

Application for an Exemption pursuant to Section 90 Electricity Industry Act 2010

Date: 2016

Applicant: **Top Energy Limited**
Level 2 John Butler Centre
60 Kerikeri Road
Kerikeri

Applicant's contact: **Peter Castle**
Commercial Barrister
Level 1 Solnet House
P O Box 10731
Wellington 6143

Tel: (04) 974 5950
Fax: (04) 9745955
Email: peter.castle@cliftonchambers.co.nz

Application: Pursuant to section 90 (1) of the Electricity Industry Act 2010 (**Act**), application is hereby made to the Electricity Authority (**Authority**) for exemptions in respect of Section 76 under Part 3 of the Act.



Introduction

1. The circumstances in which network companies operate in New Zealand are rapidly changing. With technology developments, the distributed generation paradigm for network companies is changing. Cheaper and more reliable solar energy systems and longer storage capacity battery technology increases the risk that network assets will become stranded and uneconomic. As a result, network companies must now examine whether the construction of new lines and replacement lines is appropriate and whether other means of managing supply obligations can be more effectively and economically efficiently adopted.
2. Specifically, in the context of a largely rural radial line network where various parts of the network supply energy to a few thousand and (often) less customers, the use by network companies of strategically installed diesel or bio diesel generators to maintain supply where planned or unplanned outages have interrupted supply, is now proving to be a more effective and economically efficient method of dealing with network construction and maintenance issues than simply constructing more lines.
3. In circumstances where network companies have considerable generation (which admittedly might be few), the continued appropriateness of the retail/distributor separation rules comes into question.
4. If generation is used for network purposes, it makes little sense to corporately separate that generation from the network company, and yet where the capacity thresholds are breached, that is what section 76 of the Act requires. Additionally, that generation is required to be operated at arm's length in those circumstances, which again, when it is being operated for network purposes, makes little sense.
5. Top Energy Limited (**Top Energy**) currently owns diesel distributed generators with a capacity of 3.65MW. It uses that generation to maintain network supply. In addition, it owns and operates a 32 MW geothermal plant in Ngawha Springs. It proposes to acquire more diesel/bio diesel generators to be used for network purposes, and also to increase the capacity of its geothermal generation. These actions will take Top Energy's generation capacity beyond the 50 MW capacity limit which triggers separation and arm's length compliance requirements.
6. Top Energy's circumstances are unique in that few network companies own generation with the capacity of Ngawha. However, despite the fact that the Act arguably is no longer appropriate in respect of network company owned distributed generation, the Act imposes those requirements for generation where the capacity threshold is breached. These applications are made in that context.
7. In addition, Top Energy proposes to expand the current capacity of its geothermal plant at Ngawha Springs.

Confidentiality

8. Confidentiality in respect of paragraph 106 of this application in relation to the Offtake Agreement is sought on the grounds that the applicant is subject to contractual confidentiality constraints in



respect of the details of the agreement referred to in that section and the information is commercially sensitive.

Details of the Applications for Exemption

Application 1 Acquisition and operation by Top Energy of diesel/bio diesel generators for network security of supply and peak demand purposes

9. Application 1 is made under Section 90 (1) (a) of the Act by Top Energy for an exemption from the requirements to comply with section 76 (1) (corporate separation) and section 76 (2) (arm's-length rules) but only in respect of the diesel/bio diesel generators Top Energy intends to purchase and use for the purposes of maintaining supply when planned or unplanned outages would otherwise interrupt supply and to reduce peak demand on parts of its network so as to defer the need for network investment to address demand issues.

Application 2 Expansion of Ngawha

10. Application 2 is made under Section 90 (1) (b) of the Act by Top Energy Limited (**Top Energy**), the directors of Top Energy, Russell Kenneth Shaw, Steven Richard James and Paul Victor Doherty for a limited exemption from compliance with Section 76 of the Act in respect of compliance with arm's-length rules 9 and 10 of the Arms-Length Rules set out in Schedule 3 to the Act (**Arm's-Length Rules**) if and to the extent that the generation capacity held by Top Energy and its wholly-owned subsidiary Ngawha Generation Limited (**NGL**) is increased from 32 MW to 65 MW (an increase from the 42 MW which is currently the subject of the exemption granted by the Commerce Commission) in respect of the following involvements:

(a) Top Energy's involvement in NGL

Top Energy carries on the business of a distributor and is involved in NGL, a generator because it holds all of the shares in NGL and therefore exceeds the 10% threshold.

(b) The directors of Top Energy and NGL involvement in Top Energy and NGL.

The directors are involved in both Top Energy and NGL because as directors of both entities they have a material influence over each of them.

(c) Russell Kenneth Shaw, the Chief Executive of Top Energy involvement in Top Energy and NGL.

Mr Shaw has a material influence over Top Energy as a manager and has material influence over NGL in his capacity as a director of NGL, and his remuneration is partly based on the performance of both Top Energy and NGL.

(d) Steven Richard James involvement in Top Energy and NGL.

Mr James is the general manager, corporate services Top Energy, and has material influence over Top Energy in that capacity. In that capacity he also undertakes management of a

AK

substantial part of the business of NGL and has material influence over NGL in that capacity. His remuneration is partly based on the performance of both Top Energy and NGL.

(e) Paul Victor Doherty involvement in Top Energy and NGL.

Mr Doherty is the general manager finance Top Energy and has material influence over Top Energy in that capacity. He also undertakes management of a substantial part of the business of NGL and has material influence over NGL in that capacity. His remuneration is partly based on the performance of both Top Energy and NGL.

11. Application 2 is made either on the basis of an amendment to the existing exemption held by Top Energy or, in the alternative, a new limited exemption from compliance with section 76 in relation to compliance with the Arm's-Length Rules 9 and 10 which require separate management.

Background to the applications

12. Top Energy is an electricity distributor and owns and operates a local distribution network in the Far North region. As part of its network assets, it currently owns 3.65 MW (nameplate) diesel generation located at Taipa and which is used to maintain supply in the local area if supply through fixed lines has been lost.
13. The Taipa generation is located at Taipa because Top Energy's network extends beyond that point as a radial line which serves 3,891 consumers. If supply through Top Energy's fixed radial line is lost to that area, the generator is used to supply those customers. Since its installation in 2012, there have been 17 instances of lost supply during which it has operated to maintain supply. In total, the electricity generated through the Taipa Generator since installation has been 99MWh.
14. Through its wholly owned subsidiary NGL, Top Energy owns a 32 MW (nameplate) geothermal generation plant at Ngawha Springs, 6 kilometres from Kaikohe (**Ngawha**). Ngawha is a binary geothermal power plant, initially constructed in 1997/8, commissioned on 15 June 1998 with a nameplate capacity of 12MW.
15. At the time of its construction, there were no constraints on the ability of Top Energy to own and operate generation as well as carry on its distribution business. Subsequently, the Electricity Industry Reform Act 1998 (**EIR Act**) required separation of retail and distribution businesses but under the EIR Act (by virtue of an amendment in 2001), Top Energy's ownership and therefore involvement in Ngawha was to be disregarded for the purposes of the EIR Act. Top Energy was therefore permitted to own and operate Ngawha without the need to comply with the corporate separation or the arms-length rules. That statutory exemption is now set out in paragraph 3 of Schedule 2 to the Act.
16. In 2006, Top Energy received resource consents sufficient to enable NGL to expand the capacity of Ngawha from 12 MW to 42 MW (name plate). At that time, the legislation provided no specific exemption in respect of this increased capacity. As a result, Top Energy was required to comply with the corporate separation and arm's-length rules set out in the EIR Act or seek an exemption from compliance. On 6 November 2006 Top Energy applied for a limited exemption from the arm's-length requirements.

raw

17. In Decision 603 issued on 10 May 2007, the Commerce Commission granted an exemption from compliance with arm's-length rules 7, 8, 9 and 10 (the equivalent rules to Arm's-Length Rules 9 and 10).¹ No other exemption from any other requirement under the EIR Act was sought.
18. Following Decision 603, Top Energy completed the expansion of Ngawha and has operated on the basis of the existence of the exemption, notwithstanding that the increased capacity limits in the Act meant that from the time of its enactment Top Energy was not required to comply with any of the Arm's-Length Rules.
19. In total, Top Energy's generation capacity is currently 35.65 MW (nameplate). Resource consents recently granted to NGL allow for geothermal fluid extraction sufficient to increase the generation capacity of Ngawha from 32 MW up to 100 MW (nameplate). Top Energy proposes to initially increase the capacity of Ngawha by 32 MW to 64 MW.
20. Top Energy holds an exemption from compliance with some of the Arm's-Length Rules, for capacity up to 42 MW. The exemption was granted by the Commerce Commission when the statutory limit for the involvement of a distributor in a generator was lower than the Act currently permits. As a result, Top Energy relied on that exemption and completed the expansion, continued to operate the plant with common management and complied with the conditions on which the exemption was granted for two years. Following enactment of the Act, the increased generation capacity limits (50 MW before a generator not connected to the national grid or 250 MW where the generator is connected to the national grid) meant that Top Energy has not been required to rely on its exemption since the enactment of the Act in 2010, but has continued to comply with the conditions (see paragraph 41) on which it was granted.
21. In addition, Top Energy proposes to acquire and operate further diesel/biodiesel generators with a combined aggregate of 26 MW (nameplate). Such generators, as is the case with the existing 3.65 MW diesel generator at Taipa, will be used solely for the purpose of maintaining network supply when planned and unplanned outages on the network occur and for managing peak demand on the network. Top Energy had intended to construct a second 110kV line between Kaikohe and Kaitaia. However, it has now determined that it would be more efficient to provide security of supply to the northern section of the Top Energy distribution system by installation of diesel/bio-diesel generators. These will improve the security of supply to geographically remote areas, reduce the costs of maintaining reliable supply to such areas, address the risk of obsolescence of new line assets arising from technological advances as well as enabling Top Energy to manage peak demand on its network.

¹ The arm-length rules at the time provided as follows:

7. A manager of business A must not be a manager of business B.
8. A manager of business Name must not be an associate of business B, other than by virtue of being a manager of business A.
9. A manager of business A must not be involved in the business of business B.
10. (1) Subject to sub clause (2), no person may place the manager of business A under an obligation, whether enforceable or not, to act in accordance with the directions, instructions, or wishes of business B, or any manager or associate of business B, or any parent of business B, and no manager may submit to any such obligation;
(2) a common parent of both business A and business B may place a manager under such obligation if doing so does not contravene another of the arm's-length rules.

Top Energy

22. As previously noted, Top Energy carries on the business of distribution business as defined in the Act. It owns and operates the local distribution network in the Far North region. The area reticulated is approximately 6,800 square kilometres. The geographic boundary is approximately 20 kilometres north of Whangarei at Hukerenui and generally equates to the Far North District Council territorial authority. A total of 31,000 consumers are supplied by 4,016 kilometres of lines with an asset value of \$224 million.
23. The area in which Top Energy's distribution network is located is economically disadvantaged in comparative terms, with relatively low household incomes relative to the national average. The customer density is 7.7 per kilometre of line compared to the national average of 12.2 customers per kilometre of line.
24. Top Energy is a regulated electricity distribution business as defined in the Commerce Act 1986. Although it is owned entirely by the Trustees of the Top Energy Consumer Trust, the Trustees of that trust are not elected by consumers, but are appointed by a selection panel made up of the local member of Parliament, the MP for Te Tai Tokerau and the Chair of the Northland Regional Council. Top Energy is therefore not an exempt electricity distribution business and is subject to both the information disclosure regulatory regime and the default price-quality path regulatory regime under Part 4 of the Commerce Act.
25. The Directors of Top Energy are:
 - Murray Ian Bain – Chair
 - Euan Richard Krogh
 - James Robert Parsons
 - Gregory Mark Steed
 - Paul Irven White
 - Simon Venn Young

The Directors of NGL are the directors of Top Energy, plus Robert Duncan Kirkpatrick (the independent director) and Russell Kenneth Shaw (Chief Executive of Top Energy).

Ownership of Top Energy

26. Top Energy is wholly-owned by the Top Energy Consumer Trust (**Trust**), the beneficiaries of which are Top Energy's electricity consumers. The definition of "consumer" under the *Trust's trust deed* is:

"Consumer" means the persons who, at any appropriate date designated from time to time by the Trustees, are named in the record held by or available to the Company (or are otherwise ascertainable to the satisfaction of the Company) as persons whose premises are connected to the Company's distribution network and who are liable, whether alone or jointly with any other person (and where jointly liable shall be one Consumer for the purposes of the Trust), to the Company or any energy company for the payment of any amount in respect of the use of and connection to the Company's distribution network

RW

where there is consumption at those premises of all or nearly all of the electricity that is delivered to those premises through the Company's distribution network."

27. The trustees of the Trust are:

- Yvonne Lesley Sharp
- Hugh Victor Ammundsen
- Ann Lynette Court
- Stuart Archibald Spittle
- Kenneth Alan Rintoul

28. The Trust was established in 1993 when Top Energy was established as a company in accordance with the Energy Companies Act 1992. Since establishment, it has distributed approximately \$57 million to consumer beneficiaries.

Requirement for the exemptions sought

29. Section 76 (1) of the Act provides that:

"the person or persons who carry on the business of distribution must carry on that business in a different company from the company that carries on the business of a connected generator or a connected retailer."

30. Section 76(2) of the Act provides that:

"Every person who is involved in a distributor, and every person who is involved in a connected generator or a connected retailer, must comply, and ensure that the persons businesses comply, with the arm's-length rules."

31. A connected generator is defined in section 76(3) in relation to a distributor means a generator

- (a) *that has a total capacity of more than 50 MW of generation that is connected to any of the distributors network's; and*
- (b) *in respect of which the distributor, or any other person involved in the distributor is involved.*

32. Currently, Top Energy's generation is made up of the 3.65 MW diesel generator used for network support and 32 MW generated by NGL. Because this generation capacity does not exceed 50 MW NGL is not a connected generator for the purposes of section 76. As a result, the corporate separation requirement does not apply and all those "involved" in Top Energy and NGL are not required to comply with the Arm's-Length Rules. However, Top Energy and NGL are intending to increase their generation capacity.

33. Top Energy proposes to acquire and operate diesel/bio diesel generators with a combined aggregate capacity of 26 MW. At present, Top Energy has received approval to construct a 110 kV line between Wiroa and Kaitaia in order to maintain reliable supply and to recover the costs of doing so under the default price path regulatory regime which applies to it.

34. Given the costs of the construction of such a line, the changing nature of the network business given the increased likelihood of distributed generation including solar and batteries, the ongoing

issue of network companies owning under-utilised assets and the desirability of reducing demand thus enabling deferral of network investment, Top Energy has decided not to proceed with the construction of this line at this time. It has identified that it would be possible for it to meet its statutory supply obligations and peak demand management objectives without building the proposed line by installing diesel/bio diesel generators at key points on its network. It is expected that the generators will be located at the following locations: 1 MW situated at Omapere (west of Kaikohe), 5 MW at Carrington (Karikari Peninsula, near Kaitaia) and up to 20 MW at Kaitaia. It is anticipated that these generators will run only between 16 and 25 hours per annum for planned and unplanned maintenance response and a further 45 hours to address winter peaks in those areas.

35. The ownership and operation of these generators will mean that Top Energy owns generation capacity greater than 50 MW. The requirements of section 76 (1) and (2) of the Act require corporate separation and compliance with the arm's-length rules in respect of the ownership and operation of this diesel/bio generation. However, since their use will be restricted to network support and peak demand management, it is not appropriate or sensible to locate these assets away from the network business. It is important that the management operating the network are also in charge of decisions relating to the need/desirability of running the diesel/biodiesel generation. Accordingly, an exemption from the section 76 (1) and (2) requirements is required. This is Application 1.
36. Top Energy accepts that it is appropriate to grant the exemption sought in respect of the diesel/biodiesel generation as long as the diesel/bio diesel generation is used for network security of supply and reduction of peak demand purposes. Although the generation produced by the diesel/biodiesel generators will be sold into the National Wholesale Market, the amounts will be small and immaterial in the context of the National Wholesale Market. Generation from the Taipa generator has to date not been sold into the National Wholesale Market. The small amount of electricity produced by these units is intended to be sold into the National Wholesale Market once they have been established with metering facilities.
37. In addition, Top Energy proposes to expand Ngawha's capacity by 32 MW (nameplate). The Ngawha Springs geothermal field covers approximately 25 square kilometres. Top Energy has received advice to the effect that the maximum geothermal generation capacity available from the Ngawha Springs geothermal resource is 125 MW. No other party holds resource consents to extract and reinject geothermal fluid from the Ngawha Springs geothermal field.
38. Although there is the ability to increase capacity from Ngawha to 125 MW, Top Energy will expand its capacity by initially adding only 32 MW of capacity.
39. Therefore, Top Energy seeks an exemption from Arms-Length Rules 9 and 10 in respect of the Ngawha expansion of 32 MW (nameplate). This is Application 2.
40. Top Energy currently complies with, and has no difficulty in continuing to comply with most of the Arm's Length Rules in relation to Ngawha. However, Arms-Length Rules 9 and 10 require separate management for the two businesses. Top Energy wishes to maintain its existing management arrangements and in order to do so will require the exemptions applied for in Application 2.
41. The conditions on which the current exemption is held are:
 - (a) That an independent director be appointed to NGL;
 - (b) That Top Energy complies with the other Arm's-Length Rules;

LM

- (c) That Top Energy not be involved either directly or indirectly in selling electricity to any end-use customer connected to its network. This excludes any offtake agreement with an electricity retailer; and
 - (d) That Top Energy not engage in the financial hedging of risks relating to the price of electricity in New Zealand beyond the nameplate general relation capacity of Ngawha.
42. Top Energy has complied with these conditions and will agree to the same conditions being imposed as part of the Authority's grant of the exemptions sought. Top Energy notes that the Arm's-Length Rules now require 2 independent directors to be appointed to NGL. Top Energy accepts the requirement to comply with this requirement.

Existing consent in respect of Ngawha Extant

43. Section 144 of the Act provides:

"Any exemption granted by the Commerce Commission under the Electricity Industry Reform Act 1998 from an obligation under that act continues in force, until it is revoked or expires, as if it was granted by the Authority under this Act in respect of any corresponding obligation under this Act."

44. The obligation to comply with the arms-length rules in section 76 of the Act is a corresponding obligation for the purposes of section 144 of the Act. As a result, the exemption granted in Decision 603 remains in force, and is by virtue of the provisions of section 144, in effect, the decision of the Authority.
45. Accordingly, Top Energy submits that Decision 603 "market affects" analysis of the impact of the generation on the relevant markets establishes the factual position that Ngawha's current exempted generation capacity of 42 MW has no adverse market effects.
46. As a result, in Top Energy's submission, the Authority's starting point for its analysis of the market effects of the increased capacity is that at 42 MW there are no adverse market effects and that it is therefore only required to consider whether the increased generation capacity beyond that capacity, in effect only 23 MW, changes that analysis and whether it will give rise to different impacts on the markets involved.

Benefits of granting the exemptions sought

Diesel/bio diesel generation

47. As noted above, Top Energy had previously intended to construct a second 110kV line between Kaikohe and Kaitaia. It has now decided to provide security of supply to the northern section of the Top Energy distribution system by installation of diesel/bio-diesel generators. The use of diesel/bio diesel generators is expected to be more cost effective. Top Energy's modelling of the capital and operating costs of the diesel/bio-diesel option (including the much greater cost of the variable operating costs of the units) indicate that the economic life of a second 110kV line to Kaitaia must exceed 30 years. The technology risks impacting on a capital investment in line construction are such that Top Energy do not believe this is a prudent course of action.
48. It also reflects the rapid development of potentially alternative energy systems, which raise questions in relation to the economic life of electricity distribution infrastructure generally.

nm

The expansion of Ngawha

49. There are several benefits to Top Energy's consumers in owning Ngawha and, there will be even greater benefits to them and a wider group of electricity users if its capacity is to be expanded and the diesel/bio-diesel generators are purchased.
50. It is useful to consider the benefits of granting the exemption in the context of what would happen if the exemption is not granted. If the exemption is not granted, Top Energy's options would include:
- (a) Continuing with the Ngawha expansion and diesel generator acquisitions as planned but incur higher management and governance costs
 - (b) Not expanding Ngawha at all
 - (c) Connecting Ngawha to the national grid
 - (d) Constructing an additional 110kV line between Kaikohe and Kaitaia, instead of acquiring the diesel generators.
51. The most likely outcome of the exemption applied for in Application 2 not being granted is option (a) above. However, for completeness, the benefits of the exemption in relation to each of these options is considered below.

(a) Additional costs are avoided

52. The most likely benefit of granting the exemption is that costs will be saved and the efficiency of the Top Energy Group is maintained. This is because, if the exemption is not granted the most likely outcome is that both NGL and Top Energy will face higher business support costs due to duplication of management positions and board members.
53. The estimated costs avoided are \$1m comprising additional costs for separate Boards of Directors, separate senior executive teams, premises and general support arrangements.
54. These additional costs are unwarranted and introduce unnecessary cost inefficiencies to both entities.

(b) Benefits of Ngawha are not realised

55. Another benefit of the exemption is that it increases the probability of the Ngawha generation capacity being expanded. Ngawha expansion can deliver a number of benefits to electricity consumers in Northland and to the regional transmission system. These are summarised below.
56. In the absence of local generation, electricity must be transmitted over a greater distance to Top Energy's consumers than any other transmission distance in New Zealand. The result of this is that transmission losses payable for electricity distribution to Top Energy's network are greater than almost any other losses on transmission in New Zealand and average 6%² when based on the

² Based on 6% built into CFDs linked back to Otahuhu



closest point of significant generation injection at Otahuhu although load flows would suggest the figure is actually higher than this.

57. Locally produced embedded generation is therefore a much more economically efficient means of meeting the customer demand on Top Energy's network.
58. Currently, Ngawha generates approximately 70% of the electricity supplied across Top Energy's network. Ngawha's increased capacity will meet 100% of the electricity needs of all consumers on Top Energy's network.
59. Transmission losses avoided currently as a result of the current capacity of the plant amount to at just under \$1million.³ These avoided loss benefits can be expected to increase as Ngawha expands.
60. The new power station will also use "synchronous" generators. This means that in addition to generating electrical power, these generators can also regulate the system voltage by generating - or absorbing - reactive power, delivering further benefits to the national grid.
61. When the expansion has been completed, the generating plant will also be able, as referred to above, to supply the Kaikohe GXP load on its own. This means that if the Kaikohe GXP loses its connection to the grid because of a transmission line failure or voltage collapse or other problem at Auckland, Ngawha should be able to restore supply until the Kaikohe GXP is once again able to connect to the national grid.
62. As well, the generation from geothermal resources is recognised as being in line with Government policy aimed at reducing reliance on fossil fuels for generation. In particular, reference is made to the current National Policy Statement for Renewable Electricity Generation 2011 which specifically records "the need to develop, operate, maintain and upgrade renewable electricity generation activities throughout New Zealand" as a matter of national significance.

(c) Cost of connecting Ngawha directly to the grid are avoided

63. Top Energy wishes to continue to own and operate Ngawha. In light of the provisions of the Act, it will be possible for them to do so without an exemption if the proposed expansion was owned by an unrelated third party or if Ngawha were to be connected to the national grid because the capacity of Ngawha will never exceed 250 MW.
64. If the exemption in relation to Application 2 is not granted, Top Energy could decide to continue with the expansion but also decide to connect that and the existing generation at Ngawha to the national grid.
65. If it were to do so, under the provisions of section 75 of the Act, Top Energy would not be required to comply with any of the Arm's-Length Rules and no separate management team would be required to manage Ngawha. This is the case because the provisions of section 75 allow a distributor to have an involvement with a generator connected to the national grid provided the generation capacity of that generator or generators does not exceed 250 MW.
66. If Top Energy were to connect to the national grid, it would be required to construct a very short distance of further lines, but the recovery of that cost over the life of the assets involved on an

³ Calculation based on 179Gwh x 6% losses @ \$86/MW plus retailers' margin

AW

amortised basis means that this cost would be significantly less than the additional costs of operating Ngawha with an entirely separate management team.

Matters to be taken into account in considering application

67. As noted previously, two applications are made by Top Energy. Application 1 seeks exemptions in respect of diesel/bio diesel generation owned by Top Energy and used for network security of supply and peak demand management purposes. Application 2 is in respect of the expansion of Ngawha either by way a variation to an existing exemption or, in the alternative, a new exemption. Top Energy has assumed that the application form and information required for an application for an amendment to an existing exemption would be the same as for a new application, the published form for which specifies the matters the Authority will take into account when considering an application for an exemption.
68. The Authority has stated that it will consider whether granting an exemption would be contrary to the purpose of Part 3 and the Authority's objective set out in section 15 of the Act. The Authority will also take into account the following:
- *would the exemption promote, or not inhibit, competition in the electricity industry?*
 - *would the exemption permit any involvement in a distributor and a generator or a retailer that may create incentives or opportunities to inhibit competition in the electricity industry?*
 - *would the exemption, in respect of a business or involvement, create incentives or opportunities for a distributor to cross-subsidise the connected generator or a directly connected generator of over 250MW?*
 - *would the exemption, in respect of a business or involvement, permit a relationship between a distributor and a retailer or generator which is not at arm's-length?*

Relevant markets

69. The Authority has determined that it will consider the relevant markets in the electricity industry. It is clear from Decision 603 and the previous two decisions of the Authority in respect of applications under section 90 of the Act that the relevant markets are:
- (a) the national electricity generation and wholesale market (**National Wholesale Market**);
 - (b) the electricity retail market corresponding with Top Energy's network (**Local Retail Market**); and
 - (c) the electricity distribution market that corresponds with Top Energy's network (**Local Distribution Market**).⁴

⁴ In Top Energy's submission other unrelated market segments such as metering and data management are not impacted by this exemption. This is the view taken by the Commerce Commission in Decision 603 and are therefore not discussed in this application.

Application 1 – The acquisition and use of further Diesel/bio diesel generation

In respect of each of these markets would the exemption promote, or not inhibit, competition?

National Wholesale Market

70. The diesel/bio-diesel generation will be sold into the National Wholesale Market. Based on anticipated hours of operation of the diesel/biodiesel generation at a maximum of 100 hours per annum, generation of up to 2,600 MWhr per annum would be produced. This amount in a national market of over 41,300 GWh will be so small, that there will be no material promotion of competition in this market.

Local Retail Market

71. The ability to use diesel/bio diesel generation at times of network unavailability and for managing peak demand should be positive from the perspective of the Local Retail Market. This is because the operation of the diesel generation assets will improve resilience and reliability on Top Energy's distribution network and reduce capital expenditure on the network. In turn, this will mean retailers can have greater confidence in continuity of supply which in turn should promote competition in the local retail market.

Local Distribution Market

72. As determined in Decision 603, the granting of the exemption will neither promote nor inhibit competition in this market. Top Energy, as the local electricity distributor, is a natural monopoly within its own distribution network area and any exemption could not, and would not affect the level of existing competition or scope for potential competition within this market.

In respect of each of these markets would the exemption permit any involvement in a distributor and a generator that may create incentives or opportunities to inhibit competition in the electricity industry?

National wholesale Market

73. All the diesel/bio diesel generation assets owned by Top Energy will only be used to provide network resilience and security at times of planned and unplanned outages on parts of Top Energy's distribution network and for managing peak demand so as to enable deferral of network capital investment. There is no intention that this generation will run except where network issues give rise to supply continuity issues or it is appropriate to manage peak demand. Market prices will have nothing to do with the decision to run the generation.

AKS

74. The costs of fuel to run the diesel/bio diesel generation will likely be in the order of \$300 per hour. In addition, fixed maintenance costs will be incurred. Although the electricity generated will be sold into the National Wholesale Market, the likely amount which will be received will represent less than one third of that cost. As a result, the likely payment for generation produced by the diesel/biodiesel generators will not incentivise the running of the generation. In reality, there is a natural disincentive to run the generation for any longer period than is necessary to maintain supply while that part of the network is down or to manage peak demand.
75. Based on its historical data Top Energy expects the generation produced on a per annum basis by the diesel/biodiesel generators to be approximately 2,600 MWh.
76. Given the infrequency of outages and the very small supply area involved relative to the overall wholesale market, the impact would be immaterial.

Local Retail Market

77. The generation produced by the diesel/bio diesel generators will be sold by Top Energy into the National Wholesale Market and not to an end use customer on Top Energy's network. Accordingly, the granting of the exemption will not create incentives or opportunities to inhibit competition in this market.

Local Distribution Market

78. As determined in Decision 603, the granting of the exemption will neither promote nor inhibit competition in this market. Top Energy, as the local electricity distributor, is a natural monopoly within its own distribution network area and any exemption could not, and would not affect the level of existing competition or scope for potential competition within this market

Would the exemption in respect of a business or involvement or interest, create incentives or opportunities for a distributor to cross subsidise a connected generator namely NGL?

79. The use of the diesel/bio diesel generation does not create any opportunity to cross subsidise a connected generator. Top Energy will have paid for the generation to enable it to perform its obligation to maintain supply and to manage peak demand. The generators are network assets, are part of Top Energy's regulated asset base and used solely for network purposes. The costs of acquisition and the costs incurred in running the generation are met by Top Energy itself.

Would the exemption in respect of a business or involvement permit a relationship between a distributor and a generator which is not at arm's length?

80. Because Top Energy will own and make decisions as to when the network unavailability or peak demand management requires the diesel/bio diesel generation to run, the operation of that generation is solely the decision of Top Energy. NGL has and will have no involvement in the decisions whether to run the generation and is entirely unconnected to Top Energy in relation to those decisions. As a consequence, the exemption granted will not permit a relationship between a distributor and a generator in relation to that generation which is not at arm's-length.



Application 2 – The expansion of Ngawha

In respect of each of these markets would the exemption promote, or not inhibit, competition?

National Wholesale Market

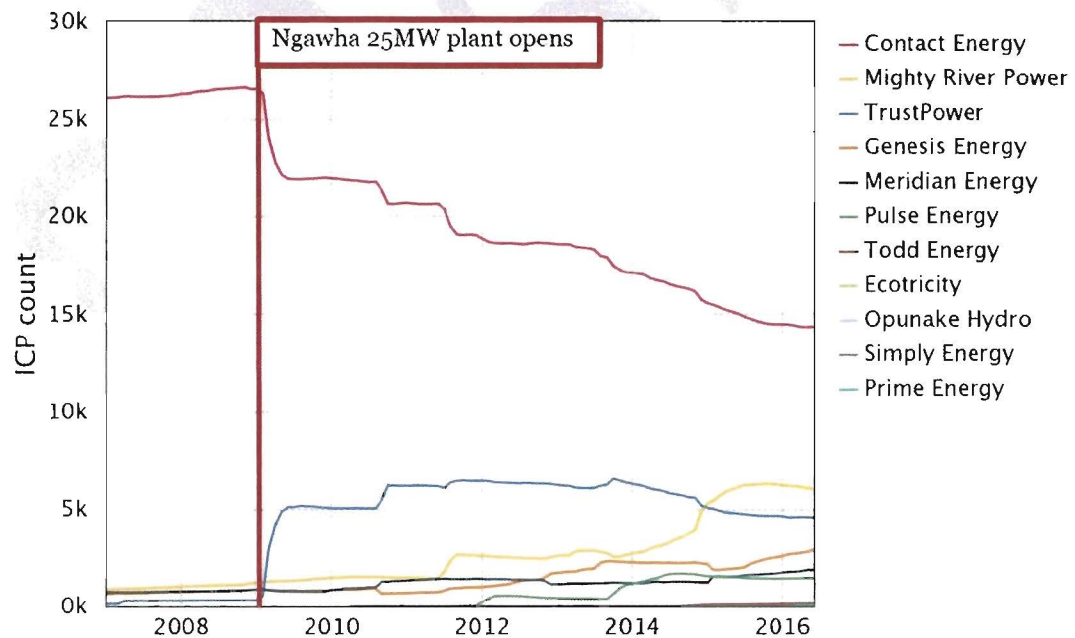
81. While it is acknowledged that Ngawha's capacity is small relative to the entire wholesale market in New Zealand, nevertheless, it is submitted that the additional capacity does represent further generation participating in the National Wholesale Market, and the addition of such capacity must have an albeit, small benefit in the context of competition. Put simply, further generation creates competitive tension with existing generation and therefore promotes competition in this market.
82. However, it is also relevant to note that because of NGL's intention to enter into a number of hedges for 5 MW & 10 MW, further liquidity will be added to the hedge market. Accordingly, the strategy to deal with NGL's existing and expanded generation will promote competition in the National Wholesale Market.
83. Whether Ngawha is expanded further by a further 33MW will be determined at a future date and, if appropriate, would be the subject of a separate application for exemption at the time.

Local Retail Market

84. Top Energy submits that as can be clearly seen from retailer's market behaviour following the expansion of Ngawha from 12 MW to 42 MW (as allowed for in the existing exemption), the granting of the exemption would promote competition in this market.
85. Prior to the commissioning of the first expansion of the plant in 2008, the incumbent retailer, Contact Energy Limited, had retained over 90% of all consumers connected to the Top Energy distribution system, following separation of the lines and retail activities required by the EIR Act.
86. In 2008, a new contract for the output from Ngawha was entered into with Trustpower and Trustpower undertook a recruitment programme for retail accounts in Top Energy's distribution system. As a result, Trustpower acquired a little over 20% of the customers connected to the Top Energy distribution system.
87. The number of retailers operating in the Local Market has continued to increase. Presently there are 13 retailers operating across the Top Energy's distribution system, with Contact Energy's customers presently representing 46% of ICPs and 31% of volume distributed.
88. The catalyst for this significant increase in competition can be clearly seen as the result of the introduction of Trustpower as a customer of the expanded Ngawha plant. (See Figure 1 below).

rw

Figure 1: Retail market share trend on Top Energy's network



89. Given the retailer's market response following the previous expansion of Ngawha as described above and illustrated by Fig 1, Top Energy submits that the further expansion of Ngawha will likely give rise to further competitive responses in this market.
90. Market behaviour following the last expansion showed that, where supply is taken from Ngawha by a retailer, this local base load generation provides a natural hedge for a local consumer base. For that reason, the additional generation following the expansion of Ngawha is likely therefore to again give rise to increased retailer competition.

Local Distribution Market

91. As determined in Decision 603, the granting of the exemption will neither promote nor inhibit competition in this market. Top Energy, as the local electricity distributor, is a natural monopoly within its own distribution network area and any exemption could not, and would not affect the level of existing competition or scope for potential competition within this market.

In respect of each of these markets would the exemption permit any involvement in a distributor and a generator that may create incentives or opportunities to inhibit competition in the electricity industry?

92. Top Energy submits that in considering this question, the appropriate approach is to consider whether the impact on competition would differ:

- (a) if the exemption from Arms-Length Rules 9 and 10 was granted; and
- (b) if the exemption was rejected and NGL's generation activity was managed as a separate arms-length business by separate management.

Des

93. In light of the Authority's stated approach, in this context, because the issue relates to the behaviour of management, it is appropriate to consider what incentives there are on management under both scenarios.
94. If there is no material difference in incentives between the situation where an exemption is granted and one where it is not, it is submitted that it is reasonable to conclude that this market would not be affected by the exemption and therefore the exemption would not permit any involvement that might create incentives or opportunities to inhibit competition.
95. At a general level, it must be the case that any differences in incentives on management will be unlikely to have any noticeable or material impact on competition in the National Wholesale market due to the small capacity of the expanded Ngawha and the diesel/bio-diesel generators relative to the size of this market.
96. The National Wholesale Market comprises 9,861 MW⁵. Therefore, what is being considered is the addition of only an additional 33MW (nameplate) capacity in a market of nearly 10,000MW.
97. Currently, generation from Ngawha comprises 0.25% of the national capacity and national generation output. If the additional 33 MW is commissioned, the output from Ngawha would still only represent 0.5% of national capacity and output. In addition, it is important to note that generation from a geothermal source is almost always base load. As a consequence, the generator is a price taker, and is virtually unable to influence the market price by generating or withholding generation.
98. Addressing specific areas in which potential management incentives might exist, it is submitted that there are potentially only two areas that need to be considered: the operation of the Ngawha plant and the commercial arrangements for selling Ngawha's generation into the National Wholesale Market. The diesel/bio-diesel generators which are the subject of Application 2 are not relevant to this analysis as their use is driven not by the market factors but by network reliability and security of supply factors.
99. In considering potential incentives, it has not been overlooked that a theoretical ability to cross subsidise the costs of expanding Ngawha are an arguable opportunity to inhibit competition. However, this, in Top Energy's submission, is merely a theoretical opportunity and since the Authority's process specifically refers to consideration of cross subsidisation as a separate matter, this matter is dealt with under the question relating to cross subsidisation in paragraphs 118 to 124 of this application.

The operation of Ngawha

100. It is submitted that the granting of the exemption would not change how Ngawha is operated at all.
101. Ngawha is base load geothermal generation. The plant is not designed to throttle up or down in response to the market. The commercial incentive in operating Ngawha is to maximise revenue by running the plant at optimal production levels, subject to planned or forced shutdowns. This behaviour is consistent with how other geothermal generators operate their plants.
102. A key operating decision therefore is when to shut down the plant for maintenance or refurbishing work. In making decisions on the timing of planned shutdowns, management must:

⁵ Source-the Ministry for Business Innovation and Employment report "Energy in New Zealand"-July 2014.

Rev

- (a) consider the terms agreed under the supply offtake agreement; and
- (b) notify Transpower and Top Energy (under respective connection agreements) to co-ordinate works.

103. Given these considerations, it is common for generators to schedule maintenance to align with periods of low demand. This minimises the impact on generation and retailer margins and also minimises distribution and transmission security of supply risks. Thus, there is an alignment of the interests of all parties and a minimisation of the impact on the market. Accordingly, the operation of Ngawha will not change whether an exemption is granted or not. There can thus be no inhibition of competition in the context of the operation of plant if the exemption were to be granted.
104. It is also noted that Arm's-Length Rule 3 prohibits NGL preferring the interests of Top Energy, and no exemption from the application of this Arm's-Length Rule is being sought.

Sale of generation into the National Wholesale market

105. It is submitted that the granting of the exemption would not change how NGL sells Ngawha's output into the National Wholesale Market or how the diesel generation output is sold.

106. [REDACTED]

107. A range of alternative commercial strategies are adopted by generators for managing wholesale market risk. These generally comprise a mix of long-term supply contracts, hedges, spot market transactions, and natural hedges from securing a retail base. Top Energy's approach is common practice for generators that do not have a retail base as a natural hedge and wish to limit their exposures to the wholesale spot market.
108. The overarching incentive for any generator is to seek the best terms possible for its generation output, relative to its owner's risk profile. The risk profile of Top Energy and the risk appetite of its owners, the Trust, will not change as a result of granting the exemption. Ngawha's management will therefore face the same cash flow risks and accordingly will likely follow similar risk strategies whether the exemption is granted or not.
109. In addition, as stated above, NGL and Top Energy have no other wholesale or retail interests that would influence how Ngawha's generation is sold into the market. The incentive on Ngawha's management is to sell Ngawha's generation on the best possible terms to the party who offers the best terms. The Authority is also referred to the fact that Top Energy accepts that a condition of

nm

the exemption prohibiting Top Energy engaging in financial hedging beyond Ngawha's nameplate capacity is appropriate.

110. Accordingly, Top Energy submits that there is no incentive on management to behave any differently whether the exemption is granted or not. Therefore, there can be no adverse competition effects from the granting of the exemption and there is therefore no inhibition of competition in the National Wholesale Market will arise if the exemption is granted.

Local Retail Market

111. Top Energy's proposed acceptance of conditions to the granting of an extended exemption that it must not be involved either directly or indirectly in the selling of electricity to any end-use customer connected to Top Energy's network (although not including the sale of electricity to an electricity retailer) means that neither the national retail electricity market or the Local Retail Market is relevant to this application.

Local Distribution Market

112. As previously noted, given that, as with all distribution companies in New Zealand, Top Energy is a natural monopoly within its local electricity distribution network area, the granting of an exemption could not and clearly would not affect the level of existing competition or scope for potential competition within that market and equally would not create any incentive or opportunity to inhibit competition in that market.

Would the exemption in respect of a business or involvement or interest, create incentives or opportunities for a distributor to cross subsidise NGL?

113. Top Energy submits that while it may appear that the expansion of Ngawha relies on cross subsidisation because of the use of combined management, in reality there is no opportunity for cross subsidisation and as a result the granting of the exemption will not create incentives or opportunities for cross subsidisation. For further discussion on this point see paragraphs 118 to 124.
114. As referred to above, the decision to expand Ngawha is not in question as Top Energy is permitted to invest in generation up to 250 MW. However, it is relevant to consider whether NGL, as a separate company operated on an arm's-length basis by separate management would have sufficient incentives to invest in the expansion.
115. Top Energy considers that it would invest in the expansion. It considers that there are significant benefits from the expansion. In summary, as outlined above, the key benefits of the expansion of Ngawha are as follows:
- (a) the investment is economic and relatively low cost compared to other available generation investment opportunities;
 - (b) the geothermal resource is proven and consented under the Resource Management Act;
 - (c) Ngawha's proximity to Northland loads avoids the cost of losses from the national grid. This benefit can be monetised in supply agreements;

AKS

- (d) Ngawha is the only major generator north of Auckland. It plays an important role in securing retailer load during transmission interruptions, particularly north of the Maungatapere GXP where the transmission system reduces to a single tower line configuration; and
 - (e) Ngawha's position at the end of long transmission circuits provides voltage support, reducing electrical losses on the national grid to supply the Far North District.
116. Top Energy's investment case assumes that NGL is able to share business support (i.e. general governance, finance and administration functions) with Top Energy. This is an efficient structure. It is common practice in competitive markets for businesses to adopt shared cost structures such as these by seeking out economies of scale or economies of scope which in turn puts downward pressure on prices. In Top Energy's submission, the purpose of Part 3 of the Act is in fact to promote this type of competition.
117. The key role of section 76 is to introduce competition safeguards to prevent distributors inefficiently subsidising activities impacting on retail or generation markets that would be detrimental to competition. However, if the exemption is not granted, both NGL and Top Energy will face higher business support costs as a result of the duplication of management and board resources. These additional costs are unwarranted and introduce unnecessary cost inefficiencies to both entities.
118. In Decision 603, the Commerce Commission determined that any potential incentives for cross subsidisation were adequately dealt with because all of the Arm's-Length Rules, with the exception of the equivalent rules to Arm's-Length Rules 9 and 10, would provide sufficient safeguards.⁶ This application will achieve the same outcome.
119. There are additional safeguards that limit Top Energy's ability to inefficiently cross subsidise its investment in Ngawha which were not in place when the original exemption was granted. The risk of cross-subsidisation is, in effect, in Top Energy's view, eliminated as a result of the introduction of Part 4 of the Commerce Act which regulates cost allocation by regulated distributors through input methodologies. Top Energy is a regulated distributor under Part 4.
120. When Decision 603 was issued, while some cost allocation regulatory requirements were in place, these were limited to providing transparency over allocation of costs between a distributor and a generator. The cost allocation input methodology is now applied directly by the Commerce Commission in setting Top Energy's cost base and regulated revenue allowances under the default price-quality path. This methodology is currently under review by the Commerce Commission. Accordingly, the risk of cross-subsidisation is now negligible and likely to reduce further.
121. Top Energy applies the accounting based allocation approach option under the input methodologies to allocate shared business support costs. This allocation of costs between the two businesses is applied on a proportionate basis using cost drivers. Approximately one third of Top Energy's total business support costs are currently being allocated to non-distribution activities including NGL and are unable to be recovered through Top Energy's line charges.
122. Accordingly, the combination of the application of all but two of the Arms-length Rules, the default price-quality path regulation of Top Energy and its accounting based allocation approach, in Top Energy's submission, deal more than adequately with the cross subsidisation incentive or

⁶ See paragraphs 63-64

ms

opportunity risk with which section 76 is concerned. In reality, the appropriate competition safeguards are already in place through these mechanisms. Top Energy would argue that these mechanisms mean that there is in fact no opportunity to cross subsidise NGL's operations

123. As a further submission, Top Energy refers the Authority to comments on the issue made by the Commerce Commission in its decision 576 (**Unison Decision**). In the Unison decision (at paragraph 58) the Commission said that to the extent that Unison had the ability to misallocate costs, the level of the ability to do so was immaterial. Top Energy submits that this is also the case for this application. Top Energy is already permitted to have this involvement. Increased capacity makes no difference to the ability to misallocate costs and Top Energy submits that if any increased ability does exist (which it strongly refutes), it is immaterial.
124. An additional cross-subsidisation matter that needs to be addressed is whether the allocation of funding costs is not adequately dealt with by the regulatory regime referred to. Ngawha's generation has been funded by loans from Top Energy. That funding was established under a banking facility subject to a negative pledge over all the activities of the Top Energy Group. To ensure that there is no cross subsidisation in relation to the cost of these funds, Top Energy has taken advice from the BNZ (being the source of the funds at that time) and PricewaterhouseCoopers to consider what premium should be charged between the two entities. In addition, a third opinion was received from an independent consultant. All advisers advised that an appropriate premium was 100 basis points over the borrowing cost. Top Energy has applied this premium between the two companies for a number of years and intends to continue this practice. If, at any time in the future, it is decided that a change to the arrangement where funding to NGL is provided by Top Energy is appropriate, it will be to fund the NGL activities directly and therefore any issue of the potential for cross-subsidisation would be removed. At the present time it is most economical to continue with the present arrangements.

Would the exemption in respect of a business or involvement permit a relationship between a distributor and a generator which is not at arm's length?

125. As a first submission Top Energy submits that the answer to this question must be no. There is already a relationship which is not arms-length and this is expressly permitted by Parliament. Therefore, by granting an exemption, the Authority will not be permitting such a relationship.
126. In the alternative, Top Energy submits that the correct approach to this question is outlined in Commerce Commission decision 541⁷ and to determine:

"the practical effect of the non-arm's length relationship to decide whether that relationship is likely to lead to a result that would be contrary to the purposes of the EIR Act."

127. Parliament did not determine this to be an issue in Top Energy's case otherwise it would have required the arm's-length rules to apply to its initial generation at the time of the EIR Act. It specifically chose not to do so and the existing statutory provisions which allow a non-arms-length relationship reflect acceptance that a relationship may exist even though it is not at arm's-length. While it may be considered that this non-arms-length relationship may be acceptable in

⁷ Vector's application under section 81 in relation to cross involvements.

circumstances where the generation capacity is no more than 50 MW, Top Energy submits that in these particular circumstances, there is no practical difference between the current capacity in respect of which the non-arm's length arrangement is permitted (i.e. 50 MW), and the situation which will apply after the capacity of Ngawha is increased.

128. In Top Energy's submission, if the Authority takes a different view on the immateriality of the non-arm's length relationship, there are multiple, better directed mechanisms, namely the other Arm's-Length Rules, the default price-quality price path regulatory regime, the accounting practice adopted by Top Energy and the provisions of section 77 of the Act.
129. Top Energy also submits that as determined in the Unison Decision (paragraph 67), strict compliance with the arms-length rules is really only required where Top Energy is or is proposing to retail the generated electricity across its own network. That is not the case.

Declaration

130. The required declaration is attached.

Further Information

131. For further information, relating to this application, please contact in the first instance, the applicant's contact as set out on the front page.

Additional Information

132. The Top Energy Application under section 81 of the Commerce Act for the exemption from some of the arm's-length rules and the commerce Commission Decision 603 in respect of that application is attached.



DECLARATION

This application is made by **TOP ENERGY LIMITED (Company)**

The Company hereby confirms that:

- all information requested by the Electricity Authority is provided;
- all relevant information known to the applicant is provided; and
- all information provided is true and correct as at the date of this application.

The company undertakes to advise the Authority immediately of any material change in circumstances relating to the application.

Top Energy Limited

Date: 25-11-16

Signed by:

Russell Shaw



Chief Executive Officer

I am the Chief Executive Officer of the Company and am duly authorised to make this application.

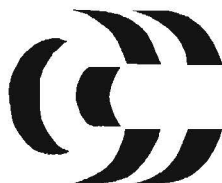
Date: 25-11-16.

Signed by:

Russell Shaw



Chief Executive Officer



COMMERCE COMMISSION

Decision No. 603

Determination pursuant to the Electricity Industry Reform Act 1998 (EIR Act), in the matter of an application for exemption of a cross-involvement in an electricity lines business and electricity supply businesses from the application of the EIR Act. The application is made by:

TOP ENERGY LIMITED

The Commission:

D R Bates
D F Curtin

**Summary of the
Application:**

Application by Top Energy Limited for exemption from section 17 of the EIR Act in respect of certain prohibited cross-involvements that would result from a proposed investment in a non-renewable generation plant.

Determination:

The Commission, pursuant to s81 of the EIR Act, determines to grant an exemption from s17 on the conditions specified in the Notice of Exemption.

Date of Determination:

10 May 2007

Date of Exemption:

This exemption takes effect upon publication in the New Zealand Gazette.

<p>CONFIDENTIAL MATERIAL IN THIS REPORT IS CONTAINED IN SQUARE BRACKETS</p>
--

TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
Introduction	i
The Commission's Criteria	i
<i>Incentives or Opportunities to Inhibit Competition in the Electricity Industry</i>	<i>i</i>
<i>Incentives or Opportunities to Cross-Subsidise Electricity Generation Activities From Electricity Line Business Involvements</i>	<i>ii</i>
<i>Creation of a Relationship not at Arms Length.....</i>	<i>ii</i>
Determination	ii
INTRODUCTION	1
COMMISSION PROCEDURES	1
General	1
Criteria Used by the Commission to Consider Exemption Applications	1
PARTIES.....	2
The Applicant	2
<i>Top Energy Limited (Top)</i>	<i>2</i>
Other Parties.....	2
<i>Interested parties.....</i>	<i>2</i>
THE PROPOSAL.....	3
APPLICATION OF THE ACT	3
Electricity Lines Business Involvements	3
Electricity Supply Business Involvements.....	4
Cross-Ownership Prohibition	5
<i>Exemption for Generation Commissioned After 20 May 2003</i>	<i>5</i>
Corporate Separation and Arms Length Rules.....	6
The Meaning of Cross Involvement.....	6
The Commission's Exemption Power	7
Summary of Application of the EIR Act and Cross-Involvements	8
THE COMMISSION'S EXEMPTION POWER IN RELATION TO S46C	8

EXAMINATION IN TERMS OF THE COMMISSION'S CRITERIA.....	8
Question 1: Incentives or Opportunities to Inhibit Competition in the Electricity Industry	8
<i>Regional Electricity Distribution Markets</i>	<i>9</i>
<i>National Electricity Generation and Wholesaling Market</i>	<i>9</i>
<i>Conclusion on Question 1</i>	<i>10</i>
Question 2: Incentives or Opportunities to Cross-subsidise Generation Activities	10
<i>Conclusion on Question 2</i>	<i>11</i>
Question 3: A Relationship Not at Arms Length	11
<i>Conclusion on Question 3</i>	<i>12</i>
Conclusion in Respect of the Commission's Criteria.....	12
NOTICE OF EXEMPTION	15
APPENDIX 1	16

EXECUTIVE SUMMARY

Introduction

- 1 On 9 November 2006, the Commerce Commission (the Commission) registered an application (the Application) from Top Energy Limited (Top) for exemption from section 17¹ of the Electricity Industry Reform Act 1998 (the EIR Act).
- 2 Top is an electricity lines company whose network covers the Northland region. In addition, Top, through its wholly owned subsidiary, Ngawha Generation Limited (NGL) owns and operates the Ngawha 12 MW (name plate) geothermal power plant at Ngawha Springs, 6 kilometres from Kaikohe (Ngawha).
- 3 Top has a statutory exemption for its existing 12MW of generation through section 19(3)(ga) of the EIR Act, which essentially provides that a person may be cross-involved in a lines business and a supply business that has up to 12 MW of geothermal generation, providing the generation was commissioned between 1 January 1998 and the date on which section 19(3)(ga)(i) came into force.
- 4 An exemption is sought to enable Top to expand the nameplate capacity of Ngawha by up to 30 MW to result in a new nameplate capacity of up to 42 MW. Top has gained the relevant resource consents for the proposal, and has also recently entered into supply and engineering, procurement and construction contracts for the proposal.

The Commission's Criteria

- 5 In considering an exemption from the EIR Act the Commission has regard to the purposes of the Act and the extent to which granting the exemption would promote or inhibit these purposes.
- 6 To do this the Commission obtains and evaluates objective answers to the following questions in relation to the particular purpose of Parts 1 to 5 of the EIR Act:
 - Would the Commission, by granting an exemption in respect of a business or involvement or interest, create incentives or opportunities to inhibit competition in the electricity industry?;
 - Would the Commission, by granting an exemption in respect of a business or involvement or interest, create incentives or opportunities to cross-subsidise generation activities from electricity lines businesses?; and
 - Would the Commission permit, by granting an exemption in respect of a business or involvement or interest, a relationship between an electricity lines business and an electricity supply business which is not at arms length?

Incentives or Opportunities to Inhibit Competition in the Electricity Industry

- 7 The Commission is of the view that, in respect of the national electricity generation and wholesaling market and the relevant regional electricity distribution market, granting an exemption in this case would not create incentives or opportunities for Top to inhibit competition.
- 8 Further, the Commission considers that an exemption would not create an incentive or opportunity to inhibit competition in respect of the electricity retail markets, as neither

¹ Section 17 prohibits a person from being cross-involved in an electricity lines business and an electricity supply business.

Top nor NGL will be involved in selling electricity to end-use customers connected to Top's network.

Incentives or Opportunities to Cross-Subsidise Electricity Generation Activities From Electricity Line Business Involvements

- 9 The Commission considers that granting a limited exemption from the Arms Length Rules² in this case would not create incentives or opportunities (that did not already exist) to cross subsidise between lines activities and generation activities.
- 10 The Commission considered whether the ability to mis-allocate cost from the generation business to the lines business might be increased as a result of granting a limited exemption (but still requiring compliance with rules one to six and 11 to 15 of the Arms Length Rules) and considers that the likely degree of any such increase would not be material.

Creation of a Relationship not at Arms Length

- 11 The Commission considers that, as the exemption is unlikely to create incentives or opportunities to inhibit competition in the electricity industry or to cross-subsidise generation activities from electricity lines businesses, a limited exemption from the Arms Length Rules in this case is unlikely to have a material adverse effect on the purposes of the EIR Act.

Determination

- 12 The Commission determines to grant an exemption from s17 of the EIR Act, in respect of the cross-involvements outlined in the application subject to the following terms and conditions:
 - a director must be appointed to the Board of NGL who must not be:
 - a) a manager of Top;
 - b) an associate of Top, other than by virtue of being a director of NGL; or
 - c) involved in the business of Top;
 - NGL and Top's electricity lines business must comply with rules 1 to 6 and 11 to 15 of the Arms Length Rules set out in Schedule 1 of the EIR Act;
 - Top must not be involved either directly or indirectly in the selling of electricity to any end-use customer connected to Top's electricity network. This does not preclude the sale of electricity to an electricity retailer;
 - this exemption does not extend to engaging in the financial hedging of risks relating to the price of electricity in New Zealand beyond the nameplate generation capacity (42MW per annum) of the proposed expanded geothermal generation plant; and
 - this exemption is specific to the cross-involvements created through Top's involvement in the proposed expanded geothermal generation plant at Ngawha. It does not extend to any other interest, or existing or future cross-involvement of Top.
- 13 The exemption takes effect from the date of its publication in the New Zealand Gazette.

² The Arms Length Rules set out the requirements for any person not complying with the ownership separation rules to operate at arms length. These are set out in full in Appendix 1 to this determination.

INTRODUCTION

- 1 On 9 November 2006, the Commerce Commission (the Commission) registered an application (the Application) from Top Energy Limited (Top) for exemption from section 17 of the Electricity Industry Reform Act 1998 (the EIR Act).
- 2 Top is an electricity lines company whose network covers the Northland region. In addition, Top, through its wholly owned subsidiary, Ngawha Generation Limited (NGL) owns and operates the Ngawha 12 MW (name plate) geothermal power plant at Ngawha Springs, 6 kilometres from Kaikohe (Ngawha).
- 3 Top has a statutory exemption for its existing 12MW of generation through section 19(3)(ga) of the EIR Act, which essentially provides that a person may be cross-involved in a lines business and a supply business that has up to 12 MW of geothermal generation, providing the generation was commissioned between 1 January 1998 and the date on which section 19(3)(ga)(i) came into force.
- 4 An exemption is sought to enable Top to expand the nameplate capacity of Ngawha by up to 30 MW to result in a new nameplate capacity of up to 42 MW.

COMMISSION PROCEDURES

General

- 5 For the purpose of considering this application for exemption, the Commission, in terms of s73 of the Crown Entities Act 2004, has delegated its powers under s81 of the EIR Act to D R Bates QC and D F Curtin, Commissioners.

Criteria Used by the Commission to Consider Exemption Applications

- 6 The EIR Act gives the Commission wide powers of enforcement, extension and exemption. To provide assistance to parties affected by the EIR Act, the Commission set out its role and processes in Practice Note No.3.³
- 7 The Commission stated in Practice Note No.3 that:

The EIR Act provides for the Commission to make exemptions in terms of section 81 of the Act. In considering applications for exemptions, the Commission will have specific regard to the particular purpose of Parts 1 to 5 of the EIR Act as defined in section 2(2) of the EIR Act. The Commission is likely to grant an exemption in respect of a business or involvement or interest only where doing so:

- (a) would not result in certain involvements in electricity lines businesses and electricity supply businesses which may create incentives or opportunities:
 - (i) to inhibit competition in the electricity industry; or
 - (ii) to cross-subsidise generation activities from electricity lines businesses; and
- (b) would not result in relationships between electricity lines businesses and electricity supply businesses which are not at arms length.

In determining exemptions, the Commission will also have regard to the overall purpose of the EIR Act as set out in section 2(1) of the Act. That is, the purpose of the EIR Act is to reform the electricity industry to better ensure that:

- (a) costs and prices in the electricity industry are subject to sustained downward pressure; and
- (b) the benefits of efficient electricity pricing flow through to all classes of consumers

³ Practice Note No.3, September 1998, Electricity Industry Reform Act 1998 Commission's Role and Processes.

by –

- (c) effectively separating electricity distribution from generation and retail; and
- (d) promoting effective competition in electricity generation and retail.

8 Practice Note No.3 states that :

On receipt of an application in the prescribed form, the Commission will determine whether granting an exemption would be contrary to any element of the particular purpose of Parts 1 to 5 of the EIR Act or the overall purpose of the Act.

The Commission's tests would necessitate obtaining and evaluating objective answers to the following questions in relation to the particular purpose of Parts 1 to 5 of the EIR Act:

- Would the Commission, by granting an exemption in respect of a business or involvement or interest, create incentives or opportunities to inhibit competition in the electricity industry?
- Would the Commission, by granting an exemption in respect of a business or involvement or interest, create incentives or opportunities to cross-subsidise generation activities from electricity lines businesses?
- Would the Commission permit, by granting an exemption in respect of a business or involvement or interest, a relationship between an electricity lines business and an electricity supply business which is not at arms length?

In relation to these questions, the Commission will consider factors such as:

- The relevant market(s)⁴ within the electricity industry;
- The nature of any incentives or opportunities created;
- The temporal nature of any incentives or opportunities created;
- The nature of any relationship which is not at arms length; and
- The temporal nature of any relationship which is not at arms length.

PARTIES

The Applicant

Top Energy Limited (Top)

- 9 Top owns and operates the local electricity distribution network in the Far North Region. It delivers 320GWh of electricity per annum to approximately 27,000 consumers. Top is wholly-owned by the Top Energy Consumers Trust (the Trust), the beneficiaries of which are Top's consumers.
- 10 The Top distribution network covers approximately 6,800 square kilometres. The geographic boundary is approximately 20 kilometres north of Whangarei at Hukerenui and equates to the Far North District Council territorial authority.
- 11 Top, through its wholly owned subsidiary Ngawha Generation Limited (NGL), owns and operates the Ngawha 12MW (name plate) geothermal power plant at Ngawha Springs, six kilometres from Kaikohe (Ngawha).

Other Parties

Interested parties

- 12 The Commission received submissions on the application from various parties including Genesis Power Limited and Meridian Energy Limited.

⁴ Defined using the same process as used for market definitions in respect of Commerce Act matters.

THE PROPOSAL

- 13 Top intends to expand the nameplate capacity of Ngawha by up to 30MW to result in a new nameplate capacity of up to 42MW. The proposed expansion will be connected directly to the local electricity distribution network. Top submitted that the generation will provide important voltage support in the region and would be capable of supplying the entire Kaikohe load. In addition, Top submitted that the generation will provide increased security in Auckland and the Far North District by reducing transmission loading from the South and, by virtue of generating reactive power, increasing transmission capacity from the South.
- 14 In selling the electricity generated, Top has an exclusive offtake agreement with Contact Energy Limited (Contact) which expires on 15 December 2008 and which is in respect of the existing electricity generated at Ngawha as well as any increased generation following expansion. The agreement is on a 'fixed price variable volume' basis, with the price set as part of the agreement, and with no link to the spot price.
- 15 Top is agreeable to the imposition of a condition to the exemptions sought that it not become involved directly or indirectly in retailing electricity, other than through the existing offtake agreement or any similar succeeding agreement.
- 16 Top made the following applications under section 81 of the EIR Act:
 - a) that the Trust be exempted from section 17 of the EIR Act;
 - b) that the trustees of the Trust, to the extent necessary, be exempted from section 17 of the EIR Act; and
 - c) that Top, NGL and its representative directors be exempted from the requirement to comply with the Arms Length Rules as required by section 46C(2) of the EIR Act or, in the alternative, be exempted from the requirement to comply with clauses 7, 8, 9 and 10 of the Arms Length Rules which, in general terms, relate to the appointment of directors and managers.

APPLICATION OF THE ACT

Electricity Lines Business Involvements

- 17 The definition of "electricity lines business" appears in s4(1) of the EIR Act. That provides as follows:
 4. **Meaning of 'electricity lines business'**
 - (1) For the purposes of this Act, 'electricity lines business'-
 - (a) Means a business that conveys electricity by line in New Zealand; and
 - (b) Includes the ownership or operation, directly or indirectly, of lines in New Zealand or any other core assets of an electricity lines business.
- 18 There are a number of exceptions to this definition in subsection (2):
 - (2) None of the following activities brings a person within subsection (1):
 - (a) Conveying, together with its associates (if any), less than 2.5 GWh per annum;
 - (b) Conveying electricity solely for its own consumption or for the consumption of its associates;
 - (c) Conveying electricity only from a generator to the national grid or from the national grid to a generator;
 - (d) Conveying electricity (other than via the national grid) only from a generator to a

- local distribution network or from a local distribution network to a generator:
- (e) Conveying electricity by lines that are owned or operated by a business that also owns or operates a generator which generates electricity solely for the consumption of a local community, where both those lines and that generator are not connected, directly or indirectly, to the national grid;
 - (f) Conveying electricity only by a line or lines that are mostly in competition with a line or lines operated by another electricity lines business that is not an associate of the person, provided that the competition is actual competition and not potential competition;
 - (g) Owning or operating, directly or indirectly, lines referred to in any of paragraphs (a) to (f) or any other core assets of an electricity lines business used in connection with those lines.

19 Top falls within the above definition in s4(1)(a) and (b) and is not excepted by s(4)(2). Accordingly, Top is considered to be an electricity lines business.

Electricity Supply Business Involvements

20 The EIR Act provides for the definition of “electricity supply business” in s5(1):

5. Meaning of ‘electricity supply business’

(1) For the purposes of this Act, ‘electricity supply business’ –

- (a) Means a business that –
 - (i) Sells electricity in New Zealand;
 - (ii) Sells financial hedges for risks relating to the price of electricity in New Zealand;
 - (iii) Generates electricity in New Zealand;
 - (iv) Trades in rights to sell or generate electricity in New Zealand; and
- (b) Includes the ownership or operation, directly or indirectly, of a generator in New Zealand or any other core generation assets; and
- (c) Includes the ownership or operation, directly or indirectly, of any core assets of an electricity retail business, which include –
 - (i) The customer data base relating to and used for the purposes of an electricity retail or electricity trading business; and
 - (ii) The benefit of a contract to sell electricity; and
 - (iii) The benefit of an undertaking from any other electricity supply business not to compete with the business.

21 Subsection (2) provides for a number of exemptions from s5(1):

(2) None of the following activities brings a person within subsection (1):

- (a) Selling or generating less than 2.5 GWh per annum;
- (b) Generating or selling electricity solely for its own consumption or for the consumption of its associates;
- (c) Generating electricity solely for the consumption of a local community, where -
 - (i) The generator is owned or operated by a business that also conveys electricity by line; and
 - (ii) Both those lines and that generator are not connected, directly or indirectly, to the national grid;
- (d) Selling electricity that is generated at a generator referred to in paragraph (c) or subsection (3);
- (e) Generating electricity from distributed generation, and selling the electricity generated, where –
 - (i) the generating capacity of the distributed generation is no more, at any one time, than the greater of 5MW (determined according to the nameplate or nameplates) and 2% of the maximum demand, in the immediately preceding

financial year, of the system to which the distributed generation is connected;
and

- (ii) the distributed generation is owned or operated by a business that also conveys electricity by line and that distributed generation is connected to those lines:
 - (f) Selling financial transmission rights that hedge risks arising from the effects of losses and constraints on the national grid:
 - (g) Owning or operating, directly or indirectly, a generator referred to in any of the paragraphs (b) to (f) or subsection (3) or any other core generation assets used in connection with those generators.
- 22 Through the proposed expansion of the Ngawha geothermal plant, Top would be deemed to be an electricity supply business by way of s5(1)(a)(i) and (iii) and also through 5(1)(b) and 5(1)(c)(ii). Through its proposed arrangement in respect of the exclusive offtake agreement with Contact, the Commission also considers that Top would be deemed to be an electricity supply business pursuant to s5(1)(a)(ii).
- 23 Accordingly, the proposal would result in Top being an electricity supply business.

Cross-Ownership Prohibition

- 24 One of the key intentions of the EIR Act on its inception was to effect ownership separation between electricity supply and electricity lines businesses, as they are defined by the EIR Act. Accordingly, s17 of the EIR Act expressly prohibits such cross-ownership. It provides:

17. Cross-ownership prohibition –

- (1) No person involved in an electricity lines business may be involved in an electricity supply business.
- (2) No person involved in an electricity supply business may be involved in an electricity lines business.

Exemption for Generation Commissioned After 20 May 2003

- 25 The Act was amended in 2004 with the intention of relaxing the principle of ownership separation to allow for cross-ownership to exist in particular circumstances with respect to generation from sources other than a new renewable energy source. The amendment, which exists as s46C of the EIR Act, was designed to facilitate the investment by lines companies in new non-renewable generation and provides as follows:

46C. Exemptions for generation commissioned after 20 May 2003 and for reserve energy –

- (1) The following activities do not cause any person to be in breach of the ownership separation rules:
 - (a) generating electricity from generation commissioned on or after 20 May 2003, and selling the electricity generated, if the generating capacity of the generation is no more, at any one time, than the greater of 50MW (determined according to the nameplate or nameplates) or 20% of the maximum demand, in the immediately preceding financial year, on the lines owned or operated by the person:
 - (b) generating reserve energy and selling the electricity generated in accordance with the terms and conditions for that reserve energy set by the Commission, as those terms are defined in the electricity Act 1992.
 - (2) Subsection (1) applies only if and as long as sections 24 and 25 (corporate separation and the arms length rules) are complied with.
- 26 Top is proposing to invest in a geothermal generation plant. As the proposal relates to a generation plant that has an aggregate generating capacity of more than 5MW it cannot be considered generation from a new renewable energy source as that term is defined in s46(A)(4), as s46(A)(4)(b) allows no more than 5MW of geothermal generation, unless approved by the Minister under s46(A)(3). Instead the proposal is subject to s46C and

Top is deemed not to be in breach of the cross-ownership provisions (subject to s46C(1)(a)) in so far as the proposal relates to:

- the generation of electricity by the geothermal generation plant; and
- the selling of that electricity.

- 27 However, as provided by s46C(2), the exception applies only if the corporate separation and arms length provisions in sections 24 and 25 of the EIR Act are complied with. Further, regardless of the operation of s46C, the Commission considers that Top, through the proposal, would still be in breach of the cross-ownership prohibition in s17 by way of the hedge arrangements to be entered into through its contract with an electricity retailer.

Corporate Separation and Arms Length Rules

- 28 Section 24 defines what is meant by ‘corporate separation’:

24. Corporate separation–

- (1) Every person that carries on an electricity business that is exempt from complying with the ownership separation rules by reason of ... section 46A (exemption for new...generation from new renewable energy source)...must...carry on its electricity lines business and its electricity supply business in separate companies.

- 29 Section 25 refers to the requirement to comply with the Arms Length Rules:

25. Arms length rules –

- (1) Every person that is involved in an electricity business that is exempt from complying with the ownership separation rules by reason of ...section 46A (new...generation from new renewable energy source), and any business in which any such person is involved, must...comply, and ensure that that person’s electricity businesses comply, with the arms length rules.
- (2) For that purpose, references in the arms length rules to business A and business B are references only to the electricity lines business and electricity supply business in which the exempt person is involved.
- (3) A transfer that implements a separation for the purposes of section 24 need not be on an arms length basis, but the outcome of the separation must enable compliance with the arms length rules.

- 30 Schedule 1 of the EIR Act sets out in detail what is meant by the Arms Length Rules in s25. It articulates a number of rules and principles which must be complied with in order to ensure that the two businesses are operated at arms length. Schedule 1 is attached to this determination as Appendix 1.

The Meaning of Cross Involvement

- 31 Section 7(1) of the EIR Act defines “involved” :

7. Meaning of ‘involved’

- (1) For the purposes of this Act, a person is involved in an electricity business if the person –
- (a) Carries on that business, either alone or together with its associates and either on its own or another’s behalf; or
 - (b) Exceeds the 10% threshold in section 8 in respect of that business; or
 - (c) Has material influence over the business; -
- and ‘involvement’ has a corresponding meaning.

- 32 Section 11 of the EIR Act defines “material influence” :

- (1) Without limiting the ordinary meaning of the expression “material influence”, the following people are deemed to have material influence over an electricity business:
- (a) A manager of a person that carries on the business:
 - (b) If the business is carried on by a natural person, that person:

- (c) A person in accordance with whose directions, instructions, or wishes a person referred to in either of paragraph (a) or paragraph (b), or the business, may be required or is accustomed to act in respect of the carrying on or management of the business:
 - (d) A person that exercises or that is entitled to exercise, or who controls or is entitled to control the exercise of, powers which would ordinarily fall to be exercised by a person referred to in either of paragraph (a) or paragraph (b):
 - (e) A person that can appoint or remove, or control the appointment or removal of, a person referred to in either of paragraph (a) or paragraph (b):
 - (f) A person that has a power to influence a decision of the business which would ordinarily require the holding of control rights which would cause the person to exceed the 10% threshold:
 - (g) A person in circumstances where that person and the business is acting, or proposing to act, jointly or in concert in relation to the business; or
 - (h) A person that, under a trust or agreement (whether or not the person is a party to it), may at any time have any of the powers referred to in paragraph (c) to paragraph (f).
- (2) Where a person has material influence over an electricity business under this section, and another person has any of the powers or controls referred to in paragraph (c) to paragraph (h) in relation to the first person or the majority of its managers, then that other person is deemed also to have material influence over the business, and so on. (3) A person is deemed to have material influence over an electricity business if the person is one of 2 or more associates who, together, have material influence over the business.
- (4) Subsection (3) does not apply to deem a person to have material influence over a business only because that person is, under section 12(1)(b) or (c), an associate of another person, provided those associates act in accordance with the arms length rules (with all necessary modifications) in respect of the business.
- (5) For the avoidance of doubt, a power to cast one of many votes at an election of trustees or councillors does not, of itself, constitute material influence.
- 33 The Commission considers that all parties deemed to be involved in both Top's electricity lines business and Top's proposed involvement in an electricity supply business would be deemed to be cross involved themselves. This would extend, but is not necessarily limited to, the directors of Top who, it is proposed, will also sit on the board of the electricity supply business.
- 34 If the Commission determined to grant an exemption for the proposal, any such involvements could be disregarded through the operation of s19(1)(h):

19. Certain businesses and involvements to be disregarded

- (1) For the purposes of this Act, no account is to be taken of a person's business, or involvement or interest in a business, if- ...
- (h) The business, involvement, or interest is exempted by the Commission under s81...

- 35 In that event, all otherwise prohibited cross-involvements that would stem directly from the cross-involvement of Top could be disregarded for the purposes of this determination.

The Commission's Exemption Power

- 36 Section 81(1) of the EIR Act provides the Commission with a power of exemption:

- (1) The Commission may, for the purposes of this Act, in its discretion and upon the terms and conditions (if any) that it thinks fit, by notice in the *Gazette*, exempt—
- (a) any business, involvement, or interest, or class of business, involvement, or interest, from the application of this Act; or
- (b) any person or class of persons from compliance with any provisions of this Act or any regulations made under it.

Summary of Application of the EIR Act and Cross-Involvements

- 37 The s46C exemption from complying with the ownership separation provisions in s17 is contingent on Top complying with:
- the corporate separation provisions in s24; and
 - the arms length provisions in s25 and schedule 1.
- 38 The proposal would also breach the ownership separation rules in so far as Top wishes to enter into a financial hedge arrangement with an electricity retailer.
- 39 Therefore, Top has sought an exemption from s17 of the EIR Act to enable it to operate its electricity lines business and manage its investment in the proposed geothermal generation plant in a manner that is other than at arms length, and to enter into hedge arrangements (by way of a fixed price variable volume contract) with an electricity retailer.

THE COMMISSION'S EXEMPTION POWER IN RELATION TO S46C

- 40 Given the statutory exemption allowing lines companies to invest in new non-renewable generation in s46C and the requirement to comply with the Arms Length Rules in s46C(2), the Commission considered whether it would be appropriate to exercise its discretionary power to applications seeking exemption from compliance with the Arms Length Rules.
- 41 The Commission's discretionary power to grant exemptions under s81 is in addition to the limited statutory exemption under s46C and the Commission considers that the questions stated in the Commission's Practice Note No.3 continue to be the relevant questions in assessing applications for s81 exemption from the EIR Act and the appropriate questions to address in this case.

EXAMINATION IN TERMS OF THE COMMISSION'S CRITERIA

- 42 The Commission is of the view that the relevant markets in this instance are the national electricity generation and wholesaling market and the electricity distribution market that corresponds with Top's electricity distribution network.

Question 1: Incentives or Opportunities to Inhibit Competition in the Electricity Industry

Would the Commission, by granting an exemption in respect of a business or involvement or interest, create incentives or opportunities to inhibit competition in the electricity industry?

- 43 As stated in the Commission's Practice Note No.3, the Commission considers this question in respect of the relevant markets within the electricity industry.
- 44 The relevant markets for the consideration of this application are:⁵
- the regional electricity distribution market in the Far North of the North Island (geographically defined by the boundary of the Top distribution network in that area),⁶ and

⁵ Other markets in the electricity industry, for example the electrical construction and maintenance market and the market for reticulation of new subdivisions, do not appear to be relevant to this application for exemption.

- the national electricity generation and wholesaling market.⁷

45 The Commission considers that, as Top will not be involved in the selling of electricity to anyone connected to Top's distribution network (other than to an electricity retailer), an analysis of either a national or regional electricity retailing markets is unnecessary.

Regional Electricity Distribution Markets

46 The regional electricity distribution market that is relevant to this application is the Far North District, being the region where Top is the network operator.

47 Local electricity distribution networks are characterised by being regional natural monopolies. The granting of this exemption would not affect the level or existing competition or scope for potential competition within those markets.

48 Accordingly, the granting of an exemption would not, in respect of this market, create incentives or opportunities to inhibit competition.

National Electricity Generation and Wholesaling Market

49 In Decision 591⁸ the Commission considered that the proposal of Westpower Limited (Westpower) was unlikely to provide incentives or opportunities for Westpower to inhibit competition in this market. In that case the Commission also considered that Westpower would be unlikely to have any market power in respect of the contract for differences it was proposing to enter and that the hedge price in the contract would be constrained by the spot price for electricity at the grid exit point to which the contract applied.

50 Similar to the Westpower case is the fact that Top proposes to connect its generation to the local distribution network and sell the electricity through a hedge arrangement with an electricity retailer.

51 The Commission has considered whether there would be an incentive for Top to, in some way, favour its contractual partner in respect of lines access and treatment. However, the Commission considers that there is no incentive for Top to do this, as once the contract has been finalised (and the price set) there is no ability for Top to manipulate its financial position under it by favouring the counterparty in respect of lines services or otherwise.

52 Further, the Commission considers that the proposal to enter into a fixed price variable volume contract as outlined in the proposal will not create incentives or opportunities for Top to inhibit competition in respect of the national generation and wholesaling market.

53 Accordingly, the Commission considers that the connection of the generation to Top's distribution network, and the sale of electricity through a contractual arrangement as described, will not create incentives or opportunities for Top to inhibit competition in the national generation market.

⁶ For discussion of electricity distribution market definition see Decision 345, United Networks Limited / Transalta New Zealand Limited, 11 March 1999 and Decision 299, Holdco (Mercury Energy Ltd and Utilicorp) / Power New Zealand Ltd, 27 June 1997.

⁷ For a discussion of electricity generation market definition see Decision 340, Transalta Corporation of Canada / Contact Energy, 12 February 1999 and Decision 491, Contact Energy Limited / Natural Gas Corporation Holdings Limited, 04 February 2003.

⁸ Decision 591, *Westpower Limited*, 25 October 2006.

Conclusion on Question 1

- 54 The Commission is of the view that, in respect of the national electricity generation and wholesaling market, and in respect of the regional⁹ electricity distribution market the granting of an exemption in this case would not create incentives or opportunities for Top to inhibit competition.

Question 2: Incentives or Opportunities to Cross-subsidise Generation Activities

Would the Commission, by granting an exemption in respect of a business or involvement or interest, create incentives or opportunities to cross-subsidise generation activities from electricity lines businesses?

- 55 The Commission considers that a lines business which is also engaged in generation has the opportunity to cross-subsidise its generation business, should it choose to do so. Cross-subsidisation could take a number of forms. It may be that the lines business would meet costs which more properly lie with the generation side of the business. It may be that common costs would all be attributed to the lines business. It may be that the lines business would provide capital to the generation business at less than its true cost. It may be that the generation project would be funded in a way which weakens the financial stability of the lines business.
- 56 Any of these possibilities of cross-subsidisation could increase upward pressure on lines charges.
- 57 In the Westpower decision, the Commission considered that the 80/20 proposed joint venture ownership structure would weaken the incentive to cross-subsidise, though this was not a factor which, on its own, would remove such incentives altogether. This incentive could arise from an attempt to see the overall business expand, possibly by providing a competitive advantage to the generation business. It is possible that an incentive to cross-subsidise would arise from a desire to make the regulatory regime for lines businesses less effective by 'hiding' lines profits in the generation business.
- 58 As NGL is a wholly owned subsidiary of Top, there is no joint venture ownership structure to weaken any incentive to cross-subsidise¹⁰. The Commission considers that in order to weaken any incentive to cross-subsidise, it may be appropriate to require that an independent director be appointed to the Board of NGL, though, again, this is not a factor which, on its own, would remove such incentives altogether.
- 59 The Commission has considered the extent to which incentives or opportunities to cross-subsidise (by way of misallocation of costs) might be created or increased as a result of granting an exemption. Top submitted that a key reason for requiring the exemption is to maintain the existing governance structure for NGL since the current directors and managers operate Ngawha and are thoroughly familiar with Ngawha, the details of its operation and the risks it is required to manage as well as the proposal to increase its capacity. The Commission considers that a limited exemption to allow this to occur, whilst retaining the obligation to comply with the balance of the Arms Length Rules, is appropriate. The Commission considers that this would limit the extent to which incentives or opportunities (to misallocate costs) would be increased by the exemption, to

⁹ Specifically the region where Top is the network operator.

¹⁰ The Commission is aware that there may be a potential joint venture partner for the proposed expansion to Ngawha. At the date of this determination, it was unclear whether there would be a joint venture partner and, therefore, the analysis has been undertaken assuming that there will be no joint venture partner.

a level that is not material, particularly considering the relatively small size of the proposed generation asset.

- 60 Accordingly, the Commission considers that a condition of any exemption granted should be the requirement to observe the Arms Length Rules numbered 1 to 6 and 11 to 15.
- 61 Further, the Commission has considered the extent to which an exemption might enable a direct financial cross-subsidisation between the lines business and generation business, or whether such a relationship would enable the lines business to incur risk that would be more properly incurred by the generation business. The Commission considers that these opportunities and incentives, to the extent that they exist at present, would not be created by the Commission granting a limited exemption in this instance. Section 46C allows cross-ownership of lines businesses and non-renewable generation (such as is proposed by the Applicant), as long as the corporate separation and arms length provisions are complied with. The opportunity or incentive to cross-subsidise is an effect of cross-ownership that is authorised by s46C. If a lines company invested in generation and complied with the corporate separation and arms length provisions, no exemption would be required¹¹, but the risk of cross-subsidisation identified above would still exist.
- 62 Accordingly, the Commission does not consider that a limited exemption would materially affect the incentive or opportunity to cross-subsidise the generation activity proposed by Top. The Commission notes that this view would not change, if Top had a joint venture partner for the expansion of Ngawha.

Conclusion on Question 2

- 63 The Commission considers that the granting of an exemption from the Arms Length Rules in this case would not create incentives or opportunities (that do not already exist) to cross subsidise between lines activities and generation activities.
- 64 The Commission considered the extent to which the ability to misallocate costs from the generation business to the lines business might be increased as a result of granting a limited exemption (requiring compliance with 1 to 6 and 11 to 15 of the Arms Length Rules, and requiring the appointment of an independent director to the Board of NGL) and considers that any such increase would not be material.

Question 3: A Relationship Not at Arms Length

Would the Commission permit, by granting an exemption in respect of a business or involvement or interest, a relationship between an electricity lines business and an electricity supply business which is not at arms length?

- 65 In most circumstances where an exemption is required from the ownership separation provisions of the EIR Act, a relationship will be created that will ultimately not be at arms length. In each case the Commission assesses the practical effect of the non-arms length relationship in order to decide whether that relationship is likely to lead to a result that would be contrary to the purposes of the EIR Act.
- 66 This Application specifically seeks exemption from the necessity to comply with the Arms Length Rules.

¹¹ On the assumption that the lines company was not proposing to sell a financial hedge for risks relating to the price of electricity.

- 67 Previously, the Commission has determined that where the granting of an exemption would not create incentives or opportunities to inhibit competition in the electricity industry or would not create incentives or opportunities to cross-subsidise generation activities from electricity lines businesses then the arms length requirement may have no practical effect.
- 68 In this case s46C(2) of the EIR Act requires, where lines companies seek to invest in non-renewable generation, that the Arms Length Rules be complied with. Whilst the Commission considers that strict compliance with these rules is necessary in instances where the lines business is also proposing to retail the generated electricity across its own lines, that is not what is proposed in the present case.
- 69 Top has submitted that it wishes to retain the existing governance structure of NGL in order to utilise the experience and knowledge of the directors and managers, as stated above.
- 70 The Commission considers that a limited exemption to allow the retention of the current governance structure of NGL, subject to the appointment of an independent director to the Board of NGL, is appropriate in this case whilst maintaining the existing requirement to otherwise comply with the Arms Length Rules.

Conclusion on Question 3

- 71 The Commission considers that as the exemption is unlikely to create incentives or opportunities to inhibit competition in the electricity industry or to cross-subsidise generation activities from electricity lines businesses, a limited exemption from the requirement to comply with rules 7-10 of the Arms Length Rules in this case is unlikely to have any material adverse effect.

Conclusion in Respect of the Commission's Criteria

- 72 The Commission considers that the granting of a limited exemption in this case would not create incentives or opportunities to inhibit competition in the electricity industry.
- 73 The Commission also considers that limiting the exemption to Arms Length Rules 7 to 10 only would not result in any material increase in the opportunities or incentives to cross subsidise generation activities from lines activities.
- 74 Further, the Commission considers that the exemption would create a relationship between an electricity supply business and an electricity lines business that is other than at arms length but that that relationship, due to the above considerations, would have no practical effect on the purposes of the EIR Act.
- 75 Accordingly, the Commission determines to grant a limited exemption to Top from s17 of the EIR Act in respect of the cross-involvements outlined in the application, subject to the following conditions:
- a director must be appointed to the Board of NGL who must not be:
 - a) a manager of Top;
 - b) an associate of Top, other than by virtue of being a director of NGL; or
 - c) involved in the business of Top;
 - NGL and Top's electricity lines business must comply with rules 1 to 6 and 11 to 15 of the Arms Length Rules set out in Schedule 1 of the EIR Act;

- Top must not be involved either directly or indirectly in the selling of electricity to any end-use customer connected to Top's electricity network. This does not preclude the sale of electricity to an electricity retailer;
- this exemption does not extend to engaging in the financial hedging of risks relating to the price of electricity in New Zealand beyond the nameplate generation capacity (42MW per annum) of the proposed expanded geothermal generation plant; and
- this exemption is specific to the cross-involvements created through Top's involvement in the proposed expanded geothermal generation plant at Ngawha. It does not extend to any other interest or existing or future cross-involvement of Top.

76 The exemption takes effect from the date of its publication in the New Zealand Gazette.

THE COMMISSION'S DETERMINATION

- 77 The Commission determines to grant a limited exemption from particular Arms Length Rules of the EIR Act, subject to the terms and conditions stated in the Notice of Exemption.

Dated this 10th day of May 2007

Donal Curtin
Commissioner
Commerce Commission

NOTICE OF EXEMPTION

The Commerce Commission (Commission), pursuant to section 81 of the Electricity Industry Reform Act 1998 (the EIR Act), exempts Top Energy Limited (Top) from the application of section 17 of the EIR Act in respect of the cross-involvement (as that term is defined in the EIR Act) that would be created through its investment in a geothermal generation plant, located at Ngawha Springs, Northland, through Top's wholly owned subsidiary Ngawha Generation Limited (NGL) outlined in its application for exemption registered by the Commission on 9 November 2006.

The exemption is subject to the following conditions:

1. a director must be appointed to the Board of NGL who must not be:
 - a. a manager of Top;
 - b. an associate of Top, other than by virtue of being a director of NGL; or
 - c. involved in the business of Top;
2. NGL and Top's electricity lines business must comply with rules 1 to 6 and 11 to 15 of the Arms Length Rules set out in Schedule 1 of the EIR Act;
3. Top must not be involved either directly or indirectly in the selling of electricity to any end-use customer connected to Top's electricity network. This does not preclude the sale of electricity to an electricity retailer;
4. this exemption does not extend to engaging in the financial hedging of risks relating to the price of electricity in New Zealand beyond the nameplate generation capacity (42MW per annum) of the proposed expanded geothermal generation plant; and
5. this exemption is specific to the cross-involvements created through Top's involvement in the proposed expanded geothermal generation plant at Ngawha. It does not extend to any other interest or existing or future cross-involvement of Top.

The exemption takes effect from the date of publication of this notice in the New Zealand Gazette.

The Commission may vary or revoke the exemption in accordance with s81(5) of the EIR Act.

Dated this 10th day of May 2007

Donal Curtin
Commissioner

APPENDIX 1

ARMS LENGTH RULES

1. Objective—

(1) The objective of this schedule is to ensure that where—

(a) Persons carrying on an electricity business or businesses, and any common parent of those businesses, have not complied with the ownership separation rules;

(b) A settling trust and a mirror trust are involved in electricity businesses,—the electricity lines business and electricity supply business and, in the case of paragraph (b), the settling trust and the mirror trust, operate at arms length.

(2) Without limiting the ordinary meaning of the expression, “arms length” includes having relationships, dealings, and transactions which—

(a) Do not include elements that parties in their respective positions would usually omit; or

(b) Do not omit elements that parties in their respective positions would usually include,—

if the parties were—

(c) Connected or related only by the transaction or dealing in question; and

(d) Acting independently; and

(e) Each acting in its own best interests.

2. Arms length rules—

The arms length rules are as follows:

Duty to Ensure Arms Length Objective Is Met

1. Business A and every parent of business A, and business B and every parent of business B, must take all reasonable steps to ensure that the arms length objective in clause 1 is met.

Arms Length Terms

2. Business A, and every parent of business A, must not enter into a transaction in which business B, or any parent of business B, is interested if the terms of the transaction are terms which unrelated parties in the position of the parties to the transaction, each acting independently and in its own best interests, would not have agreed to.

Duty Not to Prefer Interests of Business B

3. A manager of business A must not, when exercising powers or performing duties in connection with business A, act in a manner which the manager knows or ought reasonably to know would prefer the interests of business B over the interests of business A.

Duty Not to Discriminate in Favour of Business B

4. Business A must not, in providing services or benefits, discriminate in favour of business B or the customers, suppliers, or members of business B.

Duty to Focus on Interests of Right Ultimate Owners

5. A manager of business A must, when exercising powers or performing duties in connection with business A, act in the interests of the ultimate members of business A in their capacity as such, and must neither subordinate the interests of those members to the interests of the members of business B nor, to the extent that the members or ultimate beneficial members of each business overlap, take account of that fact or have regard to their dual capacity as members of business B and business A.

Duty of Managers of Parents of Business A

6. A manager of a parent of business A must not, when exercising powers or performing duties in connection with business A, act in a manner which the manager knows or ought reasonably to know would prefer the interests of business B, or of the customers, suppliers, or members of business B in that capacity, over the interests of business A or the customers, suppliers, or members of business A.

Requirement for Separate Management

7. A manager of business A must not be a manager of business B.
8. A manager of business A must not be an associate of business B, other than by virtue of being a manager of business A.
9. A manager of business A must not be involved in the business of business B.
10.
 - (1) Subject to subclause (2), no person may place the manager of business A under an obligation, whether enforceable or not, to act in accordance with the directions, instructions, or wishes of business B, or any manager or associate of business B, or any parent of business B, and no manager may submit to any such obligation.
 - (2) A common parent of both business A and business B may place a manager under such an obligation if doing so does not contravene another of the arms length rules.

Restriction on Use of Information

11. Business A must not disclose or permit the disclosure to business B, or use or permit the use for the purposes of business B of, restricted information of business A.

An electricity trust that is a parent of business A (trust A), business A, and every parent of trust A, must not disclose or permit the disclosure to business B, an electricity trust that is a parent of business B (trust B), or any parent of trust B, or use or permit the use for the purposes of business B or trust B, of restricted information of business A or trust A.

“Restricted information” is information received or generated, and held, by business A or trust A connected with its business, being information which—

- (a) Is not available to the competitors or potential competitors of business B or trust B; and
- (b) If disclosed to business B or trust B, would put, or be likely to put, business B or trust B in a position of material advantage in relation to any competitor or potential competitor.

Records

12. Every business to which this schedule applies must keep at its registered office a register of transactions entered into between business A, or any parent of business A, and business B, or any parent of business B.
13. Business A must, within 10 working days of entering into any such transaction, enter in its register details sufficient to identify the nature and import of the transaction.

Practical Considerations

14. Business A and every parent of business A must ensure that its practical arrangements, such as use of accommodation, equipment, and services, do not contravene this schedule.
 15. Business A and every parent of business A must ensure that its selection and appointment of advisors does not prejudice compliance with rules 7 to 11.
3. Rules do not limit objective—
The arms length rules in clause 2 do not limit the generality of the arms length objective in clause 1.
 4. Interpretation—
 - (1) In this schedule,—
 - (a) "Parent", in relation to a business, means every person that is involved in the business;
 - (b) "Common parent", in relation to business A and business B, means a person that is involved in both business A and business B.
 - (2) In this schedule, a person is "interested" in a transaction if the person, or an associate of that person,—
 - (a) Is a party to, or will derive a material financial benefit from the transaction; or
 - (b) Has a material financial interest in a party to the transaction; or
 - (c) Is a manager of a party to, or a person who will or may derive a material financial benefit from the transaction; or
 - (d) Is otherwise directly or indirectly materially interested in the transaction.
 - (3) References in this schedule to business A or trust A apply equally to business B or trust B and vice versa.
 5. Terms refer only to related companies—
The terms "business A" and "business B" refer to electricity lines businesses and electricity supply businesses—
 - (a) Which are carried on by electricity companies in which a mirror trust and its settling trust are involved; or
 - (b) Which are carried on by electricity companies which have a common parent.
 6. These duties are additional to other duties—
The requirements of this schedule are additional to the requirements of the Electricity (Information Disclosure) Regulations 1994 and any other regulations from time to time made under the Electricity Act 1992.