

# Application for exemption from arm's-length rules: Top Energy Limited

### Final Decision Paper

1 September 2017

#### **Executive summary**

#### Decision No. 3

Final decision pursuant to the Electricity Industry Act 2010 (Act), in respect of a request for an exemption under section 90 of the Electricity Industry Act 2010 (Act), relating to the involvement of a person in a distributor and a connected generator or a connected retailer.

This is the third decision made by the Authority for an exemption under section 90 of the Electricity Industry Act 2010.

**Applicant** 

Top Energy Limited (Top) (for Top, and various other parties).

**Background** 

Top is an electricity distributor in the far North. Ngawha Generation Limited (NGL) is a wholly owned subsidiary of the electricity distributor Top. NGL owns Ngawha Power Station (Ngawha). Top proposes to expand Ngawha to a total capacity of 64 MW. The NGL expansion would mean that NGL would become a connected generator in relation to Top, under section 76 of Part 3 of the Act.

Summary of application:

The application requests that the Electricity Authority (Authority) exempt, under section 90(1)(b) of the Act, Top, the directors of Top and NGL, and senior managers at Top and NGL (the chief executive officer, the chief financial officer, and the general manager corporate services, or persons holding equivalent positions) from the requirement in section 76 to comply with the arm's-length rules 9 (separate management) and rule 10 (directors and managers must not be placed under certain obligations).

Summary of decision:

The Authority grants Top, the directors, the chief executive officer, or person holding an equivalent position, the chief financial officer, or person holding an equivalent position and the general manager corporate services, or person holding an equivalent position of Top and NGL, an exemption under section 90(1)(b) of the Act from the requirement in section 76 to comply with arm's-length rules 9 and 10, subject to the following conditions set out in the Notice of Exemption:

- (a) the exemption applies in relation to the expansion of Ngawha Springs Power Station up to a nameplate capacity of 65MW
- (b) the exemption from the requirement to comply with rule 10 only applies to the appointment of management to positions of material influence over NGL

- (c) Top Energy and NGL must not engage in retailing, as that term is defined in the Act, to any customer connected to Top Energy's distribution network
- (d) the exemption applies while Top Energy and NGL are whollyowned by the Top Energy Consumer Trust
- (e) the exemption applies until the close of 1 November 2027.

The Authority also revokes Top's existing exemption from the application of section 17 of the Electricity Industry Reform Act 1998 (EIR Act) granted on 10 May 2007 by the Commerce Commission.

Date of decision: 2 October 2017.

**Date of exemption**: The exemption takes effect from the date notified in the New

Zealand Gazette.

#### **Contents**

Exe	ecutive summary Decision No. 3	ii ii
1	The Application Top and Ngawha provide electricity in the far North Top's expanded operations attract additional obligations Top has applied for two exemptions from Part 3 of the Act This decision relates to the expansion of Ngawha	6 6 6 7
2	The purpose of Part 3 of the Act is to promote competition Section 90 allows the Authority to grant exemptions We used a counterfactual to assess the effect of the requested exemption We assess competition in the relevant markets The Authority may impose conditions	8 9 10 10
3	The Authority has issued guidance about its process	10
4	Some parties were concerned the requested exemption could inhibit competition Cost sharing between distribution and generation businesses could create a competitive advantage Potential for unreasonable cost allocation	11 11 12
	Transactions between distribution and generation businesses may not be at arm's-length  Distributors self-supplying network support services may not consider third party	12
	providers  The precedent effect of granting the requested exemption	12 12
5	The likely state of competition with and without the requested exemption  Describing the factual scenario – with the requested exemption  Describing the counterfactual scenario – without an exemption	13 14 14
6	The Authority identified the relevant markets Network services market National wholesale electricity market Local wholesale electricity market Local retail electricity market Other markets	15 15 16 16 16
7	The Authority applied the tests to the markets  Analysis by market - statutory criteria  Network support services market  National and/or local wholesale electricity markets  Local retail market  Other matters referred to in Authority guidance  Opportunities to cross-subsidise connected generator  Will the exemption permit a relationship between a distributor and a retailer or generator which is not at arm's-length  The temporal nature of the exemption  Summary	17 18 18 19 22 23 23 26 26 27
8	The exemption meets the tests in the Act	29
9	The Authority published a draft decision and invited comments  Top believes the expiry condition of 10 years is unnecessary  Directors of NGL will need to consider the potential of a new exemption not being granted	30 30 30
	The Authority may amend or revoke the exemption	31

Resource	ce consents are held for a period of 35 years	31
Four submis	sions oppose the decision	32
The inte	nt of Part 3 of the Act	32
inhibit co Comme A term o Ngawha Concerr	re concerns that the exemption will create incentives and opportunities to ompetition nters believe Top should not be permitted to retail on the adjacent network of 10 years is too long it's ability to provide network support in that the exemption would create a precedent for future applications ded comments on the draft decision	32 33 34 34 34
10 The Authorit	y grants the exemption, subject to conditions	35
Appendix A	Exemption Application Top Energy Limited	36
Appendix B Reform Act	Top Energy Limited existing exemption under the Electricity Industry 37	
Appendix C Section 76 Corporate se Arm's length Section 90(1 Section 90(1	rules )(a)	38 38 38 38 39
Appendix D	Schedule 3 of the Electricity Industry Act 2010: Arm's-length rules	40
Glossary of abbr	eviations and terms	41

#### 1 The Application

#### Top and Ngawha provide electricity in the far North

- 1.1 Top is an electricity distribution business (distributor) responsible for the supply of electricity in the Far North. It is owned by the Top Energy Consumer Trust (Trust), on behalf of approximately 31,000 consumers.<sup>1</sup>
- 1.2 Top owns 3.65 MW of diesel generation for providing support to its distribution network.
- 1.3 NGL is a wholly owned subsidiary of Top that owns and operates 32 MW of geothermal generation at Ngawha Power Station (Ngawha) connected to Top's distribution network.
- 1.4 Top proposes to install and operate an additional 26 MW of generation for providing support to its network, and proposes to expand Ngawha to a total capacity of 64 MW. This would bring Top's involvement in generation to a total of 93.65 MW.
- 1.5 The increase arises as a result of two proposals: one relating to generation for network support, the other, the expansion of Ngawha.

#### Top's expanded operations attract additional obligations

- 1.6 If Top goes ahead with either or both of the proposals, Top will be carrying on the business of a connected generator, and will be involved in a connected generator under section 76 of the Act. Top, NGL, and others involved in those entities would be required to comply with corporate separation requirements and the arm's-length rules. To avoid the costs associated with complying with those obligations, Top has applied for exemptions under section 90 of the Act from complying with certain obligations under Part 3. The Authority explains these issues further below.
- 1.7 Implementing either or both of Top's proposals will result in it becoming involved in a "connected generator". A connected generator, 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 distributor's networks
  - (b) in respect of which the distributor, or any other person involved in the distributor, is involved.
- 1.8 Top currently holds an exemption relating to its involvement in NGL. The exemption was granted in 2007 by the Commerce Commission, and permits the expansion of Ngawha up to a maximum nameplate capacity of 42 MW. This exemption was granted under the EIR Act, but, as set out in section 144(a) of the Act, any such exemption granted by the Commission continues in force as if it were granted by the Authority under the Act.
- 1.9 The Act relaxed restrictions on distributors owning generation, and in Part 3 introduced new rules for cross-involvements between distributors and generators. Those changes effectively mean that Top's existing exemption is unnecessary (because NGL is not currently a "connected generator" under the relaxed restrictions of the Act).

#### Top has applied for two exemptions from Part 3 of the Act

1.10 Top has applied for two different exemptions. Specifically:

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Top Energy Annual Report 2015/16

- (a) under section 90(1)(a) of the Act, Top has applied for an exemption from the corporate separation and arm's-length requirements in section 76 in relation to its involvement in the proposed 26 MW of generation for network support
- (b) under section 90(1)(b) of the Act, Top has applied for an exemption for itself, the directors of Top and NGL, and certain managers of Top and NGL from the requirement in section 76 of the Act to comply with arm's-length rules 9 and 10 in relation to their involvement in NGL.
- 1.11 The Authority may exempt any business or involvement (as defined by section 74 and Schedule 2 of the Act) from the application of Part 3 on any terms or conditions that it reasonably considers are necessary to give effect to the purpose of Part 3.

#### This decision relates to the expansion of Ngawha

- 1.12 This decision relates to the exemption application described in paragraph 1.10(b), regarding Top's involvement in NGL. The Authority intends to publish a draft decision later in 2017 regarding the exemption application described in paragraph 1.10(a) regarding Top's involvement in generation for network support, (which will also address the relevance of Top's ownership of the existing 3.65 MW of diesel generation to the restrictions in Part 3, in light of the proposed Ngawha expansion).
- 1.13 Top's wholly owned subsidiary NGL has recently been granted resource consent for geothermal fluid extraction sufficient to increase the nameplate capacity of generation at Ngawha up to 100 MW. The exemption application is for the proposed expansion up to a maximum of 65 MW. Any further expansion would require a further exemption application to the Authority.
- 1.14 At present, Top has six directors. Those six directors are also directors of NGL. NGL has two other directors: one independent director, and Top's chief executive. In addition, Top has advised that its general manager of finance and general manager of corporate services have material influence over NGL.
- 1.15 If NGL goes ahead with the expansion of generation at Ngawha to a nameplate capacity of 64 MW, the capacity of Ngawha would be greater than 50 MW, so that in relation to Top, NGL would be a connected generator for the purpose of section 76 of the Act.
- 1.16 Top as a distributor, and NGL as a connected generator, would be required to ensure corporate separation, and to comply with the arm's-length rules in Schedule 3 of the Act in relation to that involvement. Top and NGL directors would be required to comply with the arm's-length rules.
- 1.17 Top already complies with the corporate separation requirement in section 76(1) of the Act in relation to Ngawha. Ngawha is owned by NGL, and NGL carries on the business of a generator.
- 1.18 However, Top estimates the cost of separate management for NGL, as required by arm's-length rules 9 (separate management) and 10 (directors and managers must not be placed under certain obligations), to be in excess of \$1million per annum. Top considers separate management unnecessary to achieve the purpose of Part 3, and seeks to maintain its existing management arrangements, the reason for this application for exemption.
- 1.19 Top has applied under section 90(1)(b) of the Act for an exemption for itself, the directors of Top and NGL, Chief Executive Russell Shaw, General Manager Corporate Services Steven James, and General Manager Finance Paul Doherty from the requirement in

- section 76 of the Act to comply with arm's-length rules 9 and 10 in relation to NGL's generation at Ngawha, up to 65 MW.
- 1.20 Top currently holds an exemption (Appendix B) for its involvement in up to 42 MW of generation at Ngawha with certain conditions. While the enactment of the Act in 2010 made this exemption redundant (as discussed in paragraph 1.9 regarding connected generators), Top and NGL have continued to comply with the conditions of that exemption.
- 1.21 The conditions on the existing exemption are:
  - (a) an independent director must be appointed to the Board of NGL
  - (b) NGL and Top must comply with arm's-length rules 1 to 6 and 11 to 15 of Schedule 1 of the EIR Act<sup>2</sup>
  - (c) Top must not be involved in retailing electricity to consumers on its network. This does not preclude the sale of electricity to a retailer
  - (d) the exemption does not extend to the engaging in the financial hedging of risks relating to the price of electricity beyond the nameplate capacity of generation at Ngawha
  - (e) the exemption is specific to the cross-involvement created through Top's involvement in the proposed expansion of NGL's generation it does not extend to any other interest or existing or future cross-involvement of Top.
- 1.22 Top has stated that it would be appropriate to grant its new exemption subject to the same conditions imposed on its existing exemption.
- 1.23 In its application, Top has requested that the Authority either amend the existing exemption, or grant a new exemption from the equivalent arm's-length rules 9 and 10 in Schedule 3 the Act (Appendix D), on the same conditions.
- 1.24 The Authority has decided to grant a new exemption and revoke the existing exemption. This ensures the new exemption has been fully considered against, and is consistent with, the requirements of the Act.
- 1.25 This exemption has been requested under section 90(1)(b) of the Act which, as described in C.17, exempts a person or persons from compliance from specific provisions, but their involvement must still be taken into account in determining whether the provisions of Part 3 of the Act apply to other persons, businesses, or involvements.

# 2 The purpose of Part 3 of the Act is to promote competition

- 2.1 The Authority administers Part 3 of the Act, which relates to the separation of distribution from certain generation and retailing activities, and imposes restrictions on the involvement of distributors in certain generation and retailing activities. Prior to the Act, similar provisions were contained in the EIR Act and were administered by the Commerce Commission.
- 2.2 Section 72 of the Act provides that the purpose of Part 3 is to promote competition in the electricity industry:

Schedule 1 of the EIR Act contains the arm's-length rules superseded by the Act in 2010.

- (a) by prohibiting a person who is involved in a distributor from being involved in a generator where that may create incentives and opportunities to inhibit competition in the electricity industry
- (b) by restricting relationships between a distributor and a generator or retailer, where those relationships may not otherwise be at arm's-length.
- 2.3 Implicit in the purpose outlined above is that the involvements to which Part 3 apply, and relationships between parties that are involved, may inhibit competition in the electricity industry.
- 2.4 The solution, as implemented in Part 3 of the Act (and, before that, in the EIR Act), is to require ownership separation, corporate separation, and the implementation of other safeguards such as arm's-length rules and other requirements relating to use-of-system agreements.
- 2.5 Relevant to the proposed expansion of Ngawha, section 76 of the Act imposes corporate separation and arm's-length rules for distributors and connected generators where the generation exceeds 50 MW.

#### Section 90 allows the Authority to grant exemptions

- 2.6 Section 90(1) of the Act provides that the Authority may, by notice in the Gazette, exempt:
  - (a) any business or involvement from the application of Part 3, or
  - (b) any person from compliance with any provisions of Part 3.3
- 2.7 Section 90 of the Act recognises that the policy that Part 3 is intended to implement will not always be compromised by a person's involvement in a distributor on the one hand, and a generator or retailer on the other.
- 2.8 Section 90(2) of the Act provides the statutory criteria that the Authority must apply in order to grant, or decline to grant an exemption from any of the provisions of Part 3.
- 2.9 Section 90(2) of the Act provides that the Authority may grant an exemption only if it is satisfied that:
  - (a) the exemption will either promote, or not inhibit, competition in the electricity industry
  - (b) the exemption will not permit an involvement in a distributor and a generator or retailer that may create incentives and opportunities to inhibit competition in the electricity industry.
- 2.10 Appendix C describes in more detail the relevant provisions in the Act.
- 2.11 The Authority has stated in paragraph 34 of its "Guidelines on Part 3 of the Electricity Industry Act 2010" (Guidelines) its view that any exemption should be the minimum necessary to permit an involvement that would be prohibited by Part 3, but that otherwise the application of Part 3 should be preserved.

9

As set out in section 1 of this decision, the exemption relating to the expansion of Ngawha has been requested in terms of section 90(1)(b) (an exemption from compliance with provisions of Part 3).

# We used a counterfactual to assess the effect of the requested exemption

2.12 The Authority determines whether the exemption will meet the criteria in section 90(2) of the Act by comparing the likely state of competition if the exemption is granted (the scenario with the exemption, referred to in this decision paper as the factual), with the likely state of competition if the exemption is not granted (the scenario without the exemption, referred to in this decision paper as the counterfactual).

#### We assess competition in the relevant markets

- 2.13 Determining the scope of the relevant market or markets is an important tool in determining the competitive effects of the exemption.
- 2.14 The Authority defines markets in a way that it considers best isolates the key competition issues that arise from granting the exemption. In many cases this may not require it to precisely define the boundaries of a market. The Authority has adopted the definition of market from section 3(1A) of the Commerce Act 1986 (Commerce Act): "the term market is a reference to a market in New Zealand for goods or services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them".

#### The Authority may impose conditions

- 2.15 Section 90(4) of the Act provides that the Authority may grant an exemption on any terms and conditions that it reasonably considers are necessary to give effect to the purpose of Part 3.
- 2.16 Conditions may be imposed on an exemption to address specific competition concerns that are identified in the Authority's analysis, where those conditions allow the Authority to be satisfied the statutory criteria and the purpose of Part 3 are met.

#### 3 The Authority has issued guidance about its process

- 3.1 The Authority has issued guidelines on Part 3 of the Act (Guidelines).4
- 3.2 Paragraph 46 of the Guidelines describe the process the Authority will follow when it receives an application for an exemption:
  - (a) register the application, including publishing the application on the Authority's website (the Authority will not publish confidential information)
  - (b) investigate the application (which may include interviewing and seeking comment from relevant parties)
  - (c) determine to grant, or decline to grant, an exemption.
- 3.3 In order to assess whether the criteria in section 90(2) of the Act are met, and in light of the Guidelines and guidance in the application for exemption template, the Authority has set out its analysis as follows:
  - (a) determination of the appropriate counterfactual, and identification of the relevant markets
  - (b) assessment of the exemption against the criteria in the Act, including relevant matters in the Guidelines and application template:

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Guidelines on Part 3 of the Electricity Industry Act 2010.

- (i) whether granting the exemption would either promote, or not inhibit, competition in the electricity industry
- (ii) whether granting the exemption would create incentives and opportunities to inhibit competition in the electricity industry
- (iii) whether granting the exemption would create opportunities for a distributor to cross-subsidise the connected generator
- (iv) whether the exemption, in respect of a business or involvement, will permit a relationship between a distributor and a retailer or generator which is not at arm's-length
- (v) the temporal nature of the exemption and any incentives or opportunities it may create
- 3.4 Section 90(4) of the Act permits the Authority to impose any conditions it reasonably considers necessary to achieve the purpose of Part 3 (outlined in paragraph 2.2). Conditions are considered as part of the competition analysis under paragraph 3.3(b).
- 3.5 In practice this means applying conditions to return the market(s) to a state of competition that would exist had the exemption not been granted, that is, the state of competition under the counterfactual.
- 3.6 The Authority has stated in paragraph 48 of the guidelines that in most cases, the Authority may also publish a draft decision, including any proposed conditions, and seek comments on the draft, prior to making a final decision. A draft decision was published by the Authority on 11 July 2017.

# 4 Some parties were concerned the requested exemption could inhibit competition

- 4.1 The Authority received only one submission on the application that was relevant to the criteria in the Act. To gain a better understanding of industry views the Authority interviewed selected parties requesting their views on the application.<sup>5</sup>
- 4.2 Because this process requested comments on both exemption applications (involvement in NGL and network support generation), some concerns may have been raised about the application relating to network support generation, and may be included where they could not be separated.
- 4.3 The Authority considered the following concerns raised in the submission and through the interview process were relevant to the decision-making process.

# Cost sharing between distribution and generation businesses could create a competitive advantage

- 4.4 A concern was expressed about the sharing of costs between Top's distribution business and generation business if the Authority granted the requested exemption. Avoiding the additional costs of separate management was perceived as a competitive advantage, when compared with a stand-alone generation business.
- 4.5 Concern about cost sharing is discussed in section 7 of the paper.

Submissions on the application are published on the <u>Authority's website</u>.

#### Potential for unreasonable cost allocation

- 4.6 A number of parties expressed scepticism as to the effectiveness of the restrictions in the regime in Part 4 of the Commerce Act regarding how distributors allocate costs between regulated and unregulated activities.<sup>6</sup>
- 4.7 In relation to the concerns expressed, the Authority asked Top to outline the controls around the way costs are allocated. Top explained:
  - (a) costs are directly attributed where possible
  - (b) auditing of cost allocations
  - public disclosure of allocations with related parties (including NGL) (c)
  - (d) board approval of budgets for both businesses.
- 4.8 The potential for costs to be allocated unreasonably between the distribution and generation businesses is discussed in section 7 of the paper, as part of the Authority's analysis of whether granting the requested exemption would create opportunities for a distributor to cross-subsidise the connected generator.

#### Transactions between distribution and generation businesses may not be at arm's-length

- 4.9 Currently, and continuing under the requested exemption, Top and NGL enter into contracts with each other for connection and services. Interested parties raised concerns that these agreements would not be made at arm's-length if Top and NGL continue to share management under the requested exemption.
- Concerns raised about transactions and contracts made between Top and NGL as 4.10 related parties are discussed in section 7 of the paper.

#### Distributors self-supplying network support services may not consider third party providers

- 4.11 A common theme in the views expressed was the impact of the requested exemption on the existing and expanding market for network support services. More specifically, there was a concern that Top's proposal to own and operate generation for network support may remove opportunities for third party providers to provide equivalent services in the Top network area.
- 4.12 Competition in the market for network support services is considered in section 7 of the paper.

#### The precedent effect of granting the requested exemption

- Interested parties raised concerns about the perception of setting a precedent by 4.13 granting the requested exemption to Top. Those parties expressed the view that granting an exemption to one distributor could be perceived as an endorsement of distributors owning and operating their own generation, potentially undermining the purpose of Part 3 of the Act.
- 4.14 Shifts in technology and new business models in the industry are creating more opportunities for network support services to be procured from third party providers.

6

In the context of section 52B(3) of the Commerce Act 1986, which defines electricity lines as a regulated service.

- Competition for these services has potential to promote more efficient solutions to existing and future challenges in the electricity industry.
- 4.15 Section 90(2) of the Act requires the Authority to make its decision based on the exemption's effect on competition. Although this is done on a case by case basis, the Authority understands that the perception of any exemption is important. This highlights the importance of this decision paper to communicate the specific reasons for granting an exemption in this case, including any conditions imposed.

# 5 The likely state of competition with and without the requested exemption

- 5.1 The Authority has adopted a counterfactual analysis to assess the impact on competition of the requested exemption. Specifically, to determine what competitive effects are likely to arise from the requested exemption, the Authority has assessed:
  - (a) what is likely to occur in the future if the exemption is granted (the factual)
  - (b) what is likely to occur in the future if the exemption is not granted (the counterfactual)
- Top's exemption application outlines what it considers is likely to occur, if the Authority does not grant the exemption in relation to the proposed Ngawha expansion.
- 5.3 Top has identified potential counterfactuals as:
  - (a) continuing with the Ngawha expansion as planned and complying with the corporate separation and arm's-length rules
  - (b) not expanding Ngawha
  - (c) connecting Ngawha to the national grid.
- 5.4 Not expanding Ngawha would allow Top to keep its involvement in generation connected to its own network below the 50 MW threshold in section 76 of the Act. This would avoid NGL becoming a connected generator and so avoid triggering the requirement to follow the corporate separation and arm's-length rules.
- 5.5 From Top's application and discussions during the investigation phase, the Authority considers the likelihood of Top not expanding Ngawha in the absence of an exemption as too low to factor directly into the Authority's analysis.
- In the potential counterfactual described in paragraph 5.3(c), Ngawha would become grid connected, and the capacity of Ngawha could be expanded to up to 250 MW without breaching the ownership separation threshold in section 75 of the Act. In addition, NGL would not be a "connected generator" in terms of section 76 of the Act. This would allow Top to have involvement in up to 50 MW of other generation connected to its network without being required to follow the corporate separation or arm's-length rules.
- 5.7 However, Top's application suggests that connecting Ngawha to the grid is uneconomic when compared with the cost of separate management. The Authority accepts this analysis, and accordingly concludes that the likelihood of that occurring is too low to factor this potential counterfactual into the Authority's analysis.

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Section 75 of the Act allows distributors to be involved in grid connected generators up to a total capacity of 250 MW.

- Top considers that the counterfactual described in paragraph 5.3(a) is the most likely. That is, if the requested exemption is not granted, Top will go ahead with its proposal and comply fully with section 76 of the Act incurring the costs of separate management for NGL.
- In the event that no exemption is granted, Top estimates the costs of compliance with the arm's length rules 9 and 10 at more than \$1million a year (cost breakdowns provided to the Authority supports this is a conservative estimate and could be in excess of \$1.3 million per year), but it remains its favoured option in the event of no exemption being granted.
- 5.10 Based on the factors discussed, the Authority considers that Top would proceed with the expansion of Ngawha regardless of whether the requested exemption is granted.

  Proceeding with the Ngawha expansion without an exemption would mean that Top,

  NGL and their directors would need to comply with all the arm's-length rules.
- 5.11 Therefore, in terms of applying the criteria in section 90(2) of the Act, the relevant assessment is a comparison of the state of competition with the proposal implemented and the exemption granted, and the state of competition if Top goes ahead with its proposal and all relevant parties comply with all of the arm's-length rules.
- 5.12 The Authority's analysis considers the total generation that Top would be involved in, not the increase beyond the 50MW threshold in section 76 of the Act. This is because the competitive effects, and related incentives, must be considered having regard to the total involvement.
- 5.13 Top's existing exemption (Appendix B) is not considered directly relevant to the analysis because:
  - (a) it does not extend to the 64 MW expansion proposed in the application,
  - (b) it is no longer required by Part 3.
- 5.14 However, the conditions on the existing exemption are referenced when applicable.

#### Describing the factual scenario – with the requested exemption

- 5.15 In summary, the Authority considers that, in the factual, the following would occur:
  - (a) NGL would continue with its proposed expansion of Ngawha from 32 MW to 64 MW (nameplate capacity)
  - (b) NGL (and therefore Ngawha) would continue to be wholly owned by Top
  - (c) Ngawha's output would mostly be hedged in the forward markets
  - (d) Ngawha would remain connected to Top's distribution network
  - (e) Top and NGL would continue to operate under corporate separation
  - (f) Top and NGL would share the managers listed by position in the exemption across the two companies
  - (g) Top and NGL would comply with the arm's-length rules (except 9 and 10) in the Act.

#### Describing the counterfactual scenario – without an exemption

5.16 In summary, the Authority considers that, in the counterfactual, the following would occur:

- (a) NGL would continue with its proposed expansion of Ngawha from 32MW to 64MW (nameplate capacity)
- (b) NGL (and therefore Ngawha) would continue to be wholly owned by Top
- (c) Ngawha's output would mostly be hedged in the forward markets
- (d) Ngawha would remain connected to Top's distribution network
- (e) Top and NGL would continue to operate under corporate separation
- (f) Top and NGL would comply with the arm's-length rules (including rules 9 and 10) in the Act.

#### 6 The Authority identified the relevant markets

- Both statutory criteria in section 90(2) of the Act include a reference to competition in the electricity industry. In order to assess how granting the requested exemption would affect competition in the electricity industry it is necessary to identify the relevant markets within the industry.
- 6.2 Top's application addresses the impact of the requested exemption in relation to the following markets:
  - (a) the national wholesale electricity market
  - (b) the local retail market (retail customers connected to Top's distribution network)
  - (c) the local distribution market (ie, the market for electricity lines services in Top's distribution network area).
- 6.3 These were the markets adopted by the Commerce Commission when it considered Top's existing exemption.
- 6.4 The Authority has assessed that there are three markets relevant to this application however they are different to the three markets identified by Top in its application.

#### **Network services market**

- 6.5 The Authority considers that there is an emerging market for network support services that is relevant to assessing the impact of the exemption on competition, namely the market to provide support services for distribution networks that:
  - (a) maintain supply when planned or unplanned outages occur that would otherwise interrupt supply
  - (b) support the quality of supply; including, but not limited to, power factor correction and voltage support
  - (c) reduce peak demand on a distribution network to manage transmission charges or to defer the need for network investment.
- 6.6 To properly define this market, it must be differentiated from the local distribution market. This is because network support services can be provided by a range of technologies including combinations of generation, batteries, and demand response. As an emerging market, the range of solutions is growing rapidly, and this list is intended only to provide examples for context.

- 6.7 A common theme from the Authority's investigation is that a market for network support services and energy management services (to connected consumers) exists and potential participants in that market welcome the opportunity to compete.
- 6.8 Electricity distribution businesses are regulated to promote incentives to improve efficiency and provide services at a quality that reflects consumer demands. For example, this could incentivise competitive tenders for network support services from third parties, if efficiency could be achieved this way. However, there may be countervailing incentives that would encourage a decision to self-supply.

#### National wholesale electricity market

- 6.9 The national wholesale electricity market is defined as the market where electricity is bought and sold. Primarily this is the spot market, where bids and offers dictate the price of electricity in 30 minute trading periods, but it also includes complementary markets such as the hedge market which is used to manage risks by both buyers and sellers.
- 6.10 Ngawha participates in the national wholesale market.
- 6.11 Prices in the wholesale market are resolved by node, usually points of connection to the grid. Top's network is connected to the national grid by a single node at the Kaikohe grid exit point (GXP).
- 6.12 Some types of generation can also be used to supply instantaneous reserves, or other ancillary services, for the national wholesale market.
- 6.13 The Authority considers that this market is relevant.

#### Local wholesale electricity market

6.14 Due to the nodal resolution of prices in the wholesale market and the characteristics of the national grid, constraints and outages on the national grid may cause a significant separation of prices between nodes. In extreme cases it can effectively result in a local market that is temporarily isolated from the offers of generators on the other side of the constraint or outage. Therefore the Authority has also considered the impact of the requested exemption on competition in the local wholesale market (when such a market exists).

#### Local retail electricity market

- 6.15 The retail market is the market for the sale of electricity purchased from the wholesale market to end-use consumers. In this context the local retail market is the market for the sale of electricity to end-use consumers on Top's distribution network. The existence of local generation can impact the local retail market by increasing the depth of the hedge market in the region.
- 6.16 The Authority considers that this market is relevant.

#### Other markets

6.17 The local distribution market is the market for conveyance of electricity to consumers on Top's distribution network. Top currently has an effective monopoly in this market, precluding the possibility of competition being affected by the requested exemption.

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Commerce Commission fact sheet on Part 4 of the Commerce Act 1986.

- 6.18 Secondary networks can be an exception to this lack of competition. An example of a secondary network is an embedded network that connects to a distributor's network rather than directly to the national grid.
- 6.19 Currently there is one embedded network connected to Top's distribution network, that is the Kerikeri Retirement Village.
- 6.20 The Authority does not consider the expansion of Ngawha, or the requested exemption allowing shared management, would have any impact on secondary networks, or present any change in behaviour from Top to either promote, or inhibit competition in a distribution market that includes a secondary network.
- 6.21 The Authority also recognises there are other markets that could be assessed. These include the grid support market and the local commercial energy services market.
- 6.22 The Authority considers these other markets are not relevant to this application and have therefore completed its analysis on the three markets identified in paragraph 6.2.

#### 7 The Authority applied the tests to the markets

- 7.1 The Authority sets out below, in respect of each potentially relevant market, an analysis of the criteria for an exemption in section 90(2) of the Act, as well as the relevant matters set out in the application for exemption template.
- 7.2 The Authority then considers other matters specified in the Authority guidance.
- 7.3 Section 2 of this paper sets out the legal criteria that the Authority must apply when considering whether to grant an exemption. As described in section 5 of this paper, the Authority adopts a counterfactual analysis in order to assess whether the legal criteria are met. In this case the only difference between the factual and counterfactual is the existence of shared management between Top and NGL.
- 7.4 Bringing the above together, the Authority's analysis considers whether the existence of shared management will, compared with the counterfactual:
  - (a) promote or not inhibit competition
  - (b) create incentives and opportunities to inhibit competition.
- 7.5 The following table illustrates the structure of the analysis in this section. For each of the relevant markets, we discuss the effects of the proposed Ngawha expansion to fully understand the counterfactual and the factual (as the expansion is common to both). However, the key issue for this paper is the impact of shared management as a result of granting the requested exemption. Our approach is presented in the shaded cells in the right-hand-side column of the table.

Table 1: How the Authority applied the statutory criteria tests

	Ngawha expansion with corporate separation and full arm's-length rules (the counterfactual)	Ngawha expansion occurs anyway. Impact of allowing shared management by granting an exemption	
	Top may promote or inhibit competition?	Does shared management alter Top's impact on competition?	
Тор	Creates incentives and opportunities for Top to inhibit competition?	Does shared management create additional incentives and opportunities for Top to inhibit competition?	
	NGL may promote or inhibit competition?	Does shared management alter NGL's impact on competition?	
NGL	Creates incentives and opportunities for NGL to inhibit competition?	Does shared management create additional incentives and opportunities for NGL to inhibit competition?	

#### **Analysis by market - statutory criteria**

#### **Network support services market**

### Will the exemption promote, or not inhibit, competition in the network support market?

- 7.7 Ngawha is directly connected to Top's network on the sub-transmission bus of the Kaikohe GXP. This electrical positioning essentially eliminates its ability to provide support to Top's distribution network under normal operating conditions.
- 7.8 In practice, any generation at Ngawha would be equivalent to a grid connected generator in the context of network support.
- 7.9 Therefore, for both Top and NGL, the Authority considers the requested exemption will have no effect on competition in the market for network support services. That is, it would not promote, and would not inhibit, competition in the network support market.

### Will the exemption permit an involvement that may create incentives and opportunities to inhibit competition in the network support market?

- 7.10 It is possible Ngawha could be upgraded to maintain supply to Top's network during outages that isolate its network from the national grid.
- 7.11 While such outages do not contribute to Top's interruption of supply measures for the purpose of the Commerce Commission's price-quality regime, Top does have incentives to maintain supply for commercial and reputational reasons. NGL has its own incentives to continue to generate during these outages where possible. These incentives exist for both businesses, and the Trust that owns them, with or without the requested exemption in place.

- 7.12 For example, Top has an electrical contracting business unit. In theory, NGL could engage Top's electrical contracting arm to install the control systems required to provide the service, but in practice Top would be unlikely to have the expertise required to carry out the specialised technical requirements of the work. In addition, even if Top has the expertise, the remaining arm's-length rules would apply. Those arm's-length rules are discussed in greater detail below.
- 7.13 When comparing the incentives and opportunities created in the factual, and the counterfactual, the Authority considers that the requested exemption would not create any incentives or opportunities for Top to inhibit competition in the market for network support.

#### National and/or local wholesale electricity markets

#### Will the exemption promote, or not inhibit, competition in the wholesale markets?

- 7.14 Top as a distributor does not directly participate in the wholesale electricity market. Potential incentives and opportunities for Top relevant to the wholesale market (for example favourable connection terms for NGL compared with other generators) are discussed below in paragraphs 7.28 to 7.40.
- 7.15 In relation to NGL, NGL already holds rights and consents for the extraction and reinjection of geothermal fluid at Ngawha. Top (through NGL) is the only party currently able to realise the benefits of this resource, and as discussed in section 5 the Authority considers it would continue with the expansion if the exemption is declined.
- 7.16 Generation at Ngawha is a binary cycle geothermal power station. The nature of the geothermal resources and the resource consents NGL works under require Ngawha's outputs to be highly consistent. This gives NGL extremely limited opportunity to increase or reduce output based on market conditions.
- 7.17 Because of the must-run nature of geothermal, NGL's primary incentive when making offers in the market is to ensure Ngawha is dispatched. This makes NGL a price-taker; its offers will not be marginal in the national wholesale market, and the price will be set by a higher priced generator.
- 7.18 The must-run nature of geothermal also largely excludes NGL from using it to participate in instantaneous reserves and other ancillary services markets.
- 7.19 NGL generating at the proposed nameplate capacity of 64MW would comprise less than 0.7% of the capacity of the national electricity market.<sup>9</sup>
- 7.20 This combination of factors makes the expansion at Ngawha insignificant in the context of the national market and in its ability to influence price.
- 7.21 In relation to the local wholesale market, additional analysis was completed to study the impact of the generation at Top's GXP at Kaikohe when compared with the price at Otahuhu in Auckland. This analysis showed no meaningful change in the price separation between Kaikohe and Otahuhu with the generation included or removed.
- 7.22 In addition to the spot market, NGL is expected, in both the factual and counterfactual, to sell through contracts most, or all, of Ngahwa's generation output to retailers or large users.

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Based on a total market capacity of 9596MW from the Authority's EMI website.

- 7.23 Top's application states that NGL intends to sell multiple financial hedges based on the output of Ngawha in multiples of 5 MW and 10 MW to manage its exposure to risk in the wholesale market. Top submits this is consistent with the behaviour of any generator without a retail base.
- 7.24 In the absence of an exemption, NGL, still owned by Top, would have the same risk profile and would likely follow a similar risk strategy. In either case NGL has the incentive to sell the output of Ngawha to the party that offers the best possible terms.
- 7.25 Economies of scope gained through shared management (estimated at approximately \$1 million per annum between Top and NGL) under the requested exemption could make NGL more competitive in the electricity hedging market.
- 7.26 The nature of these cost efficiencies are discussed in more detail in paragraphs 7.62 to 7.65, and are separated from any concerns about cross-subsidisation from the distribution business.
- 7.27 Due to the lack of practical ability to affect the price of electricity in the spot market, and the possibility that cost efficiencies gained through shared management may promote competition, the Authority is satisfied that the requested exemption would either promote, or not inhibit competition in the national wholesale market, and that the requested exemption would have no adverse impact on competition in the local wholesale market.

### Will the exemption permit an involvement that may create incentives and opportunities to inhibit competition in the wholesale markets?

- 7.28 Top as a distributor is responsible for assessing applications from parties seeking to connect distributed generation to Top's network.
- 7.29 Because applicants would be potential competitors to NGL's generation business, there may be an incentive and opportunity for Top to restrict potential generators' access to its distribution network. These incentives and opportunities are very modest; however, as future additional generation on Top's network is likely to have a negligible impact on wholesale electricity prices received by NGL, and NGL's output would also not be affected as it's a baseload geothermal plant.
- 7.30 Part 6 of the Code sets obligations for distributors and generators to enable the connection of distributed generation.
- 7.31 Clause 6.11 of the Code requires that the application process for generators connecting to a distributor's network is made at arm's-length. Top has an obligation to treat any generator applying to connect to its network the same regardless of who is applying. This clause is in addition to the arm's-length rules in Schedule 3 of the Act.
- 7.32 Schedule 6.2 of the Code sets regulated terms for the connection, and continued connection, of generation on distributor's networks. These regulated terms must be provided to any generator connecting to Top's network.
- 7.33 The pricing principles in Schedule 6.4 of the Code do not allow Top to charge any embedded generator connecting to its network under the regulated terms more than the incremental costs of connecting them. The pricing principles only set a maximum connection charge; they do not restrict Top from charging NGL comparatively less than other generators. However, payments would be required to follow the arm's-length requirements in Clause 6.11 of the Code, and the arm's-length rules in the Act.

- 7.34 If any generator applying to connect to Top's network believed Top was not complying with its obligations in Part 6, the generator could allege a breach of the Code. Similarly if a generator believed Top was not complying with the arm's-length rules of the Act (excluding 9 and 10 from which they would be exempt), the Authority would be able to investigate these allegations.
- 7.35 If the Authority found that Top was acting in a manner that inhibited competition due to its involvement in NGL, the Authority has the ability to revoke or vary the exemption under section 90(5) of the Act. These actions would of course carry significant reputational consequences for Top's managers and directors. Accordingly, these factors are likely to completely offset the modest incentives and opportunities created by permitting shared management.
- 7.36 Further, because Top owns NGL and the Ngawha plant will be expanded anyway regardless of the exemption, any incentive for Top to discriminate against competing generators exists in both the factual and the counterfactual. Balanced against the penalties of breaching the Code or the Act, and the added risk of the exemption being revoked, the Authority does not consider that granting the exemption requested by Top would create any additional incentives and opportunities for Top as a distributor to inhibit competition in the wholesale market.
- 7.37 Regarding NGL, in the future, it is likely that the capacity of the grid to supply Auckland load from the majority of generation south of the Otahuhu node 10 will become saturated. This possibility would be increased if the thermal generation at Huntly were to be decommissioned, all else being equal. If the grid supplying the Otahuhu node from the south becomes constrained, it greatly increases the likelihood that NGL could be the only generator making offers on the north side of the constraint, making it the pivotal generator setting the price in the Auckland and north of Auckland region. 11
- 7.38 Due to the must-run nature of NGL's generation, its offers are intended to ensure its output is dispatched rather than being based on running cost inputs such as fuel. For this reason, it seems unlikely NGL would seek to reduce its offer prices in order to discourage entry with the intention of later increasing its prices to recover its losses.
- 7.39 While the lack of generation competition in the local market could facilitate NGL increasing its offer prices, particularly if NGL is pivotal, that increase does not itself weaken competition. In any event, the incentive to do so does not differ between the factual and the counterfactual.
- 7.40 Top's existing exemption (Appendix B) has a condition which means that the exemption does not extend to Top engaging in financial hedging beyond Ngawha's nameplate capacity. Top accepts this condition would be appropriate for a new exemption. However, accepting Top's submission on hedge behaviour, the Authority considers the proposed condition is unnecessary to achieve the purpose of the Act, and does not impose this condition on the exemption.

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Otahuhu is a key node often used as a proxy for Auckland in electricity markets including hedging contracts.

This result depends on the formulation of constraints within the scheduling, pricing and dispatch model (SPD), the configuration of the transmission grid, other generation and potential generation development in the region.

#### Local retail market

#### Will the exemption promote, or not inhibit, competition in the retail market?

- 7.41 Top as a distributor does not directly participate in the retail market. Potential incentives and opportunities for Top relevant to the retail market are discussed below in paragraphs 7.43 to 7.50.
- 7.42 In both the factual and counterfactual, NGL is likely to hedge most of its output with electricity retailers and large consumers. Because there is no material difference between the factual and counterfactual, the Authority considers the exemption would have no impact on competition on the local retail market. That is, the exemption would not promote, and would not inhibit, competition in the retail market. Accordingly, the focus of our analysis is on the incentives or opportunities the requested exemption may create.

### Will the exemption permit an involvement that may create incentives and opportunities to inhibit competition in the wholesale markets?

- 7.43 Section 76 of the Act allows distributors to retail up to 75 GWh of electricity per year to customers on their own network without being subject to corporate separation or arm's-length rules requirements. 75 GWh is approximately the consumption of 9000 average New Zealand households.<sup>12</sup>
- 7.44 With the exemption in place, Top or NGL could operate as an electricity retailer on Top's network, and have the same shared management making decisions for all three of the major sectors of the local market: generation, distribution and retailing, without breaching Part 3 of the Act.
- 7.45 In this scenario, corporate separation and the remaining arm's-length rules would continue to apply to Top's involvement in NGL but Top would not need to comply with the corporate separation and arm's-length requirements in relation to its retailing business provided it remains under the 75 GWh threshold in section 76 of the Act.
- 7.46 While limited, this potential involvement in the region's electrical supply, under the control of the same management as distribution and generation businesses, potentially creates incentives or opportunities for competition to be inhibited in the local retail market.
- 7.47 Top's existing exemption (Appendix B) has a condition that Top must not be involved directly or indirectly in the selling of electricity to any end-use customer connected to its distribution network.
- 7.48 Top, in its application, accepts that the exemption, if granted, should be granted subject to an equivalent condition that would prohibit Top from retailing electricity on its own network.
- 7.49 The Authority agrees, and imposes the same condition for the new exemption prohibiting Top and NGL from retailing electricity to consumers on Top's network. This would completely address the potential for the exemption to inhibit competition, or create opportunities or incentives for Top/NGL to inhibit competition, in the local retail market.
- 7.50 Concerns were also raised about the possibility of the entire output of Ngawha being sold to a single party through hedge contracts, and the impact that might have on retail

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Around 30% of the number of consumers on Top's network (but much less of total demand on Top's network), based on an annual consumption of 8000 kwh.

competition. However, as discussed above in the wholesale market analysis, the Authority considers Top's hedging behaviour is unlikely to change as a result of the requested exemption being granted (ie, Top would behave the same way in the factual and the counterfactual).

#### Other matters referred to in Authority guidance

#### Opportunities to cross-subsidise connected generator

- 7.51 The Authority considers this test is a more detailed articulation of a potential issue relevant to determining whether the statutory criteria in section 90(2) of the Act are met, as well as a way to assess whether the overall purpose of Part 3 is given effect to.
- 7.52 The Authority sets out the below analysis of the potential for the exemption to create incentives or opportunities for Top to cross-subsidise NGL.

#### Remaining arm's-length rules prohibit Top from favouring NGL

- 7.53 The objective of Schedule 3 of the Act (set out in Appendix D of this paper) is to ensure that businesses to which section 76 of the Act applies operate at arm's-length. The exemption for Top and its directors and managers would only apply to arm's-length rules 9 (separate management rule) and 10 (directors and managers must not be placed under certain obligations). An exemption from rule 10 is required because it is necessary to allow the appointment of managers with material influence over both entitles. The remaining rules 1 to 8 and 11 to 15 would continue to apply.
- 7.54 The remaining rules require that the distributor and connected generator:
  - (a) take all reasonable steps to ensure the arm's-length objective is met
  - (b) ensure transactions between the parties are entered into on terms that are consistent with each party acting independently
  - (c) not exercise power or act in a manner they reasonably know prefers the interests of the related party
  - (d) not favour the related party when providing services or benefits
  - (e) ensure staff not take into consideration their dual capacity across the two businesses when making decisions on behalf of either business
  - (f) appoint at least 2 independent directors for each business, and ensure cross directors are not executive directors of the other business
  - (g) not disclose information to the related party that they would not reasonably have access to as a separate business.
- 7.55 These arm's-length rules help control incentives and opportunities for directors and management to inhibit competition, including through Top cross-subsidising NGL. If the Authority found that Top was not abiding by the arm's-length rules, in a manner that inhibited competition, the Authority has the ability to revoke or vary the exemption under section 90(5) of the Act. Accordingly, this would encourage Top to comply with the arm's-length rules to avoid this outcome.
- 7.56 However, we consider there are residual concerns with shared management that arise from the relationships between distributors and generators in the electricity industry that may not be fully addressed by the arm's length rules. These concerns are discussed further below.

#### Top is owned by a trust and Top network consumers are beneficiaries

- 7.57 Top is wholly owned by the Top Energy Consumer Trust. Consumers on Top's network are the beneficiaries of this trust, weakening the incentive for Top to shift costs from non-regulated activities such as generation onto its regulated distribution business.
- 7.58 Although the Trust does not meet the requirements in Part 4 of the Commerce Act to be exempt from price-quality regulation (because the trustees are not directed elected by consumers)<sup>13</sup>, the combination of consumer ownership (as beneficiaries) and price-quality regulation help relieve concerns about Top structuring its cost allocations to benefit shareholders at the expense of consumers, as they are one and the same.
- 7.59 Because remuneration incentives on shared management are based on overall Trust performance, a residual incentive remains for shared management to allocate costs in a manner that maximises the total revenue of the Trust.
- 7.60 The Authority considers these concerns are reduced significantly by the oversight of the directors and the Trust to act in the interest of the ultimate owners, who are consumers supplied by Top's distribution network.
- 7.61 Since Top's ownership structure is a factor in our decision, the Authority imposes a condition that the exemption applies only for so long as Top and NGL remain wholly owned by the Trust. If Top and NGL are divested, they would be required to either comply with corporate separation and arm's-length rules, or obtain a new exemption assessed under the new ownership structure.

#### Industry concerns regarding cost sharing

- 7.62 The parties interviewed as part of the Authority's investigation raised concerns about cost sharing between Top's distribution business and NGL. These can be separated into two broad concerns:
  - shared management between Top and NGL could create a competitive advantage by reducing costs
  - (b) costs may be allocated inefficiently between Top's distribution and generation businesses to maximise the total revenue of the Trust.
- 7.63 To address the concern identified in paragraph 7.62(a), shared management reducing costs, it's important to separate unfair competitive advantages with economies of scope, or scale.
- 7.64 Cost efficiencies through shared management are available to any business in the industry of sufficient size, and not related to the specific relationship of Top as a distributor and NGL as a generator. Therefore, the Authority does not consider these efficiencies to be within the scope of the assessment criteria.
- 7.65 In assessing the concern identified in paragraph 7.62(b), cost allocation between Top's distribution business and NGL, the Authority considers the effectiveness of controls provided by the Commerce Commission's regulation, and Top's ownership by a trust as effective controls in the context of the requested exemption being granted.

b) the member of Parliament for Te Tai Tokerau, and

c) the Chairman of the Northland Regional Council.

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Consumers may nominate trustees, but appointments are made from those nominations by a panel consisting of:

a) the member of Parliament for Northland

#### Part 4 of the Commerce Act requires Top to allocate costs in a reasonable manner

- 7.66 Part 4 of the Commerce Act is administered by the Commerce Commission to promote outcomes that are consistent with outcomes produced in competitive markets, for the long-term benefit of consumers.
- 7.67 The Commerce Commission determines input methodologies (IMs) that apply to distributors like Top. IMs are the upfront rules, processes and requirements of Part 4 regulation. These include the use of prescribed cost allocators that must be used when attributing shared costs between regulated and unregulated activities, such as Top's distribution business and NGL's generation business.
- 7.68 These predefined allocators are in force to restrict potential cross-subsidisation issues, where an unreasonable portion of the shared costs are put on the regulated business, intending to maximise unregulated profits.
- 7.69 A recent review by the Commerce Commission of the input methodologies<sup>14</sup> resulted in the decision to remove the option of using the avoidable cost allocation methodology (ACAM) and require distributors to use an accounting-based allocation approach (ABAA) or its optional variant (OVABAA).
- 7.70 Top publishes its use of cost allocators as part of its information disclosure requirements under Part 4. Those disclosures are independently audited and certified for compliance and accuracy by Top's directors.
- 7.71 While the Authority accepts concerns that the use of cost allocators and the controls behind them may not always be sufficient to completely remove opportunities to cross-subsidise alone; when combined with the remaining arm's-length rules, the conditions imposed, and the specific circumstances of the exemption, these opportunities would not be increased by granting the exemption request to allow shared management.

#### Impartiality of contracts and payments between Top and NGL

- 7.72 Top and NGL have two major recurring financial transactions which are disclosed as part of their information disclosure requirements:
  - (a) avoided cost of transmission (ACOT); paid by Top as a distributor to NGL
  - (b) ongoing connection charges; paid by NGL to Top as a distributor.
- 7.73 ACOT payments from Top to NGL are captured in the Commerce Commission's information disclosure regime under related party rules are intended to provide transparency for competitors and regulators.
- 7.74 Top's current pricing methodology explains its process for allocating ACOT payments to generators. This methodology results in pro-rated payments to any generator reducing grid demand during periods of regional coincident peak demand (RCPD).
- 7.75 With the exemption in place, incentives could exist in the future for Top to change its ACOT payment methodology in the future to increase payments to NGL to be greater than the actual transmission charges avoided by Top as a result of NGL being connected to Top's distribution network.

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Commerce Commission input methodology review decisions 20 December 2016.

Top Energy Limited Pricing Methodology 2017/2018.

- 7.76 However, the input methodology rules under Part 4 of the Commerce Act only allow a distributor to recover costs incurred and amounts payable, in relation to avoided transmission charges arising from distributed generation made in accordance with:
  - (a) Schedule 6.4 of Part 6 of the Code; or
  - (b) the Act.
- 7.77 The Act does not regulate ACOT. Accordingly, if Top pays NGL for avoided transmission costs otherwise than in accordance with Schedule 6.4 of the Code, Top will be unable to recover those costs from its distribution customers.
- 7.78 The Authority has also considered the implications of Top paying NGL for avoided transmission costs in accordance with Schedule 6.4 of the Code.
- 7.79 Under the regulated terms in Schedule 6.2 of the Code, charges between a distributor and a distributed generator must be determined in accordance with the pricing principles in Schedule 6.4 of the Code.
- 7.80 Changes were made to Schedule 6.4 of the Code at the end of 2016 to implement significant policy decisions limiting how transmission charges that a distributor avoids are taken into account in determining connection charges for distributed generation.
- 7.81 As a result of the December 2016 changes, the incremental cost cap that applies to determining connection charges for distributed generators that are specifically identified on a list to be prepared pursuant to Schedule 6.4, must be net of transmission costs that an efficient distributor will be able to avoid as a result of the connection of the distributed generation at the nameplate capacity specified for that distributed generation in the list.
- 7.82 It is unknown whether Ngawha will be on the list to be prepared under Schedule 6.4.
- 7.83 In any event the avoided costs could not exceed the reduction in transmission charges resulting from NGL being connected to Top's distribution network, Top would not be able to recover a higher cost from its distribution customers.
- 7.84 Therefore, regardless of how and if Top pays NGL for avoided transmission costs, the Authority considers there is no incentive for Top to make ACOT payments to NGL higher than the transmission charges they avoid, and the requested exemption will not result in an opportunity to cross-subsidise a connected generator.

# Will the exemption permit a relationship between a distributor and a retailer or generator which is not at arm's-length

7.85 The Authority considers that the exemption involves a minimal erosion of the arm's length principle, in that NGL and Top would still be required to comply with the arm's length rules except for rules 9 and 10, for which they will hold an exemption. The Authority considers that the conditions, as analysed above, address any potential competition concerns in terms of Part 3, and mean that a totally arm's-length relationship is unnecessary to achieve the purpose of the Part in this case.

#### The temporal nature of the exemption

7.86 Owing to the changing nature of the electricity industry, the traditional models for electricity distribution, generation, retailing and consumption are all likely to shift in the medium to long term. As a result, regulatory and commercial considerations in this paper may become less relevant the longer the requested exemption remains in force.

- 7.87 To address this concern, the Authority imposes a condition limiting the exemption to a period of 10 years. This condition would allow the Authority to re-assess the exemption, and its conditions, against any changes that have occurred in the electricity industry over that period, to determine whether the exemption is still fit for purpose.
- 7.88 The Authority considers 10 years is appropriate to balance the costs and administrative effort incurred during the exemption process by the applicant and the Authority, while accounting for the high possibility of major changes in the electricity industry that could impact the relevant markets.

#### Summary

7.89 The tables below summarise the Authority's analysis of the statutory criteria.

Table 2: Will the exemption promote, or not inhibit, competition in the electricity industry?

Market		Ngawha expansion with corporate separation and full arm's-length rules (the counterfactual)	Ngawha expansion occurs anyway. Impact of allowing shared management by granting an exemption with no conditions	Same as previous column but with conditions (the factual)
Network	Тор	No impact	No impact	No impact
Support	NGL	No impact	No impact	No impact
	<u> </u>			
Wholesale	Тор	May inhibit competition (but occurs regardless of exemption)	No impact	No impact
	NGL	May promote competition	No impact	No impact
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Retail	Тор	May inhibit competition (but occurs regardless of granting exemption)	No impact	No impact
	NGL	May promote competition	No impact	No impact

Table 3: Will the exemption create incentives and opportunities to inhibit competition in the electricity industry?

Market		Ngawha expansion with corporate separation and full arm's-length rules (the counterfactual)	Ngawha expansion occurs anyway. Allowing shared management by granting an exemption with no conditions	Same as previous column but with conditions (the factual)
Warket	Тор	No	No	N/A
Network		110	110	1 1/7 1
Support	NGL	No	No	N/A
	_	T		
Wholesale	Тор	Very modest incentives and opportunities to inhibit competition may be created	No – severe consequences for shared management if found to breach Part 6 of the Code or the arm's-length rules make incentives comparable	N/A
	NGL	No practical opportunity to inhibit competition in the local market during a grid constraint	No – incentives and opportunities are unchanged by shared management	N/A
		<del>-</del>		
Retail	Тор	Incentives and opportunities to inhibit competition may exist, but would	Yes – additional incentives or opportunities may be created by shared	No – a condition removes the opportunity to inhibit competition by restricting Top
Notali	NGL	be reduced by separate management	management if Top or NGL retail electricity on Top's network	and NGL from retailing to consumers on Top's network

	Ngawha expansion with corporate separation and full arm's-length rules (the counterfactual)	Ngawha expansion occurs anyway. Allowing shared management by granting an exemption with no conditions	Same as previous column but with conditions (the factual)
	Incentives and	No – severe consequences for shared management if found to breach the arm's-length rules make incentives comparable	N/A
Opportunities to cross-subsidise a generator	opportunities exist, but would be mitigated by separate management	Yes – incentives and opportunities for shared management to cross-subsidise NGL may be increased by a new ownership model if the Trust divests ownership of Top and NGL	No – The exemption applies only if Top and NGL are owned by the Trust

#### 8 The exemption meets the tests in the Act

- 8.1 The Authority considers that by granting the requested exemption, with conditions the Authority can be satisfied that:
  - (a) the exemption will not inhibit competition in the electricity industry (section 90(2)(a)) of the Act
  - (b) the exemption will not permit an involvement in a distributor and a generator or retailer that may create incentives and opportunities to inhibit competition in the electricity industry (section 90(2)(b)) of the Act.
- 8.2 Top's ownership structure, the existing regulatory environment including the Commerce Commission's input methodologies and information disclosure regimes, and the Commerce Commission's oversight of the default price-quality path limit the opportunities and incentives for Top to inhibit competition.
- 8.3 The remaining arm's-length rules that would apply to Top's relationship with NGL would make any behaviour that could be perceived as anti-competitive open to challenge under the Part 3 regime, giving them a significant incentive to appear as impartial as possible.
- 8.4 Section 80 of the Act provides for significant pecuniary penalties for a breach of Part 3. In addition, the Authority has the power to revoke an exemption or impose additional conditions on an exemption, which could be prompted by evidence of any such behaviour.
- 8.5 When compared with the minimal impact additional competing generators on Top's network could have on the price NGL would receive from the wholesale market, the Authority believe these concerns are not substantive in the context of the tests in the Act.

# 9 The Authority published a draft decision and invited comments

- 9.1 On 11 July 2017 the Authority published its draft decision on the application and sought comments from interested parties. The Authority received comments from seven parties, including the applicant.<sup>16</sup>
- 9.2 Comments in support of granting the exemption were received from:
  - (a) Top (the applicant)
  - (b) Northland Regional Council (NRC).
- 9.3 Comments opposed to granting the exemption were received from:
  - (a) Electricity Retailers Association of New Zealand (ERANZ)
  - (b) Mercury Energy Limited
  - (c) Genesis Energy Limited
  - (d) Pioneer Energy Limited.
- 9.4 The Major Electricity User's Group (MEUG) <sup>17</sup> also provided comments on the application and the draft decision. These comments are addressed separately below in paragraphs 9.39 to 9.43.

#### Top believes the expiry condition of 10 years is unnecessary

- 9.5 Top supports the draft decision and all conditions proposed with the exception of condition (e) which limits the application of the exemption to 10 years from the date that the exemption comes into force. Specifically, Top submitted that:
  - (a) when deciding whether to proceed with the expansion, the directors of NGL will need to consider the potential of an exemption not being granted at the end of the 10 year term, and the costs that would be incurred
  - (b) the Authority may amend or revoke the exemption if industry conditions change
  - (c) resource consents for the extraction of geothermal fluid are held for a period of 35 years
- 9.6 NRC provided a letter of support for Top's submission, specifically citing the points in 9.5(a) and (c).

# Directors of NGL will need to consider the potential of a new exemption not being granted

- 9.7 Top commented that it will need to consider the exemption will only apply for 10 years when making the decision to invest in the expansion of Ngawha.
- 9.8 Top commented that due to the risk of an additional \$20 million of overheads from 20 years of separate management (\$1 million per year for the 20 years beyond the expiry), its board may choose:
  - (a) not to expand generation at Ngawha; or
  - (b) connect Ngawha directly to the national grid.

Submissions on the draft decision are published on the <u>Authority's website</u>.

MEUG is a trade association representing 16 of the largest electricity consumers in New Zealand.

- 9.9 Top's application states that the likely outcome should the exemption be declined is that the expansion goes ahead with separate management for Top and NGL. This scenario was used by the Authority for its counterfactual analysis.
- 9.10 The Authority cannot reconcile the statements that the investment would go ahead regardless (in Top's application) with statements that the investment would need to be reconsidered. If the latter was credible, the Authority would reassess the application.
- 9.11 In any event, as Top has acknowledged in its submission, the exemption may be amended or revoked regardless of the expiry condition. The risk of the exemption being revoked exists in either case, and cannot be assumed to be in force for the 30+ year investment period. Any investment decision must be made under these assumptions, regardless of the expiry condition.
- 9.12 Top and NGL are able to request that the Authority vary the exemption prior to its expiry. Providing the exemption, under industry conditions at that time, meets the tests in Part 3 of the Act, the Authority would approve the request, extending the term.
- 9.13 Taking all these factors into account, the Authority has not received any credible new information to alter its view that the expansion will proceed regardless of the exemption and regardless of the imposition of a 10 year term.

#### The Authority may amend or revoke the exemption

- 9.14 Top commented that the Authority's power to amend or revoke the exemption under section 90(5) of the Act makes the 10 year expiry condition unnecessary.
- 9.15 As discussed in paragraphs 7.35 and 7.55, the Authority considered the ability to amend or revoke the exemption a factor in the decision to grant the exemption, providing a significant deterrence from behaviour by shared management that would inhibit competition. This also applies to changes in electricity markets and the wider industry, should that affect the reasons the exemption was granted.
- 9.16 Changes in markets and structures are likely to be evolutionary rather than revolutionary, without a clear break point that necessitates a reconsideration of the exemption. The cumulative effect of multiple regulatory changes, across different regulators means it is desirable to ensure there is a clear break point at which Top would have to demonstrate the exemption still meets the criteria in section 90 in order to continue to get the benefit of the exemption.

#### Resource consents are held for a period of 35 years

- 9.17 The criteria and factors taken into account for resource consents are substantially different to the tests for granting an exemption under section 90 of the Act. As discussed in paragraphs 7.86 to 7.88, the dynamic nature of the electricity industry means it is not possible to make robust predictions as to competition over such a long period of time.
- 9.18 An important distinction between resource consent and an exemption is that resource consent is required for NGL to operate generation, whereas the exemption is only required for sharing of management with Top. Should a new exemption not be granted after the 10 year term, NGL would be able to continue to operate Ngawha under separate management.

#### Four submissions oppose the decision

- 9.19 Comments opposing the draft decision were received from ERANZ, Mercury, Genesis and Pioneer. Mercury and Genesis are members of ERANZ; and their comments support the submission from ERANZ, but provide additional context.
- 9.20 In summary the submissions state:
  - (a) the decision is not consistent with the policy intent of Part 3 of the Act (Pioneer, ERANZ, Mercury, Genesis)
  - (b) the decision would create incentives and opportunities to inhibit competition (ERANZ, Genesis, Pioneer)
  - (c) if granted, the condition restricting Top and NGL from retailing electricity should extend beyond consumers on its own network (ERANZ, Mercury)
  - (d) a term of 10 years is too long (ERANZ, Mercury, Pioneer)
  - (e) Ngawha will provide network support to Top's network and the national grid (Mercury)
  - (f) the decision would create a precedent for future applications from network companies using similar reasoning (ERANZ, Mercury, Genesis, Pioneer).

#### The intent of Part 3 of the Act

- 9.21 Comments from Pioneer, ERANZ, Mercury and Genesis questioned whether the exemption is consistent with the policy intent of Part 3 of the Act. They consider the 50 MW threshold for generation on a distributor's own network to be generous, and a figure that was subject to consultation and legislative scrutiny. In their view the exemption would undermine the confidence provided by this fixed limit.
- 9.22 The Act does not prohibit a distributor owning generation above 50MW, but specifies the threshold as the point at which corporate separation and arm's-length rules are triggered to manage any competition issues. The inclusion of the exemption provisions in Part 3 of the Act are an additional indicator that the 50MW threshold may go further than is necessary to give effect to the purpose of Part 3. That is, the 50MW threshold is presumed to give rise to the need to have corporate separation and arm's-length rules to make sure the purpose of Part 3 is met, but the exemption power in section 90 acknowledges that this will not always be the case and instead a substantive analysis of the competitive effects of the relevant conduct is required.

# There are concerns that the exemption will create incentives and opportunities to inhibit competition

- 9.23 Comments from ERANZ (supported by Genesis) and Pioneer raised their concerns about whether shared management would create incentives or opportunities to inhibit competition in the electricity industry, and whether the Authority's analysis is too optimistic or flawed in this regard.
- 9.24 In particular they raise concerns that the cost allocation rules in Part 4 of the Commerce Act, and the remaining arm's-length rules will not prevent Top and NGL from having incentives and opportunities to inhibit competition.
- 9.25 Also, ERANZ raises concerns that information will be shared between Top and NGL through shared management that would normally be restricted from sharing under rule 11 of the arm's-length rules.

- 9.26 Having considered the submissions, the Authority remains of the view that the combination of the remaining arm's-length rules and the conditions imposed will ensure the exemption will not increase incentives or opportunities when compared with the counterfactual. The reasons for this are set out in paragraph 7.71. Incentives and opportunities may increase in both the factual and the counterfactual. That is, there is no difference between those two when the competition test in section 90 is applied.
- 9.27 To address concerns on information sharing, while Top and NGL's shared management will have access to information from their roles in either organisation, the arm's-length rules restrict how this information may be used. Clause 11(3) of the arm's-length rules states that restricted information may be used 'only to the extent that the use does not contravene another of the arm's-length rules.'

### Commenters believe Top should not be permitted to retail on the adjacent network

- 9.28 ERANZ and Mercury submitted that if the exemption is granted, the condition prohibiting Top and NGL from retailing electricity to consumers on Top's distribution network should extend to the adjacent Northpower network.
- 9.29 The Authority considered extending the condition restricting Top and NGL from retailing electricity to consumers on Top's network to consumers on all networks. However, Part 3 of the Act does not place any restrictions on distributors retailing outside of their own network. Top's influence as the network owner does not extend outside its network. The Authority does not consider there are competition issues to be addressed by a condition.

#### A term of 10 years is too long

- 9.30 ERANZ (supported by Mercury) and Pioneer in their comments say they believe that a term of 10 years for the exemption would not be appropriate. Comments highlight the changing nature of the electricity industry, the shorter lengths of the Commerce Commission's regulation determinations, and the Authority's own ability to amend the Code at relatively short notice.
- 9.31 ERANZ also questioned the draft decision's reasoning to set the term at 10 years as "appropriate to provide a level of certainty to Top and NGL for their investment", considering the counterfactual has Top and NGL proceeding with the expansion of Ngawha without the exemption being granted.
- 9.32 The Act provides that the Authority can vary or revoke the exemption. This power could be exercised at any time in the 10 year period, in the event that the industry changes such that the competition analysis underpinning the exemption also changes.
- 9.33 The Authority acknowledges the concerns raised relating to investor certainty. However, the Authority also considers there are costs and administrative effort associated with more frequent exemption applications (as set out in paragraph 7.88), and that a 10 year period enables a proper assessment of the benefit of proceeding in reliance on the exemption compared with proceeding without an exemption.
- 9.34 The Authority has amended the reasoning in paragraph 7.88 to remove reference to investor certainty. As highlighted by comments, this reasoning was not consistent with the counterfactual scenario. The term of the exemption remains at 10 years, as the Authority considers that a term of 10 years a practical and reasonable length of time before the exemption must be re-assessed.

#### Ngawha's ability to provide network support

- 9.35 Mercury's submission questioned the Authority's assessment of Ngawha's ability to provide network support services to Top. It cites Top's application which states Ngawha will provide voltage support to the local network and the grid.
- 9.36 While the presence of Ngawha's generation will support voltage at Top's Kaikohe GXP, its electrical and physical proximity to the grid connection, and its baseload operation essentially nullify its value to Top as a distributor. Any voltage support provided to Transpower as the grid owner would be removed from Top's role as a distributor.

# Concerns that the exemption would create a precedent for future applications

- 9.37 ERANZ states in its submission: "this exemption would create a worrying precedent for future applications from network companies using similar reasoning". This statement is paraphrased in both Mercury and Genesis' submissions.
- 9.38 Should other distributors make similar applications, the Authority would follow the same process as outlined in the Guidelines to assess them against the tests in section 90(2) of the Act. Any future applications would be assessed based on each application's specific circumstances. For this reason, the Authority does not believe that granting the exemption will create any legal precedent, worrying or otherwise. Regardless, the Authority's job in this instance is to apply the law as it stands.

#### MEUG provided comments on the draft decision

- 9.39 MEUG comments that the Trust could sell its generation assets to another party that could invest without corporate separation or following the arm's-length rules. This is an option that would not be subject to Part 3 of the Act or require the exemption due to the separate ownership. The Authority's analysis is based on the most likely outcome if the exemption were declined, that Top and NGL would continue with the expansion while complying with all arm's-length rules.
- 9.40 MEUG also comments:
  - There is a presumption in the draft decision that local ownership of Top Energy is sufficient to allay any agency issues, that is incentives leading to inefficient outcomes, between managers of the business and local end consumers.
- 9.41 The Authority considers that consumer trust ownership is a factor in combination with other regulatory controls for its decision to grant the exemption. The Authority is aware the Trust does not meet the requirements in Part 4 of the Commerce Act to be exempt from price-quality regulations (because the trustees are not directed elected by consumers) and took this into account in its analysis. However, this analysis does not extend beyond the scope of the exemption, and is not intended as an endorsement of the overall efficiency of any ownership structure.
- 9.42 The purpose of the condition that the exemption will expire if Top and NGL are not owned by the Trust is to ensure if their ownership structure changes (and an exemption is still required), the exemption would be re-assessed against the tests in section 90(2) of the Act.
- 9.43 MEUG also provided comments on Top's application for exemption relating to network support generation, raising concerns about Top's proposal to own and operate diesel generation. These comments are beyond the scope of this decision, but will be taken

into consideration for the analysis of the network support application, which will be the subject of a separate exemption decision.

# 10 The Authority grants the exemption, subject to conditions

- 10.1 The Authority grants Top, the directors, the chief executive officer, or person holding an equivalent position, the chief financial officer, or person holding an equivalent position and the general manager corporate services, or person holding an equivalent position of Top and NGL, an exemption under section 90(1)(b) of the Act from the requirement in section 76 to comply with arm's-length rules 9 and 10, subject to the following conditions:
  - (a) the exemption applies in relation to the expansion of Ngawha Springs Power Station up to a nameplate capacity of 65MW
  - (b) the exemption from the requirement to comply with rule 10 only applies to the appointment of management to positions of material influence over NGL
  - (c) Top Energy and NGL must not engage in retailing, as that term is defined in the Act, to any customer connected to Top Energy's distribution network
  - (d) the exemption applies while Top Energy and NGL are wholly-owned by the Top Energy Consumer Trust
  - (e) the exemption applies until the close of 1 November 2027.
- 10.2 The Authority is satisfied that the conditions specified in the Notice of Exemption are necessary to give effect to the purpose of the Act.
- 10.3 Finally, the Authority is satisfied that the exemption, subject to the conditions specified, is consistent with the purpose of Part 3 of the Act and the Authority's statutory objective.
- 10.4 The Authority also revokes Top's existing exemption from the application of section 17 of the Electricity Industry Reform Act 1998 (EIR Act) granted on 10 May 2007 by the Commerce Commission.

# Appendix A Exemption Application Top Energy Limited

# 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

- 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.
- 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



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.



- 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). 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/biodiesel 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.

7. A manager of business A must not be a manager of business B.

A manager of business A must not be involved in the business of business B.

<sup>&</sup>lt;sup>1</sup> The arm-length rules at the time provided as follows:

<sup>8.</sup> A manager of business Name must not be an associate of business B, other than by virtue of being a manager of business A.

<sup>(1)</sup> 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;

<sup>(2)</sup> 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 lan 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



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;



- (c) That Top Energy not be involved either directly or indirectly in selling electricity to any enduse 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.



#### 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%<sup>2</sup> when based on the

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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.<sup>3</sup> 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

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<sup>&</sup>lt;sup>3</sup> Calculation based on 179Gwh x 6% losses @ \$86/MW plus retailers' margin

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);
  - (c) the electricity distribution market that corresponds with Top Energy's network (Local Distribution Market).<sup>4</sup>

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.



- 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).



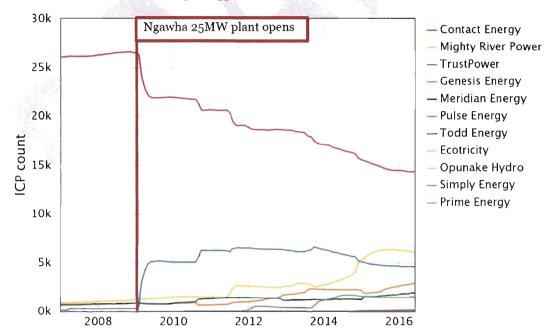


Figure 1: Retail market share trend on Top Energy's network

- 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 armslength business by separate management.

- 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 MW<sup>5</sup>. 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:

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

- (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.



- 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

- 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;



- (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.<sup>6</sup> 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

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- 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 541<sup>7</sup> 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

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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

# Appendix B Top Energy Limited existing exemption under the Electricity Industry Reform Act

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# 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 \$17 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.

CONFIDENTIAL MATERIAL IN THIS REPORT IS CONTAINED IN SQUARE BRACKETS

# TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
Introduction	i
The Commission's Criteria	i
Incentives or Opportunities to Inhibit Competition in the Electricity Industry	i
Incentives or Opportunities to Cross-Subsidise Electricity Generation Activities .  Electricity Line Business Involvements	
Creation of a Relationship not at Arms Length	ii
Determination	ii
INTRODUCTION	1
COMMISSION PROCEDURES	1
General	1
Criteria Used by the Commission to Consider Exemption Applications	
PARTIES	2
The Applicant	2
Top Energy Limited (Top)	2
Other Parties	2
Interested parties	2
THE PROPOSAL	3
APPLICATION OF THE ACT	3
Electricity Lines Business Involvements	3
Electricity Supply Business Involvements	4
Cross-Ownership Prohibition	5
Exemption for Generation Commissioned After 20 May 2003	5
Corporate Separation and Arms Length Rules	6
The Meaning of Cross Involvement	
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 \$46C	8

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

#### EXECUTIVE SUMMARY

#### Introduction

- On 9 November 2006, the Commerce Commission (the Commission) registered an application (the Application) from Top Energy Limited (Top) for exemption from section 17<sup>1</sup> of the Electricity Industry Reform Act 1998 (the EIR Act).
- 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).
- 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.
- 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.
- 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.
- 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

<sup>&</sup>lt;sup>1</sup> 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 Rules<sup>2</sup> in this case would not create incentives or opportunities (that did not already exist) to cross subsidise between lines activities and generation activities.
- 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

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.

<sup>&</sup>lt;sup>2</sup> 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

- 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).
- 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).
- 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.
- 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

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

- 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.<sup>3</sup>
- 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

<sup>&</sup>lt;sup>3</sup> 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)<sup>4</sup> 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)

- 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.

<sup>&</sup>lt;sup>4</sup> 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.
- 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.
- 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**

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, \$17 of the EIR Act expressly prohibits such crossownership. 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.
- 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.
- 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.

8

## 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.
- 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 \$46C

- 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.
- 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:<sup>5</sup>
  - 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

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.
- 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.

9

## Regional Electricity Distribution Markets

- 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

- In Decision 591<sup>8</sup> 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.
- 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.
- 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.

<sup>&</sup>lt;sup>6</sup> 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.

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.

<sup>&</sup>lt;sup>8</sup> Decision 591, Westpower Limited, 25 October 2006.

## Conclusion on Question 1

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

10

## 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?

- 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.
- 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.
- As NGL is a wholly owned subsidiary of Top, there is no joint venture ownership structure to weaken any incentive to cross-subsidise. 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.
- The Commission has considered the extent to which incentives or opportunities to crosssubsidise (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

<sup>9</sup> Specifically the region where Top is the network operator.

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 required 11, but the risk of cross-subsidisation identified above would still exist.
- 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.
- 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?

- 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.
- This Application specifically seeks exemption from the necessity to comply with the Arms Length Rules.

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.
- 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.
- 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 10<sup>th</sup> 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 10<sup>th</sup> 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.

## Appendix C The statutory criteria

- C.1 This Appendix expands on the statutory criteria the Authority must use when assessing an application for exemption under section 90 of the Act.
- C.2 To assist in determining when an interest or involvement will give rise to concerns under Part 3 of the Act, Schedule 2 of the Act lists certain types of interests and involvements that are excluded from the application of the rules in Part 3. Schedule 2 gives an indication of the type of involvements that are seen to give rise to the possibility of inhibiting competition.
- C.3 Schedule 2 also lists some involvements that are not taken into account. These include interests in distributors and generators and other interests that arise only out of financial relationships, or other benign arrangements, such as industry service providers that are only involved because of their position as a service provider.

## Section 76

- C.4 Section 76 of the Act describes corporate separation and arm's-length rules that apply to involvements between a distributor and a connected generator, or a connected retailer.
- C.5 A connected generator is defined in section 76(3), in relation to a distributor, as a generator:
  - (a) that has a total generation capacity of more than 50 MW connected to any of the distributor's networks; and
  - (b) in respect of which the distributor, or any other person involved in the distributor, is involved.
- C.6 A connected retailer is defined in section 76(3), in relation to a distributor, as a retailer:
  - (a) that is involved in retailing more than 75 GWh of electricity in a financial year to customers who are connected to any of the distributor's networks; and
  - (b) in respect of which the distributor, or any other person involved in the distributor, is involved.

## **Corporate separation**

- C.7 Corporate separation requires a person who carries on the business of distribution to carry on that business in a different company from the company that carries on the business of a connected generator or connected retailer.
- C.8 That is, it is possible for a person to be in the business of distribution as well as generation or retailing. However, the generation or retailing business must be carried on in a company that is separate from the distribution business.

## Arm's length rules

- C.9 Every person who is involved in a distributor and every person who is involved in a connected generator or connected retailer must comply, and ensure that the person's business complies, with the arm's-length rules in Schedule 3 of the Act.
- C.10 Those rules require that parties that are involved with each other and transact with each other act as if they were related only by the transaction, act independently, and act in their own best interests.

## **Section 90(1)(a)**

- C.11 Section 90(1)(a) of the Act provides that the Authority may exempt "any business or involvement" from the application of Part 3. That is, the exemption relates to a business, generally, or an involvement, generally.
- C.12 The effect of an exemption under section 90(1)(a) is that the business or involvement is not taken into account in determining whether any of the provisions in Part 3 apply to a business or to a person (such as a director of a distributor): clause 4(1)(a) of Schedule 2 of the Act provides that no account is to be taken of a person's business or involvement if the business or involvement is exempted under section 90.
- C.13 Because the involvement is not taken into account for the purposes of determining whether the Part 3 obligations apply, the consequence of an exemption being granted in respect of an involvement (or business) in section 90(1)(a) includes that the generation covered by the exemption is not considered when determining the definition of a connected generator, and is not subject to the arm's-length rules or corporate separation requirements in section 76.

## **Section 90(1)(b)**

- C.14 Section 90(1)(b) provides that the Authority may exempt any person from compliance with any provisions of Part 3.
- C.15 Clause 4(1) of Schedule 2 of the Act provides that no account is to be taken, for the purposes of Part 3, of a person's business or involvement if the business or involvement is exempted by the Authority under section 90. That is, clause 4(1) does not, on its face, differentiate between an exemption under section 90(1)(a) and an exemption under section 90(1)(b).
- C.16 However clause 4(1) clearly refers to an exemption of "a business or involvement". Only section 90(1)(a) provides for the exemption of a business or involvement. In contrast, section 90(1)(b) refers to an exemption for a person "from compliance with any provisions of" Part 3.
- C.17 The Authority's view, as set out in paragraph 42 of the Guidelines, is that, if a person is exempted under section 90(1)(b) of the Act from compliance with certain provisions, his or her involvement must still be taken into account in determining whether the provisions of Part 3 of the Act apply to other persons, businesses, or involvements. Any person's involvement exempted under 90(1)(b) continues to contribute to the thresholds defining connected generators and connected retailers for the business as a whole.

Appendix D Schedule 3 of the Electricity Industry Act 2010: Arm's-length rules

# Schedule 3 Arm's-length rules

ss 73, 76

### **Contents**

		Page
1	Objective	100
2	Interpretation	100
3	Arm's-length rules	101
4	Rules do not limit objective	104
5	These duties are additional to other duties	104

## 1 Objective

- (1) The objective of this schedule is to ensure that businesses to which section 76 apply operate at arm's length.
- (2) Without limiting the ordinary meaning of the expression, **arm's length** includes having relationships, dealings, and transactions that—
  - (a) do not include elements that parties in their respective positions would usually omit; and
  - (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 Interpretation

(1) In this schedule,—

**business A** means a business that is required to be carried out in 1 company under section 76 and the term **business B** then refers to a business that is required to be carried out in another company under that section

**common parent**, in relation to business A and business B, means a person that is involved in both business A and business B

**electricity trust** means a community trust or a customer trust or a customer cooperative

**parent**, in relation to a business, means every person that is involved in the business.

(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 director or 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) Where this schedule applies to business A, it applies equally to business B, and vice versa.
- (4) References to trust A and trust B have corresponding meanings and application.

## 3 Arm's-length rules

The arm's-length rules are as follows:

## Duty to ensure arm's-length objective is met

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 arm's-length objective in clause 1 is met.

## Arm's-length test

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 that 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

A director or manager of business A must not, when exercising powers or performing duties in connection with business A, act in a manner that the director or 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

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

A director or 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 directors and managers of parents of business A

A director or manager of a parent of business A must not, when exercising powers or performing duties in connection with business A, act in a manner that the director or 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.

## At least 2 independent directors

- 7 At least 2 directors of business A must—
  - (a) be neither a director nor a manager of business B; and
  - (b) not be an associate of business B, other than by virtue of being a director of business A.

## No cross-directors who are executive directors

- 8 A director of business A may be a director of business B, but must not—
  - (a) manage business B on a day-to-day basis; or
  - (b) be an associate of business B, other than by virtue of being a director of business A or business B; or
  - (c) be involved in business B (other than by having material influence over business B by virtue of being a director of business B).

## Separate management rule

- 9(1) This clause applies if business A is involved in—
  - (a) a generator that has a total capacity of more than 50 MW and that is connected to any of business A's networks; or
  - (b) a retailer that retails more than 75 GWh of electricity in a financial year to customers who are connected to any of business A's networks.
- (2) A manager of business A must not—
  - (a) be a manager of business B; or
  - (b) be an associate of business B, other than by virtue of being a manager of business A; or
  - (c) be involved in the business of business B.

## Directors and managers must not be placed under certain obligations

- 10(1) Subject to subclause (2), no person may place a director or 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 director or manager or associate of business B, or any parent of business B, and no director or manager may submit to any such obligation.
- (2) A common parent, or a cross-director or a cross-manager, of both business A and business B may place a director or manager under an obligation referred to in subclause (1) if doing so does not contravene another of the arm's-length rules.

## Restriction on use of information

11(1) 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.

In these rules, **restricted information** is information received or generated, and held, by business A or trust A that is connected with its business, being information that—

- (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.
- (2) This rule does not prevent cross-directors under rule 8 from having access to normal board information.
- (3) A manager of business A who is not prohibited from being a manager of business B under rule 9 may use restricted information of both business A and business B, but only to the extent that the use does not contravene another of the arm's-length rules.

#### Records

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.

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

- 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.
- 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.

## 4 Rules do not limit objective

The arm's-length rules in clause 3 do not limit the generality of the arm's-length objective in clause 1.

## 5 These duties are additional to other duties

The requirements of this schedule are additional to the requirements of any provisions of the Code or regulations made under this Act.

# Glossary of abbreviations and terms

Act Electricity Industry Act 2010

Authority Electricity Authority

Code Electricity Industry Participation Code 2010

EIR Act Electricity Industry Reform Act 1998

GWh Gigawatt hour(s)

GXP Grid exit point

MW Megawatt(s)

NGL Ngawha Generation Limited

RCPD Regional coincident peak demand

Top Top Energy Limited