited	1,945		124,000	
Hawke's Bay Power Distribution Limited	704		55,800	
Tasman Energy Limited	410		29,000	
Counties Power Limited	348		30,000	
Mainpower New Zealand Limited	337		23,500	
Electra (Horowhenua Energy Limited)	319		35,300	
Top Energy Limited	243		24,400	
Eastland Energy Limited	210		19,800	
Contact Energy Limited	4,516	16.4%	341,800	20.6%
CentralPower Limited	576		51,000	
Powerco Limited	1,190		84,300	
Wairarapa Electricity Limited	206		20,500	
Genesis Power (ECNZ Huntly)	1,972	7.2%	155,873	9.4%
TrustPower Limited	1,166		93,600	
Waipa Power Limited	236		19,700	
Otago Power Limited	234		14,700	
Westpower Limited	174		11,400	
Buller Electricity Limited	88		4,200	
Electricity Ashburton Limited	259		13,200	
Wairoa Power Limited	54		5,500	
TrustPower Limited	2,211	8.0%	118,800	7.2%
Northpower Limited	750		44,100	
Waitaki Power Limited	163		12,200	
ScanPower Limited	88		6,700	
CHB Power Holdings Limited	78		7,800	
Hydro Energy (ECNZ SI)	1,079	3.9%	70,800	4.3%
WEL Energy Group Limited	790		67,265	
Natural Gas Corporation	790	2.9%	67,265	4.0%
Bay of Plenty Electricity Limited	496		22,636	
Todd Energy	496	1.8%	22,636	1.4%
Waitomo Energy Services Limited	135		13,000	
King Country Energy Limited	122		9,726	
Waitomo/King Country	257	0.9%	22,726	1.4%
Central Electric Limited	266		18,900	
Marlborough Electric Limited	254		19,500	
Currently Independent	520	1.90%	38,400	2.3%
Very Large Customers	3,500	12.7%		
TOTAL	27,555	100.0%	1,661,204	100.0%

Source: ANZ Securities (NZ) Limited, The New Zealand Electricity Sector, February 1998