

Commerce Commission

Decision No. 397

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

SOLID ENERGY NEW ZEALAND LTD

and

FRANCIS MINING LIMITED

The Commission: M N Berry
P R Rebstock
E C A Harrison

Summary of Application: The acquisition by Solid Energy New Zealand Limited of the domestic retail customer base of Francis Mining Limited.

Determination: Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition.

Date of Determination: 4 August 2000

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THE PROPOSAL

1. In a notice to the Commission dated 23 June 2000, pursuant to section 66(1) of the Commerce Act 1986 (the Commerce Act), Solid Energy New Zealand Limited or a wholly owned subsidiary to be incorporated (“Solid Energy”) sought clearance for the acquisition of Francis Mining Limited’s (“Francis Mining”) domestic retail customer base. The proposal therefore relates to the assignment of contractual rights from Francis Mining to Solid Energy. Details of the contracts are outlined in Appendix A.
2. The contracts that are the subject of this clearance application, involve []
3. A related transaction to this proposed acquisition is the proposed sale of Solid Energy’s Island Block mine to Francis Mining. Solid Energy and Francis Mining have not sought clearance for this proposed acquisition.

THE PROCEDURE

4. The notice was received and registered on 26 June 2000. Section 66(3) of the Commerce Act requires the Commission either to clear or to decline to clear a notice given under section 66(1) within 10 working days, unless the Commission and the person who gave the notice agree to a longer period. An extension of 9 working days was sought by the Commission. A decision is therefore required by Friday 4 August 2000.
5. The applicant has not sought confidentiality for the application, or any information in the application.
6. The Commission’s determination is based on an investigation conducted by its staff. In the course of the investigation Commission staff obtained further information from the applicant, as well as from the other coal suppliers, and users of coal. These included Francis Mining Limited, A W Taylor Limited, Kenroll Limited, Heaphy Mining Limited, Morris Mines Ltd, Dunollie Mines Limited, New Vale Coal Limited, Ohai Coals Limited, Todd Energy Limited, New Zealand Oil and Gas Limited, Alliance Group, Canterbury Meat Packers Limited, Anchor Products Limited, PPCS, Canterbury Health, Bridgestone Firestone, Milburn Cement Limited, Golden Bay Cement Limited, Genesis Power Limited, BHP New Zealand Steel Limited, the Department of Conversation and the Westland Regional Council.

PARTIES

Solid Energy

7. Solid Energy is the state owned coal producer which has a large share of New Zealand coal production. It operates coal mines in all of the major coal producing regions in New Zealand; the West Coast, Southland/Otago and the Waikato region. Solid Energy exports approximately half of its annual production of about 2.5 million tonnes. The

coal exported is a high quality coking coal used by international steel makers. A price premium is obtained for these high quality products of which most come from its Stockton mine situated in the Buller coalfield on the West Coast.

8. In the year to 30 June 1999, Solid Energy was the 100th largest company in New Zealand in terms of sales revenue, with sales of \$159.9 million.¹ However, Solid Energy made a loss of \$86.6 million, which included unusual items. It has recently gone through a major restructuring process.
9. Solid Energy is organised into three business units: Solid Energy South, Solid Energy North and Solid Energy International. It is a vertically integrated organisation, which mines and processes coal, and markets and distributes it both domestically and internationally. The coal is sold under the 'Solid Energy' brand.

Francis Mining

10. Francis Mining is a privately owned company that is in the business of mine ownership and processing of coal, and marketing and distributing coal both domestically and internationally. Francis Mining contracts out its mining operations to an independent contractor.
11. Francis Mining owns the Roa mine at Greymouth, and the Echo, Hart Creek, Surprise, Topline and Welcome mines also in the Reefton area. It sells most of its coal to large domestic industrial users and to niche markets overseas where premiums are paid for high quality coal produced from some of its mines.

BACKGROUND

Introduction

12. Coal is a combustible, sedimentary, organic rock that is composed primarily of carbon, hydrogen and oxygen. It is formed from vegetation, which has been consolidated between other rock strata to form coal seams. It is altered by the combined effects of microbial action, pressure and heat over a considerable period of time.²
13. The physical and chemical characteristics of coal are determined by the nature of the original plant debris and the degree of chemical alteration of the debris. It is the original plant material and any biochemical changes it goes through prior to burial, which determine the coal type. The degree of geochemical alteration or coalification during burial determines the ranking of the coal.³

¹ "1999 Top 200 New Zealand Companies", Management, December 1999, 66.

² <<http://www.wci-coal.com>>

³ Edbrooke S, "Mineral Commodity Report 18 – Coal", New Zealand Mining, 1999, vol 25, 9.

14. The result of changes during coalification is a continuous but non-linear development of carbon with the increasing rank of the coal.⁴ Peat is very high in moisture and low in carbon content and is the lowest ranking coal. Peat is converted into lignite, a coal type with a low organic maturity. Over time the continuing effects of temperature and pressure produce additional changes in the lignite transforming it into a range of sub-bituminous coal. As the process continues, further changes occur until the coal becomes more mature and is classified as bituminous coal. Under the right conditions, the progressive increase in organic maturity continues to form anthracite.⁵
15. The degree of coalification of coal as it matures from peat to anthracite determines the coal's physical and chemical characteristics. Lower ranked coals, such as lignite and sub-bituminous are characterised by high moisture levels and a low carbon content. This results in a low energy content. Higher ranked coals are generally harder and characterised by increasing carbon and energy contents and decreasing moisture contents.⁶
16. Lignite and sub-bituminous coal accounts for approximately 48% of world reserves, whilst harder coals such as bituminous and anthracite account for 52% of world reserves.⁷ The lower ranked coals are used for power generation, cement manufacture and industrial process heating, whilst the higher ranked coals can also be used as a thermal coal or, if they contain the right properties, as a metallurgical coal or coking coal used in steel making.⁸
17. Coal is mined using two methods; surface or 'open cast' mining and underground or 'deep mining'. The type of method used is determined by the geology of the coal deposit. A large proportion of the world's coal reserves are recoverable by underground mining, and currently two thirds of hard coal production comes from underground mining. Surface mining recovers a higher proportion of the coal deposit than the underground mining methods. However, it is only economic when the coal seam is near the surface. The strata between the coal seams and the surface is called 'overburden', and it is the level of overburden that further impacts on the economics of mining. The level of overburden is determined by the 'strip ratio', which is the ratio of overburden to coal. A low ratio reduces mining costs.
18. Once the coal is mined it is processed to remove impurities such as rock and dirt, and cleaned and graded into uniform coal products suitable for the commercial market. The 'blending' of coal is a process whereby more expensive, higher quality supplies are mixed with lower quality coals to produce an average blend suitable for the particular user, at an optimum cost.

⁴ Ibid 10.

⁵ Op cit note 2.

⁶ Ibid.

⁷ Lignite 20%, sub-bituminous 28%, bituminous 51%, and anthracite 1%.

⁸ Coke is made from coking coal, which have certain physical properties that cause them to soften, liquefy and then resolidify into hard porous lumps when heated in the absence of air. The coal must also have low sulphur contents. They are generally more expensive than thermal coals because they are more scarce.

19. The effective preparation of coal prior to combustion improves the consistency of the coal supplied, reduces transport costs, improves the utilisation efficiency, and produces less ash and sulphur emissions.⁹

Global Coal Industry

20. Coal is the most abundant of all fossil fuels, with around one thousand billion tonnes of economically accessible coal reserves. These reserves are geographically diverse, spread over 100 countries. However the bulk of these reserves are in North America, Europe and the former Soviet Union. At 1998 production levels, coal reserves are sufficient to last over 200 years. Current reserve ratios of coal are approximately four times the reserves of oil and gas.¹⁰
21. The demand for energy is closely related to economic growth and standards of living.¹¹ During the period 1995 to 2020, the global demand for energy is forecast to increase by around 65%. Fossil fuels are expected to meet 95% of this additional energy demand.
22. In 1998, over 3,650 million tonnes of hard coal was produced, with the major producers being China, the United States, India, South Africa and Australia. Over the same period approximately 892 million tonnes of brown coal was produced, with the major producers being Russia, the United States, Australia and Poland.¹² Of the hard coal produced in 1998, 524 million tonnes (15%) were traded internationally. Australia and the United States were the largest exporters of hard coal with 167 and 71 million tonnes respectively. The largest importers of coal are Japan and Korea with 129 and 51 million tonnes respectively.¹³
23. There are essentially two different markets for internationally traded coal; the steam coal market for power generation and industrial steam uses, and the coking coal market. The steam coal market is where most of the growth is occurring in coal use, particularly in Asia. In the coking coal market, coal with special qualities is used as a chemical reductant as well as an energy source. This market is growing more slowly than the steam coal market, reflecting the slow growth in steel production. The coking market is stronger in Asia. Approximately 64% of the hard coal traded internationally was steam coal and about 36% was coking coal.
24. In the past five years, the price of hard coking coal has fallen approximately 26% from US\$52.50/t to US\$39.75/t. During the same period the international price of steaming coal decreased 28%, from US\$40.30/t to US\$29.00/t. These decreases in price were primarily caused by excess capacity and reduced demand resulting from the Asian economic crisis.¹⁴

⁹ Op cit note 2.

¹⁰ Ibid.

¹¹ The energy consumption per capita in North America it is 8.9 tce (tonne of coal equivalent), in Europe it is 4.45 tce and in the former Soviet Union it is 4.4 tce.

¹² Brown coal is a name used for lignite and lower quality sub-bituminous coal.

¹³ <<http://www.iea.org/stats>>

¹⁴ "Export Coal Outlook", AME Mineral Economics, February 2000, 2.

25. Globally, coal is the major fuel source used for electricity power generation, and more than half of the total world coal production provides about 37% of the world's electricity. Approximately 70% of steel production comes from iron made in blast furnaces using coal and coke.¹⁵

New Zealand Coal Industry

Introduction

26. The Crown Minerals Act 1991 (“the CM Act”) is the legislation governing the management and allocation of rights in respect of Crown owned minerals. The crown mineral estate consists of all the oil, gas, minerals and coal resources owned by the New Zealand Government. This includes all minerals on privately owned land, which are reserved to the Crown. If the Crown owns the mineral a permit is required from Crown Minerals, Ministry of Economic Development to prospect, explore or mine.
27. The CM Act provides that, before any person can prospect, explore or mine for Crown owned coal in New Zealand, that person must have been granted an appropriate permit or licence, authorising that activity. Since October 1991, permits have been granted under section 25 of the CM Act. Coal is defined in section 2 of the CM Act to mean “anthracite, bituminous coal, sub-bituminous coal, lignite, peat, and oil shale; and includes every other substance worked or normally worked with coal”.
28. Pursuant to the CM Act, the Minister of Energy has prepared a minerals programme for coal, that outlines the policies on which the government will base its management decisions, and the procedures that will be followed in implementing the policy. These programmes provide the conditions under which permits may be granted.
29. The fundamental policy objective established for the management of coal is to allow the continued investment in prospecting, exploration and mining of coal, which is in accordance with good exploration or mining practice. The Crown receives royalty payments for the coal extracted.
30. To obtain a permit, the applicant must have competencies in mining, have an identified resource, and be able to mine the resource in an effective manner. A resource consent must be obtained from the relevant regional council, and land access must be negotiated with the landowner.

Coal Resources

31. Coal is New Zealand's most abundant fossil fuel and has been an important energy source since the late nineteenth century. The total in-ground resource is estimated to be 15,563 million tonnes of which about 55% is recoverable.¹⁶ About 84% of the in-ground coal resource is situated in the South Island, most of it being lignite deposits in Southland. The North Island in-ground resource is mostly sub-bituminous coal. About 90% of the recoverable resource is situated in the South Island.

¹⁵ Op cit note 2.

¹⁶ Op cit note 3, at 12.

32. There is a wide variation in coal rank in New Zealand. Coal ranges from high moisture lignite situated in Southland to low volatile bituminous coal situated on the West Coast. Lignite and sub-bituminous coals are the most abundant, accounting for over 90% of the in-ground and recoverable resources.¹⁷
33. The main coal mining areas in New Zealand are the West Coast of the South Island, Southland and the Waikato region. The following table outlines the in-ground and recoverable resource for each of the main coalfields within these regions.

Table One
Coal Reserves of New Zealand

Region/Major Coalfields	In-ground Resource (Mt)	Recoverable Resource (Mt)
Waikato	2078	714
Huntly	1048	314
Others	1030	400
West Coast	984	343
Greymouth	544	164
Buller	193	118
Reefton	25	12
Others	222	49
Southland	9392	6256
Mataura	2940	1945
Ashers-Waituna	1357	746
Makarewa	1027	821
Others	4068	2774

Source: New Zealand Mining

34. Coal from the Waikato fields are sub-bituminous and vary from sub-bituminous C to the higher ranked sub-bituminous A, which is found in the Huntly fields.
35. There are about 13 coalfields situated on the West Coast, and all of New Zealand's bituminous coal is located within this region.
36. The Buller coalfield is New Zealand's largest producer of bituminous coal, with current annual production of 1.1 million tonnes ("Mt"). Six mines operate within this coalfield, but most of the production comes from Solid Energy's opencast mines at Stockton. Most of the high quality bituminous coal produced is exported. The coal rank in this area ranges from high volatile bituminous B rank in the Denniston and Upper Waimangaroa sectors to high-volatile bituminous A rank in the Mt William and Stockton sectors. The Stockton coal is a premium product on the export market, because of its low ash and sulphur characteristics and its high swelling characteristics.¹⁸
37. There are seven underground mines operating in the Greymouth coalfield at the moment. They produce an annual amount of 350,000 tonnes. Solid Energy's Strongman mine is the largest producer, accounting for a large proportion of total production from the area. Within the Spring Creek sector of the coalfield, a new

¹⁷ Ibid.

¹⁸ Barry J M, Duff S W, MacFarlan D A B, *Coal Resources of New Zealand* (Ministry of Commerce, Wellington, 1994) 41.

underground mine is being developed by a 50-50 joint venture between Solid Energy and Todd Energy. The mine is expected to initially produce up to 500,000 tonnes a year of high quality coking coal and steaming coal.¹⁹ The Greymouth coalfield is generally a high quality coal with low ash and sulphur contents. The coal rank increases from high volatile bituminous C in the west (Strongman mine) to low volatile bituminous coal in the east (Roa opencast mine). The western sector coal is categorised as a steaming coal, whilst the eastern sector coal with its high crucible swelling number, is considered a coking coal.²⁰

38. The Reefton and Garvey Creek coalfields contain about eight mines, which include a number of small opencast and underground mines. The coal rank varies from high volatile bituminous C in the Reefton coalfield to high volatile bituminous A-B rank in the Garvey Creek coalfield.²¹ The largest producing mines in this area are Francis Mining's Echo opencast mine (41,000 tonnes) near Garvey Creek, Solid Energy's Terrace mine (29,000t) near Reefton, and Solid Energy's Island Block opencast mine (22,000t) near Garvey Creek. Total production from this area in 1998 was approximately 170,000t.²²
39. The main coalfields in Southland are the Eastern Southland Coalfields and the Ohai coalfield. The Eastern Southland reserves are lignite rank and contain the majority of the region's resource. There are four opencast mines operating at present. The Goodwin mine (47,000t) and the Newvale mine (141,000t) are the largest producers of lignite, whilst Solid Energy's mine at Matura produced 34,000t of lignite in 1998.
40. The Ohai reserves range from sub-bituminous C rank to high volatile C bituminous rank. The Solid Energy Wairaki mine is the largest producer (146,000t) whilst smaller mines at Nightcaps and Mossbank produced 4,000t and 3,000t respectively. The coal produced is used for a range of industrial uses and is often blended with lower rank lignite coal because of its higher rank and low ash and sulphur content.
41. Coal is also produced in Otago with the main coalfield being the Kaitangata coalfield. The Kai Point mine is the largest producer with 1998 production of 44,000t. The coal rank ranges from lignite A to sub-bituminous C rank. The Otago region has a substantial in ground resource estimated at 2,721Mt of which 1,154Mt is considered to be recoverable.

Coal Production

42. Coal production during the year ending September 1999 was approximately 3.4Mt. Solid Energy is the largest coal producer accounting for about two thirds of total production. Approximately 44% of total coal production was exported in 1999, with Solid Energy being the major exporter. Japan is the largest purchaser of New Zealand coal (524,000t), whilst Chile (243,000t) and India (133,000t) were the next largest purchasers.²³

¹⁹ Christian P, "Coal Decision a Boon for Coast", The Press, 2 Sept 1999, 3.

²⁰ Op cit note 18, at 44.

²¹ Ibid 41.

²² *Analysis of New Zealand Industrial Coals 1999*, Coal Research Association of New Zealand, 1999.

²³ *Energy Data File January 2000*, (Ministry of Commerce, Wellington, 2000) 26.

43. Domestically, electricity generation (35.8%) and steel manufacture (32.5%) are the major consumers of coal. Other industrial uses accounts for approximately 19.5% of domestic consumption.²⁴

Environmental Issues

44. One of the current environmental issues relating to coal is the issue of greenhouse gas emissions. In December 1997, the parties to the UN Framework Convention on Climate Change agreed the terms of the Kyoto Protocol. The agreement identified a set of legally-binding greenhouse gas emission objectives for each industrialised country over the period, 2008-2012. These countries should, as a whole, achieve at least a 5% reduction in emissions from 1990 levels. New Zealand is required to achieve its 1990 emission levels. By the time of the 15 March deadline, 84 countries had signed the Protocol.
45. Greenhouse gases absorb more energy from outgoing infrared radiation than from incoming solar radiation. They have a similar effect to glass in a greenhouse. Greenhouse gases refer to carbon dioxide (CO₂), Methane (CH₄), nitrous oxide (N₂O), carbon monoxide (CO), other oxides of nitrogen (NO_x), and sulphur dioxide (SO₂) which also effects the atmosphere.²⁵ Both CO₂ and SO₂ are emitted from coal combustion.
46. In 1999, energy sector emissions accounted for over 90% of New Zealand's gross CO₂ emissions.²⁶ During the period 1990 to 1999, these emissions have increased by 19%, with the major contributing factors being the increased consumption of diesel and petrol for domestic transport, and the use of natural gas in electricity generation.²⁷
47. Within the energy sector, approximately 51% of CO₂ emissions are from liquid petroleum fuels with the main source being the transport sector. Natural gas made up 36% of emissions, whilst coal was responsible for 11%. Carbon dioxide emissions for coal actually decreased 7.47% (0.9%pa) during the period 1990 to 1999.²⁸
48. Of the industrial processes that use coal combustion, electricity generation and dairy processing are responsible for the highest levels of CO₂ emissions with 1,139kt and 516kt respectively. These two processes account for 54% of CO₂ emissions from coal. These two industries are amongst the largest users of coal and account for 56% of coal sales for combustion.²⁹ Other large industrial processes that use coal combustion are meat processing and cement manufacture.³⁰

²⁴ Ibid 29.

²⁵ Ministry of Economic Development, *New Zealand Energy Greenhouse Gas Emissions 1990-1999*, Ministry of Economic Development 2000, 156.

²⁶ These emissions include emissions from fuel combustion, production, storage and distribution.

²⁷ Op cit note 25.

²⁸ Ibid 76.

²⁹ The steel making process is also a large user of coal, however its primary use is as a reductant and not as an energy source.

³⁰ Op cit note 25, at 130.

49. The Minister of Energy has stated that New Zealand must take further action to reduce emissions if it is to meet its Kyoto Protocol commitments.³¹ Such action is likely to have some effect on the processes which are causing these emissions, the combustion of coal is included in this group. However coal has a low emission levels relative to other energy forms, and its emission levels have reduced from the 1990 base year.
50. An important component of the Kyoto Protocol is that CO₂ emissions will face a carbon charge, whilst CO₂ friendly activities like forestry will receive carbon credits, which can be traded. This will affect all processes that involve the combustion of fossil fuels. It is unknown what the price per tonne of CO₂ will be, however it has been estimated to be between NZ\$12/ a tonne and NZ\$30/ a tonne. These price increases would be equivalent to \$25 and \$63 per tonne of sub-bituminous coal.³²
51. The emissions trading scheme will increase compliance costs for industrial processes that use fossil fuels. In particular it will increase the price of coal relative to natural gas, increasing the competitiveness of natural gas. However its full effect is not yet known.
52. Coal accounted for 35% of SO₂ emissions in 1999, with liquid fuels accounting for 44%. During the period 1990 to 1999 sulphur dioxide emissions for coal decreased by 1.2% (0.1% pa).³³
53. Sulphur Dioxide emission levels are monitored by the relevant regional councils, and coal users must comply to ensure the issuance of a resource consent pursuant to the Resource Management Act 1991.

MARKET DEFINITION

Introduction

54. The purpose of defining a market is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition being considered. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in any market in terms of section 47(1) of the Act.
55. Section 3(1A) of the Act provides that:

“. . . the term ‘market’ is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them.”
56. Relevant principles relating to market definition are set out in *Telecom Corporation of New Zealand Ltd v Commerce Commission*,³⁴ *Commerce Commission v Carter Holt*

³¹ <http://www.med.govt.nz/ers/lastest_news/ghg1999.html>

³² “Energy Outlook To 2020”, Coal Research Newsletter 37, 1 and 4.

³³ Op cit note 25 at 104.

³⁴ (1991) 4 TCLR 473.

Harvey Building Products Limited,³⁵ and in the Commission's *Business Acquisition Guidelines* ("the Guidelines").³⁶ A brief outline of the principles follow.

57. Markets are defined in relation to three dimensions, namely product type, geographical extent, and functional level. A market encompasses products that are close substitutes in the eyes of buyers, and excludes all other products. The boundaries of the product and geographical markets are identified by considering the extent to which buyers are able to substitute other products, or across geographical regions, when they are given the incentive to do so by a change in the relative prices of the products concerned. A market is the smallest area of product and geographic space in which all such substitution possibilities are encompassed. It is in this space that a hypothetical, profit maximising, monopoly supplier of the defined product could exert market power, because buyers, facing a rise in price, would have no close substitutes to which to turn.
58. A properly defined market includes products which are regarded by buyers or sellers as being not too different ('product' dimension), and not too far away ('geographical' dimension), and are therefore products over which the hypothetical monopolist would need to exercise control in order for it to be able to exert market power. A market defined in these terms is one within which a hypothetical monopolist would be in a position to impose, at the least, a "small yet significant and non-transitory increase in price" (the "*ssnip*" test), assuming that other terms of sale remain unchanged.
59. Markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products takes place through a series of stages, which may be visualised as being arranged vertically, with markets intervening between suppliers at one vertical stage and buyers at the next. Hence, the functional market level affected by the application has to be determined as part of the market definition. For example, that between manufacturers and wholesalers might be called the "manufacturing market", while that between wholesalers and retailers is usually known as the "wholesaling market".

The Relevant Market

60. The Commission seeks to define relevant markets in a way which best assists the analysis of the competitive impact of the acquisition under consideration. In this case the subject of the application is Francis Mining's "domestic retail customer base". These retail customers comprise [] These firms receive coal under current contracts with Francis Mining and their plants are located between [] Each plant currently takes in excess of 1,000 tonnes per annum of sub-bituminous or bituminous coal under the contract with Francis Mining.
61. Coal from Solid Energy and Francis Mining is retailed to the household sector. However there is no aggregation of this activity from the proposed acquisition, therefore it has not been considered further below.
62. The applicant in this case has stated that the proposed acquisition will result in horizontal aggregation in ...

³⁵ Williams J, 18 April 2000, HC, yet to be reported.

³⁶ Commerce Commission, *Business Acquisition Guidelines*, 1999, pp. 11-16.

“the retail industrial energy market in the South Island area and, more particularly, the sale of coal to industrial users of coal in the South Island.”

The Product Market

63. The applicant has stated that:

“... coal is substitutable by other energy sources such as waste oil, oil, gas, wood waste (industrial use), wood (domestic use) and particularly electricity. An example of this is the Canterbury Meat Packers plant at Ashburton which is expected to convert from electricity back to coal, with coal being a cheaper option than electricity. The reverse could equally occur with other customers if the price was right.”

64. The Commission has given careful consideration in the past to claims that different energy forms fall within the one market. In particular it has considered claims that electricity can be readily substituted for natural gas and that this substitutability warrants placing both energy forms within the one product market. However, as the Commission noted in Decision 387 (NGC/TransAlta):

“The Commission recognised that while inter-fuel competition placed some constraint on each energy form it did not consider the constraint sufficiently strong to include electricity and gas in the same market.”

65. The Commission has sought information which is relevant to measuring substitutability between energy forms. This information includes how changes in the price of one energy form impacts on demand for other energy forms. However in the time available the information available on coal, in particular, has not been sufficiently comprehensive and robust to be particularly helpful.

66. Information obtained during the investigation of the application which is relevant to the product market question includes:

- For industrial users, coal is used for space heating, water heating and process heating. The advantage of coal over other energy forms is usually its price. However its disadvantages compared with other energy forms include high handling, freight, storage and possible environmental costs.
- As pointed out by Solid Energy in the application, there are examples where South Island industrial users have switched between electricity and coal. Canterbury Meat Packers plant at Ashburton was cited. However these examples appear relatively rare and come about through special circumstances.

[

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- All the major coal users spoken to stated that their energy form was determined in the medium term by the specification of their boilers. Within that term, and in the absence of special circumstances, it was not viable to change their energy form.
- Solid Energy has stated that the price of coal is generally higher in the North Island (where natural gas is available) than in the South Island (where gas is not

available, but competition between coal producers is generally stronger). This is consistent with the view that the constraint that natural gas places on coal is significantly less than the constraint coal producers in the same market place on each other.

67. The Commission recognises that these matters, by themselves, do not amount to conclusive evidence that the applicant is incorrect in suggesting an energy market. However, the Commission considers that in the absence of much more compelling information than has been provided to date, it is appropriate to take a conservative approach, and adopt a discrete coal product market.
68. The Commission has also considered whether the coal market should be broken down to various types of coal – bituminous, sub-bituminous and lignite, or possibly coking and thermal coal. There appear to be occasions when these different ranks of coal are readily substitutable for each other, and can be substituted by making minor modifications to boilers and other occasions when they are not. The determining factors are the types of steam boiler being used and the competitive position of each grade of coal in respect to transportation costs.
69. Generally, some types of boilers can more readily switch coal types than other types of boilers, and it is easier to switch from lower energy coals to higher energy coals. Generally, the changes that have to be made to boilers are commissioning changes and do not involve a high level of incremental cost.
70. Large industrial users of coal make purchase decisions based upon the energy content of the coal or the price per gigajoule. In Southland, where lignite and sub-bituminous coals are in a similar competitive position, the two ranks of coal can be substituted for each other by major users if the relative price of the coal, is increased by a significant but non-transitory amount. In the northern part of the South Island, sub-bituminous and bituminous coal can also be substituted for each other in response to similar price increases.
71. There is evidence that the different ranks of coal are closely competing with each other, and where the issue of transportation is neutral, each coal type can be substituted, and offers an effective constraint on the pricing decisions of producers.
72. For the purpose of the consideration of this application, all of the coal that is subject to this application is generally sub-bituminous or bituminous thermal coal and it is pragmatic to view the market and conduct an analysis on this basis. Most lignite is sold in the southern half of the South Island, while virtually all bituminous coking coal is exported.

The Geographic Market

73. In general coal is not transported between the North and South Islands, although it is recognised that coal from Francis Mining's mines is supplied to Golden Bay Cement in Whangarei and to McDonald's Lime in the King Country. As noted above, the price of coal in the North Island is higher than in the South Island.

74. It also appears that within the South Island, little coal from the southern coalfields goes north of Dunedin, and little coal from the West Coast coalfields goes south of Oamaru. Freight costs, which have been estimated to be around 50 percent of the total delivered cost of coal for this market, provide a barrier to greater movement of coal.
75. The Commission sought from Solid Energy information about pricing patterns for coal throughout the South Island, but it was unable to provide this information in the time available. Without this information, and without other information about the ability of Southland/Otago coal distributors to compete in the northern half of the island, the Commission proposes to be guided by product flows and to limit the geographic market to the northern half of the South Island. This is the conservative approach from the Commission's perspective, but is appropriate in the circumstances.

The Functional Market

76. As discussed above, the proposal relates to the contracts Francis Mining has with its industrial customers to distribute coal to them for a finite period. It does not affect the ability Francis Mining has to produce coal from its West Coast mines. The possible acquisition by Francis Mining of the Island Block mine from Solid Energy does not form part of this application for clearance.
77. It is considered that the functional market relevant to the application is the distribution market.

Conclusion on Market Definition

78. It is concluded that the relevant market for the consideration of the application is that for the distribution of sub-bituminous and bituminous thermal coal in the northern part of the South Island.

COMPETITION ANALYSIS

Introduction

79. 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**.

The Dominance Test

80. 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.”

81. 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.”

82. The test for dominance has been considered by the High Court. McGechan J stated:³⁷

“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*.”

83. Both McGechan J and the Court of Appeal, which approved this test,³⁸ stated that a lower standard than “a high degree of market control” was unacceptable.³⁹ The Commission has acknowledged this test:⁴⁰

“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.”

84. 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)

85. 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.

86. The Commission applies the dominance test in the following competition analysis.

³⁷ *Commerce Commission v Port Nelson Ltd* (1995) 5 NZBLC 103,762 103,787 (HC).

³⁸ *Commerce Commission v Port Nelson Ltd* (1996) 5 NZBLC 104,142 104,161 (CA).

³⁹ *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).

⁴⁰ *Business Acquisition Guidelines*, Section 7.

Market Concentration

87. 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.
88. 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:
 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)
89. 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.”
90. 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.

Impact of the Acquisition

91. The acquisition involves the purchase by Solid Energy of Francis Mining’s domestic customer base. This includes all those customers, which are themselves, end-users and which have supply contracts with Francis Mining. Those customers, which purchase coal off Francis Mining as required, or are distributors (such as AW Taylor) are not part of the agreement.
92. The Commission has been informed by the applicant that it intends to enter into a restraint of trade agreement with Francis Mining, and that this agreement will only relate to the contracts outlined in Appendix A. The Commission has been advised that the restraint is likely to preclude Francis Mining from competing for the contracts identified in Appendix A for five years and that it will not preclude supply by Francis Mining to independent distributors AW Taylor Limited and Kenroll Limited.
93. The Commission has been informed by the applicant that as yet the restraint of trade agreement has not yet been drafted, and that the matter is still subject to final commercial negotiation. In these circumstances, such representations about the form of

constraint that may be entered into take on the appearance of a behavioural undertaking which cannot form part of the clearance.⁴¹

Restraint of Trade

94. Following discussions with Francis Mining, the Commission has established that Francis Mining currently has [] that would be subject to the agreement. The collective coal tonnage from these contracts is []. The firms involved in these contracts are listed in Appendix A along with the expiry date of the contracts. It is noted that Francis Mining supplies coal to a large North Island customer, but this is not to be part of the proposed acquisition.
95. []
- [] To protect the user from breaks in supply there are also clauses for penalties if the supplier is unable to supply the specified coal for any reason. For these reasons, a firm currently under contract should not face any adverse affects from the acquisition or any substantial change in the supply of its coal while its contract is still in effect.
96. The Commission notes that it is only when the contracts are up for renewal, that the proposed acquisition could have any effect on competition. When the renewals occur within the restraint of trade period, Francis Mining will not be able to compete for that business.
97. As the agreement between the parties is not yet concluded, the Commission cannot assume that the restraint of trade will be limited in the way described in paragraph 91. Although it is unlikely on the basis of the advice given by the applicant to the Commission that the restraint will be wider in its reach, it is appropriate that the Commission should take a conservative approach and assume that the restraint may be wider and may preclude the ability of Francis Mining to supply other distributors (such as AW Taylor (“Taylors”) and Kenroll) who may compete for the contracts identified in Appendix A. This approach requires the Commission to test the ability of independent distributors (such as Taylors and Kenroll), to compete for this business using sources of supply other than Francis Mining and Solid Energy.
98. The issue of the legality of the restraint of trade is a matter which has not been considered in this decision and does not form part of the decision.

Market Shares

99. The market shares of the relevant market is set out in Table Two below. These estimates are based on approximate annual coal distributed in terms of tonnes and were provided by major suppliers to the market. There is no independent collation of such information.

⁴¹ Refer section 69A of the Commerce Act.

Table Two
Estimated market shares for the market for coal distribution in the Northern Part of the South Island

	Coal throughput (000 tonnes)	Market Share
Solid Energy	[]	[]
Francis (contracted)	[]	[]
Sub-total	[]	[]
Francis (uncontracted)	[]	[]
AW Taylor	[]	[]
Kenroll	[]	[]
Others	[]	[]
Total	[]	[]

100. The proposed acquisition will increase Solid Energy's market share from [] to []. Solid Energy will therefore be outside the Commission's safe harbours through the acquisition. As mentioned above, however, market share is only indicative of a firm's market power and other factors must be considered before a conclusion of dominance can be drawn.
101. AW Taylor will be the next biggest competitor with a market share of [], while Kenroll follows with a market share of []. Francis Mining will still remain in the market, albeit with a substantially smaller market share.

Constraint from Existing Competitors

102. Through market enquires the Commission has established that there are typically four tenderers for major industrial supply contracts. These are usually:
- Solid Energy
 - Francis Mining
 - AW Taylor
 - Kenroll
103. Solid Energy and Francis Mining differ from Taylors and Kenroll in that they both operate at the production level as well as the distribution level. Neither Taylors and Kenroll own any coal mines but purchase coal from various mines to serve customers.

104. Solid Energy's closest competitor in terms of market share will be Taylors. It purchases coal from a range of mines as required. Currently it sources a large amount of its coal from Francis Mining, and does not purchase any coal from Solid Energy. []
105. Taylors operates from Rolleston which is just outside Christchurch. From there, it supplies its industrial users in the Canterbury region. Taylors has operated in the Canterbury coal industry for a long time, and has the competencies to compete effectively. However, because it is a distributor only with no vertical integration, it is reliant on the availability of coal from coal producers to supply its customers. It is also substantially smaller than Solid Energy, and does not have access to the same level of resources.
106. The next largest competitor will be Kenroll. Kenroll operates in a similar way to Taylors, however on a considerably smaller scale than Taylors. Its location is also in Rolleston, next to Taylors. It also operates a relatively sophisticated coal blending facility at this site. Kenroll currently sources its coal from Solid Energy and Francis Mining. Its ability to remain competitive is dictated by its access to a supply of coal. These factors are discussed in paragraphs 122 and 123.
107. As noted, Francis Mining will still retain a presence in the distribution market, maintaining its supply to uncontracted customers, and competing for new customers if it is economic to do so.

Conclusion

108. Currently there are two existing competitors, Taylors and Kenroll, who have competencies in the sourcing, blending and distributing of coal in this market. These competitors have the ability to expand supply in the event Solid Energy increases prices by a small but significant non-transitory amount.

Constraint from Expansion and New Entry

Ability of Current Distributors to Expand Operations

109. The ability of incumbent firms to expand can serve as a constraint on a potentially dominant firm.
110. Commission staff have talked to the major distributors operating in the market, Taylors and Kenroll. Following discussions no significant barrier to expansion has been identified. Both these distributors have the ability to expand their sales significantly without incurring major capital expenditure. The key would appear to be access to coal suitable to meet the requirements of individual customers.
111. Commission staff have identified independent suppliers of the most popular types of coal. These include, Dunollie Coal Mines Limited ("Dunollie"), Cascade Mining Limited ("Cascade"), Morris Mines Limited ("Morris"), and Heaphy Mining Limited ("Heaphy"). All have indicated to Commission staff that they could readily expand output to meet increased demand from distributors or end users.

112. In addition, it is understood that a joint venture between Todd Energy and Solid Energy at Spring Creek, Greymouth, is likely to become operational by next year. It is presently producing development coal and expects to produce about [] tonnes per annum, by May 2001. []

This mine is projected to produce over 1 million tonnes of high quality sub-bituminous coal annually. If this comes to fruition, it will introduce a new source of high quality coal for distributors. []

113. Currently, Francis Mining and Solid Energy have ownership of the majority of West Coast coals, but there still exist a significant number of independent mines which a coal distributor can source from, refer paragraph 123. These mines do not tend to supply directly to users as they can typically only supply one type of coal. Often a user will have specific requirements and thus require a blend of different coals. Distributors serve the purpose of bringing the different coals of the mines together, and blend as required by the customer.
114. In Solid Energy's application, independent mining companies such as Cascade, Morris, and Heaphy were cited. Other independent mining companies include Dunollie and RJ & RJ Bank's Hutt Creek mine. Some of these mines hold contracts to supply direct to industrial users and are therefore operating in both the production and distribution markets. The Commission has considered their position and believes that they have the ability to expand and offer a competitive constraint to Solid Energy by increasing their production and supplying existing or potential independent distributors.
115. These independent mines produce the types of coals which can be blended to compete with Solid Energy for the contracts outlined in Appendix A. These mines have the ability to increase production and either directly supply the distribution market or supply an independent distributor.

Constraint from New Entry

116. In the Commission's view, a business acquisition is unlikely to result in a dominant position in a market if the threat of new entrants acts as a significant constraint on behaviour in that market. An assessment of the nature and extent of that constraint represents a key element of the Commission's assessment of competition and market dominance. Evaluation of the weight to be given to the possibility of new entry requires assessing the conditions of entry, and identifying barriers to entry. If these are onerous, the likelihood of new entry is diminished.

Capital Cost

117. The capital cost required by a new distributor wishing to enter the market does not appear to be significant and involves a low level of sunk cost. Both Taylors and Kenroll run operations outside of Christchurch which does not appear capital intensive. A moderate amount of land is required to stockpile coal as well as coal moving equipment.

Ability to Blend

118. A new entrant must have some ability and expertise in blending different types of coal. This is because many firms have specific needs for coals, which can only be achieved by drawing characteristics from several different types. In particular, Christchurch users such as [] must have a reasonably high calorific value but low sulphur to comply with regional by-laws concerning emissions. []
119. The complexity of blending facilities and consequential blend quality seem to vary quite considerably between different firms. For example, Kenroll is understood to [] at its Rolleston plant. The Kenroll blender is specially designed to blend coal, using conveyor belts and buckets to combine the different coals and produce a consistent blend. The Commission has been advised that this blending facility cost Kenroll around [] to set up.
120. Francis Mining and Solid Energy both have blending facilities on the West Coast in Reefton. The Commission has been advised, however, that vibration caused during the transportation of the blended coal from the West Coast to Christchurch has the result of separating out the different coals to some degree.
121. Despite Kenroll being recognised as having the most consistent blended coals, it would appear a new entrant could adequately blend simply with a front-end loader.

Access to Materials

122. Access to the suitable types of coal for domestic supply is potentially a barrier to entering this market. The issue to be considered is whether there are sufficient independent suppliers that can accommodate the demands of distributors to the market.
123. There are a number of smaller independent producers of coal, refer Appendix B, that can supply the type of coal and increase supply, to existing and new distributors in the market, at a price which makes them competitive. During 1998, the estimated total production of these mines was 44,000 tonnes,⁴² all have significant reserves and the ability to increase production if there was a small but significant non-transitory increase in price. The types of coal that these independent producers supply, have the properties that through blending, will satisfy the demands of the industrial users outlined in Appendix A.

Conclusion of Constraint from Expansion and New Entry

124. It is concluded that the ability to access coal may amount to a barrier to entry in the absence of suitable sources of coal independent of the applicant and Francis Mining. However, there are a number of smaller independent mines that could expand output. With the large joint venture mine at Spring Creek currently producing a large quantity of development coal, some of which will be supplied to the market under analysis by Todd Energy, the access to coal should not prove to be a barrier to entering this market.
125. There are no other significant barriers to expansion by existing distributors or for new competitors to enter.

⁴² Op cit note 22.

Constraint from other Energy Forms

126. As discussed in the market definition section, the Commission considers that it has not yet been demonstrated to its satisfaction that other energy forms place a significant constraint on coal. Accordingly, it does not consider that other energy forms, in themselves, place a significant constraint on any market power held by a coal distributor.

Countervailing Power of Purchasers

127. The large purchasers of coal in this geographic market are cement works, dairy companies and meat processing companies. Their purchases are large relative to the total size of the market, and they do have a degree of countervailing power because coal is an essential input into the production process, and they have the ability to obtain competitive quotes from alternate suppliers.

Conclusions on the market for the distribution of coal in the northern part of the South Island

128. The Commission has considered the likely impact of the proposed acquisition in the market for the distribution of sub-bituminous and bituminous thermal coal in the northern half of the South Island of New Zealand.
129. The Commission considers that, notwithstanding the proposal is outside of the Commission's safe harbours:
- the acquisition will affect only a small segment of the market, being the purchasers of coal by four firms for a limited amount of time (while the restraint of trade agreement is in place);
 - during the period of the current contract these firms receive protection from the terms of the contract;
 - following the expiry of the contract and before the expiry of the restraint of trade agreement, the four firms appear to have options for the supply of coal;
 - Solid Energy will be constrained in its actions by the ability of Taylors and Kenroll to quickly expand their output; and
 - Conditions of entry to the distribution market do not appear onerous.
130. On the basis of current information, the Commission is satisfied that the proposed acquisition would not result, or be likely to result, in any person acquiring or strengthening a dominant position in a market.

DETERMINATION OF NOTICE OF CLEARANCE

131. Accordingly, pursuant to section 66(3)(a) of the Act, the Division of the Commission determines to give clearance for the proposed acquisition by Solid Energy of Francis Mining's domestic customer base.

Dated this 4th day of August 2000

M N Berry
Deputy Chair

APPENDIX B

Selected West Coast Coal Mines

