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Submission on Review of Reserve Energy Policy: Consultation Paper

This submission focuses on section 2.2 of the Commission's consultation paper, which outlines the Commission's understanding of the legal framework for security of supply and reserve energy.

Interpretation of Act

The GPS was in circulation within the industry in draft form before the 2004 amendments to the Electricity Act 1992 ('the Act') were passed. It has been widely assumed that the Act simply provides the machinery to implement the GPS.

It has also been assumed that the Act provides "only high level guidance" and "a fair amount of flexibility", while the "instructions" are in the GPS (as Castalia put it in section 2.2.1 of their consultation paper of March 2007).

Words in the Act therefore tend to be interpreted by the industry (and the Commission) in a manner that is consistent with the GPS.

This is approach is not correct at law.

As Lord Scarman observed in a 1983 UK Court of Appeal decision, "[t]he meaning to be attributed to enacted words is a question of law, being a matter of statutory interpretation"[i]. The process by which the courts define statutory words is governed by a set of rules or conventions.

Given that the Commission's security obligations are set out in the Act, these rules must be applied to determine the nature and scope of its obligations.

The starting point is to give a statutory expression its plain and ordinary meaning. If such an interpretation would not give effect to the purpose of the legislation, the plain and ordinary meaning "must give way to the construction which will promote the purpose or object of the Act"[ii].

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This rule is reflected in section 5(1) of the Interpretation Act 1999, which requires the meaning of an enactment to be "ascertained from its text and in the light of its purpose". The purposive approach is the currently the dominant method in statutory interpretation[iii].

Distilling the Commission's security of supply obligations at law is, in essence, a question of statutory interpretation. We therefore need to address the issues as a court would. This requires us to:

- Disregard existing industry assumptions and start from a 'clean sheet', examining the legislation and GPS as if reading both for the first time;
- Take an objective approach to the legislation, addressing the outcomes of statutory language as it is written, not as Ministers or officials may have intended the outcomes to be;
- Apply the rules of statutory interpretation; and
- Draw on expert evidence that is likely to be considered by a court.

I have earlier undertaken such an exercise, and set out my analysis in a detailed legal opinion, which was peered reviewed by Richard Clarke QC. Rather than providing "only high level guidance" as is widely assumed, the words of the Act are, in fact, the Commission's "instructions"[1].

Role of GPS

In section 2.2.6 of its consultation paper, the Commission states: "The GPS provisions cover a wide range of issues relating to security of supply and provide a high degree of *prescription* about how the Commission *must* go about implementing the reserve energy policy." *[Emphasis added]*

To date, the Commission has, in effect, adopted and implemented the GPS as its security of supply policy.

Since the GPS was issued in October 2004, it has been widely assumed that the GPS is a binding legal instrument that effectively governs the manner in which Commission meets its security obligations under the Act.

Section 2.2.1 of Castalia's consultation paper of March 2007 reflects this widespread perception (which the Commission appears to endorse in section 8 of its consultation paper):

- "While the Act provides a fair amount of flexibility, the [GPS] gives detailed instructions on how the Government expects the Commission to meet the requirements of section 172O(1)(d)"; and

[1] It is altogether too loose for the Commission to say (at section 2.2.2 of its consultation paper): "The legal framework for security of supply and the reserve energy policy in New Zealand is provided by a combination of the Act, the GPS and the security of supply policy issued by the Commission"

- "As a result, despite being responsible for implementing the [GPS], the Commission can apply relatively little discretion when designing the Policy"

This view it is not correct at law.

As noted above, the GPS does not determine the nature or scope of the Commission's legal obligations. Indeed, adhering to the GPS will not necessarily meet the Commission's obligations in relation to security of supply.

At law, the Commission is governed by the Act and any regulations or rules made under it, not the GPS. The Act's security requirements have a broader scope and effect compared to the relevant GPS provisions. The Commission must also exercise its own judgement on how best to satisfy its statutory obligations.

In relation to the GPS, the Commission is only required to give effect to 'GPS objectives and outcomes'[2]. These are GPS provisions that, in substance, are equivalent to the principal objectives or specific outcomes in the Act. GPS provisions relating to processes, or to how an objective is to be achieved, are not 'GPS objectives and outcomes' and therefore not binding.

Courts are likely to take a conservative approach in construing which provisions fall within the scope of 'GPS objectives and outcomes'. This reflects a constitutional principle that Ministers may not make law by policy direction.

The GPS therefore has limited legal force. Except for two high level provisions, none of the current GPS provisions relating to security of supply are binding on the Commission.

The Act requires GPS objectives and outcomes to be consistent with the Commission's statutory functions, principal objectives and specific outcomes[3]. The Act's provisions prevail over the GPS. The GPS may only add to the Commission's principal objectives and specific outcomes at the same level of generality, without diminishing or changing those objectives and outcomes, or the Commission's functions.

The Commission is correct saying that "[t]he role of the GPS is to guide the Commission in terms of government expectations about how the Commission is expected to go about meeting its functions under the Act". However, at the same time, the Commission perceives that "[t]he GPS provisions...provide a high degree of *prescription* about how the Commission *must* go about implementing the reserve energy policy". This misunderstanding needs to be remedied.

Range of security risks

It is widely assumed in the industry that the Commission's security of supply role relates primarily to hydrology, and that its obligation to ensure security using

[2] As defined in s172ZJ and s172ZK of the Electricity Act 1992.

[3] s172ZK(4) of the Electricity Act 1992

reasonable endeavours under section 172O(1)(d) of the Act relates mainly to dry year risk. This is reflected in:

- A range of consultation papers issued by the Commission and its consultants;

- The Commission's current security of supply policy, which relates to managing hydrology risk – in particular, how it will to deliver a 1 in 60 security standard; and

- The Commission's web site description of its role in relation to security of supply, which states: "Security of Supply is the area relating to meeting system security in a 1 in 60 dry year. The Commission is responsible for managing the electricity sector so that electricity demand can be met in a 1-in-60 dry year, without the need for emergency conservation campaigns".

However, the range of risks to be managed by the Commission under section 172O(1)(d) are not limited to, or weighted towards, hydrology. All types of security risk come within its ambit. None are excluded.

There is also no indication in the Act that 'security of supply' excludes 'reliability' or 'quality' as these expressions are used in relation to transmission and distribution networks.

The Commission's security of supply obligations under the Act therefore include:

- Events for which there is no notice – for example, unexpected outages in generation, transmission, distribution lines, or thermal fuel supply[4] due to forces of nature (earthquake, flood, wind, temperature, lightening), some acts of human interference (war, terrorism, sabotage or other malfeasance), operational errors, design or engineering defects, maintenance deficiencies, or a combination of the above.

- Events for which there is short term notice – for example, a sharp increase in demand due to a significant and unexpected change in temperature; an unexpected outage in generation, transmission, distribution lines or thermal fuel supply due to any or all of the causes referred to above; or a combination of these events.

- Events for which there is medium term notice – for example, a seasonal shortage of hydro fuel due to low inflows, a sustained seasonal increase in demand due to unexpected temperatures, or interruption to any supply of thermal fuel[5].

- Events for which there is long term notice – for example, lack of investment in generation, transmission and/or distribution; higher than expected economic growth, driving higher than expected increases in demand; a sudden

[4] This may include a failure in a gas pipeline or platform

[5] Interruption of any overseas fuel supply is a less significant security issue in New Zealand electricity, relative to the supply of oil in the transport and industrial sectors. However, it could become a consideration in future. The 2002 UK Energy Review points out at para 4.13 that "the equation 'domestic' and 'secure' does not always apply. Imports of energy are not necessarily less secure than domestic sources. Where trade involves substantial market power on the part of producers, or there are good grounds for worrying about political reliability of suppliers, then there may be a case for government intervention"

substantial write-down of gas reserves in known fields; high prices for alternative uses of gas, reducing the volumes of gas available for electricity generation; and/or failure to find or access sufficient additional fuel (thermal or renewable) to meet growing demand over time[6].

The Commission should not limit or narrow its security of supply policy to using reasonable endeavours to ensure a certain level of dry year security. The Commission's security policy must address all the relevant risks in order to meet the requirements of the Act.

Range of security functions

The Commission's consultation paper refers to three security-related functions under the Act – sections 172O(1)(a), (d) and (j).

In fact, the Commission has five stand-alone functions under the Act relating to security of supply, namely:

- To use reasonable endeavours to ensure security of supply, without assuming any reduction in demand from emergency conservation campaigns, while minimising distortions to the normal market[7]:

- To manage emergency conservation campaigns to avoid material risk of security of supply shortages[8];

- To give effect to GPS objectives and outcomes as they relate to security of supply[9];

- To formulate and recommend regulations and rules to give effect to the principal objectives, specific outcomes, GPS objectives and GPS outcomes[10], as each relates to security of supply; and

- To perform all eleven statutory functions seeking to achieve (among other things) the specific outcome where "risks (including price risks) relating to security of supply are properly and efficiently managed"[11].

Each function at law is independent of the others. One is not constrained by the rest. One does not have higher priority than the others. One is not an instrument of another[12]. Performance of one does not necessarily mean performance of any other: for example, giving effect to the GPS objectives and outcomes does not necessarily satisfy any other function, even if there is an overlap.

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6 This may be a physical constraint, but it is far more likely to be an economic (contract and pricing) or regulatory (RMA consents) limitations

7 s172O(1)(d)

8 s172O(1)(g)

9 s172O(1)(j)

10 s172O(1)(a) and s172X

11 s172N(2)(b)

12 Except in recommending regulations and rules to give effect to GPS objectives and outcomes [s172X]

Also note that the relationship between the Commission's principal objectives, specific outcomes, and statutory functions give rise to some interesting complex issues. The diagram in Appendix 1 below illustrates these relationships.

Applying the framework above, the words of each function need to be defined at law, which then gives the Commission its "instructions" in relation to security.

Definition of 'security of supply'

A court would give a legal definition of 'security of supply'. After reviewing the literature and scheme of the Act, it could be defined at law as follows:

> "A defined probability that electricity supply will meet certain levels of consumer demand for electricity over a given time-frame or range of contingencies".

This definition has five key elements:

- The level of probability that supply will meet demand;
- The level of demand to be satisfied;
- The relevant time-frame over which security is to be provided. This element can also be considered in terms of the range of contingencies or risks to covered;
- The range of mechanisms available to be used to provide security; and
- The regulatory structure within which the system and its participants are to operate.

Castalia's definition - "having enough supply to meet demand over specified period, with a specified level of probability" – has most of these elements.

The Commission's security of supply policy should set out the Commissions' understanding of the definition of security of supply under the Act.

Commission's security obligations to ensure security [s172O(1)(d)]

Applying the framework outlined above to section 172O(1)(d), it is possible to conclude at law that:

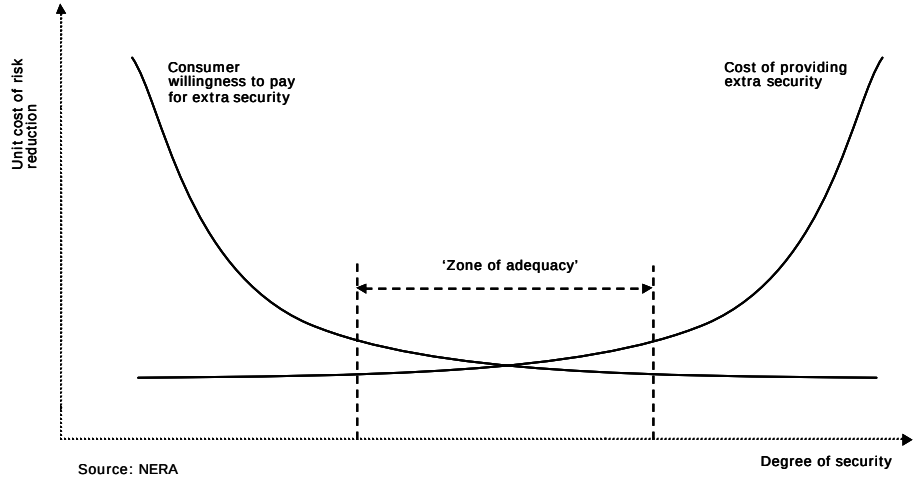
Security standard

- The target standard of security required by section 172O(1)(d) is high. It makes the Commission the default guarantor of security, using reasonable endeavours.
- With a view to minimising its legal risks and meeting the binding GPS objective of giving as much certainty as possible to the market, the Commission should define how it interprets the general standard of 'ensuring' in specific probability-based terms.

- The target probability is not necessarily a 1 in 60 dry year, as proposed in the GPS. This standard is probably not binding on the Commission. It is too specific to be an objective or outcome at the level of section 172N(2)(b). Even if it were held to be binding, it does not prescribe the standard under section 172O(1)(d). At law, the Commission must form its own view on how best to meet its legal obligations.

- Morrison & Co suggests that the 1 in 60 standard proposed by the Government in May 2003 (and now reflected in the GPS) "probably reflects a pragmatic political judgement rather than an economic assessment"[13]

- NERA observes that achieving desired levels of security involves balancing the benefits of risk reduction against the costs of achieving it. MacKerron + Lieb-Doczy note that "identifying a single optimum level of risk and security is, in practical terms, impossible", given that (i) there is no direct market for security, (ii) it has some 'public good' elements, and (iii) some consumers are likely to be willing to pay more than others to avoid the risk of interruptions[14]. However, as illustrated below, NERA considers it is possible to define a 'zone of adequacy' within which security will be adequate and where costs will not rise excessively if the optimum is missed in either direction.



Source: NERA

Quantity of demand

- If the Commission were to assess that scarcity of supply was not likely to be properly signalled in prices to consumers, it should be concerned that demand may not be sufficiently restrained on a voluntary (market) basis to match reduced supply. Under these conditions, the Commission would have to address the question of the quantity of demand to be satisfied within its target security standard under section 172O(1)(d).

- The Act provides no guidance on the methodology that the Commission should apply to determine the level of demand to be satisfied at the target

[13] Morrison & Co (2003) at 4.1 and Appendix D of that report

[14] NERA (2002) at section 3 and MacKerron + Lieb-Doczy (2003) at p12

security standard. A court is likely to focus on whether the Commission has used a reasonable process, and whether (as in the UK) the level of demand it seeks to satisfy is reasonable.

Range of risks

- The time-frame over which security is to be ensured by the Commission is not limited. Nor are any risks or contingencies excluded or prioritised. All risks come within its ambit. The range of potential security risks to be addressed by the Commission is therefore very wide.

- It does not follow, however, that the same security standard must be applied to all types and levels of risk. The standard may be higher for some conditions, but lower for others.

Range of measures

- The Commission is authorised to use contractual and exhortatory measures in seeking to ensure security under section 172O(1)(d), but not regulations and rules, which are to be recommended under section 172O(1)(a) for differently worded objectives and purposes.

- Contracting for reserve energy is only one of the measures the Commission can use in seeking to ensure security of supply. The menu of options includes contracting to buy or subsidise energy, fuel, electricity conservation[15], energy efficiency services, and any other technology, systems or services that, in the Commission's considered opinion, contribute to security of supply.

- Unlike the GPS, the Act does not set any limits in relation to type, quantity, conditions of use, or the process for acquiring reserve energy. Buying base-load energy to ensure security is not precluded by the Act and the Commission should not say it would not consider entering into a contract for this purpose.

- If the Commission were to limit its approach to reserve energy, and section 172O(1)(d), to a rigid application of the GPS, it could expose the Commission to the risk of failing to properly carry out its statutory function. The Commission must form its own view on how much reserve energy to acquire, and on when and how to use it, consistent with its broad obligation under section 172O(1)(d), not the requirements of the GPS.

- For the avoidance of doubt, the Commission's obligations under section 172O(1)(d) are *not* currently restrained by the GPS –

    - Cap of 1200GWh over any given four month period,

    - Preference for plant with low fixed costs and high operating costs, rather than baseload plant,

    - Criteria for evaluating alternative reserve energy proposals, including demand-side savings, or

[15] Excluding emergency conservation campaigns, as discussed later in this paper

- Conditions of using reserve energy, including a minimum offer price.

'Reasonable endeavours'

- 'Using reasonable endeavours' means "applying a fair, proper and due degree of care and ability". Having regard to the Commission's powers, assumed expertise, potential funding and the importance placed on improving security of supply in the scheme of the Act, 'reasonable endeavours' in the context of section 172O(1)(d) requires a high level of effort from the Commission, but less than 'leaving no stone unturned', and less than the standard of a fiduciary.

- 'Reasonable endeavours' does not soften the target security standard. Nor does it require the Commission to trade-off expected security gains against economic costs to the nation (contrary to the Castalia's interpretation of 'reasonable' in section 2.2.1 of their March 2007 consultation paper). Rather, it qualifies the level of effort to be applied in seeking to achieve the target standard.

'Minimising distortions'

- Section 172O(1)(d) does not prohibit measures that distort the normal operation of the market. The Commission is required to choose the option that most effectively addresses the security risk with the lowest market distortion. If, for example, the risk is high and the measure that mitigates the risk in the most optimal manner also involves (in absolute terms) a high degree of distortion, it fits within section 172(O)(1)(d). Ensuring security ranks above minimising distortions.

- The Commission is only required to minimise distortions to the market as it operates in normal conditions. At law, this probably excludes uncommon conditions, such as unusual shortages or extremely high prices. In other words, the Commission is not obliged by section 172O(1)(d) to minimise distortions to the market in a very dry period or a significant unexpected generation or lines outage.

- It is not clear which market the Act is referring to. The Commission should define the market it is assessing for the purposes of section 172O(1)(d. The Commission may define the market in narrow or wide terms – for example, only the residential retail market in a particular location (at one end of the spectrum) or electricity market as a whole (at the other end). This choice of approach could limit or enlarge the practical effect of the duty to minimise distortion under section 172O(1)(d).

- The Commission is required to minimise distortions in relation to measures to ensure security. However, the Commission is not required to 'minimise distortions' in relation to the other elements of section 172O(1)(d) – namely, its level of effort ('reasonable endeavours'), the target standard of security ('ensure security'), or the exclusion of emergency savings ('without assuming any reduction in demand from emergency conservation campaigns').

Excluding 'emergency conservation'

- The scope of assumed demand savings from emergency conservation campaigns to be excluded under section 172O(1)(d) is wide. It is not limited to campaigns managed by the Commission under section 172O(1)(g). It could include any programme or procedure to save electricity in response to any type of emergency, whether implemented by the Commission, the Government, market participants, consumers or any other person, and whether implemented by contract, exhortation or regulation. It could be for long periods (fuel shortages) or short periods (brief plant outages). It is not limited to national advertising campaigns under the GPS. It need not be a nation-wide activity.

- The scope of this exclusion in section 172O(1)(d) is likely to lead to a more conservative approach to security (with a higher buffer or margin) than would otherwise be the case.

Obligation to manage emergency conservation campaigns [s172O(1)(g)]

Applying the framework outlined above to section 172O(1)(g), it is possible to conclude at law that:

- Section 172O(1)(g) gives the Commission authority to manage emergency conservation campaigns on a contractual or exhortatory basis, which the rest of section 172O would not otherwise provide. As mentioned above, a wide range of measures comes within the legal definition of 'emergency conservation campaign'. It is not limited to nation-wide advertising campaigns under the GPS.

- Recommending regulations or rules for emergency conservation measures is not covered by section 172O(1)(g). It is a separate function under (1)(a), which is to be exercised for a different set of objectives.

The Commission's goal under section 172O(1)(g) is to avoid a material risk of supply shortage. 'Material' is not defined in terms of a specific threshold. The Commission must decide what a court is likely to regard as 'material'. It is not dictated by the GPS. It is not necessarily '1 in 60'.

- Any contractual or exhortatory emergency conservation campaign by the Commission under section 172O(1)(g) would have to start at a relatively late stage in the development of a shortage, perhaps *after*:

    - Action by the Commission under section 172O(1)(a) [rules and regulations] and section 172O(1)(d) [supply side and non-emergency demand-side initiatives of a contractual or exhortatory nature]; and

    - Action by other parties, including market participants, consumers and the Government.

- 'Shortage' is also not defined. A court is likely to leave it to the Commission to determine and publish its assumptions and policy parameters of when supply is available for the purposes of section 172O(1)(g).

- A court is likely to decide that demand assumptions under section 172O(1)(g) should be (i) based on prices consumers are likely to be asked to pay as supply reduces, (ii) likely industry behaviour and (iii) any Ministerial involvement.

Obligation to recommend regulations and rules for security [172O(1)(a)]

Applying the framework outlined above to section 172O(1)(a), it is possible to conclude at law that:

- Recommending regulations and rules under section 172O(1)(a) is also separate from section 172O(1)(g) and (1)(d).

- In formulating regulations and rules under section 172O(1)(a), the Commission is required to give effect to (among other things) the specific outcome where "risks (including price risks) relating to security of supply are properly and efficiently managed"[s172N(2)(b)]. This is different from the Commission's objective of ensuring security under section 172O(1)(d). There is a tension between sections 172O(1)(d) and 172N(2)(b).

- There are also potential tensions between sections 172D and 172N(2)(b). It is quite possible that the purposes for which regulations and rules may be made under section 172D are not consistent with the range of possible interpretations of section 172N(2)(b).

Obligation to give effect to GPS security objectives and outcomes [s172O(1)(j)]

Applying the framework outlined above to section 172O(1)(j), it is possible to conclude at law that:

- The function of giving effect to GPS objectives and outcomes under section 172O(1)(j) could give rise to additional security obligations. However, out of the 48 paragraphs relating to security of supply in the current GPS, only two are clearly 'GPS objectives or outcomes' that are additional to the principal objectives and specific outcomes in the Act – namely:

    - The objective of providing well-researched information on short and long term security of supply, including likely availabilities of fuels, new generation options, and likely price trends under various scenarios[16]; and

    - The "overriding objective" of giving as much certainty as possible to the market in relation to the Commission's security of supply policy[17].

[16] Paragraph 38 of the GPS

[17] Paragraph 41 of the GPS

- While there is a considerable overlap between objectives and outcomes in section 172N and the GPS objectives and outcomes, section 172O(1)(j) may give the Commission more contractual or exhortatory options to achieve them its other functions under section 172O(1) provide.

Conclusion

This is the legal framework within which the Commission is required to develop its security of supply policy. Despite the narrower approach requested in the GPS, the Commission must take a wider approach reflecting the requirements of the Act.

Thank you for the opportunity to make this submission. I would be pleased to provide any further information.

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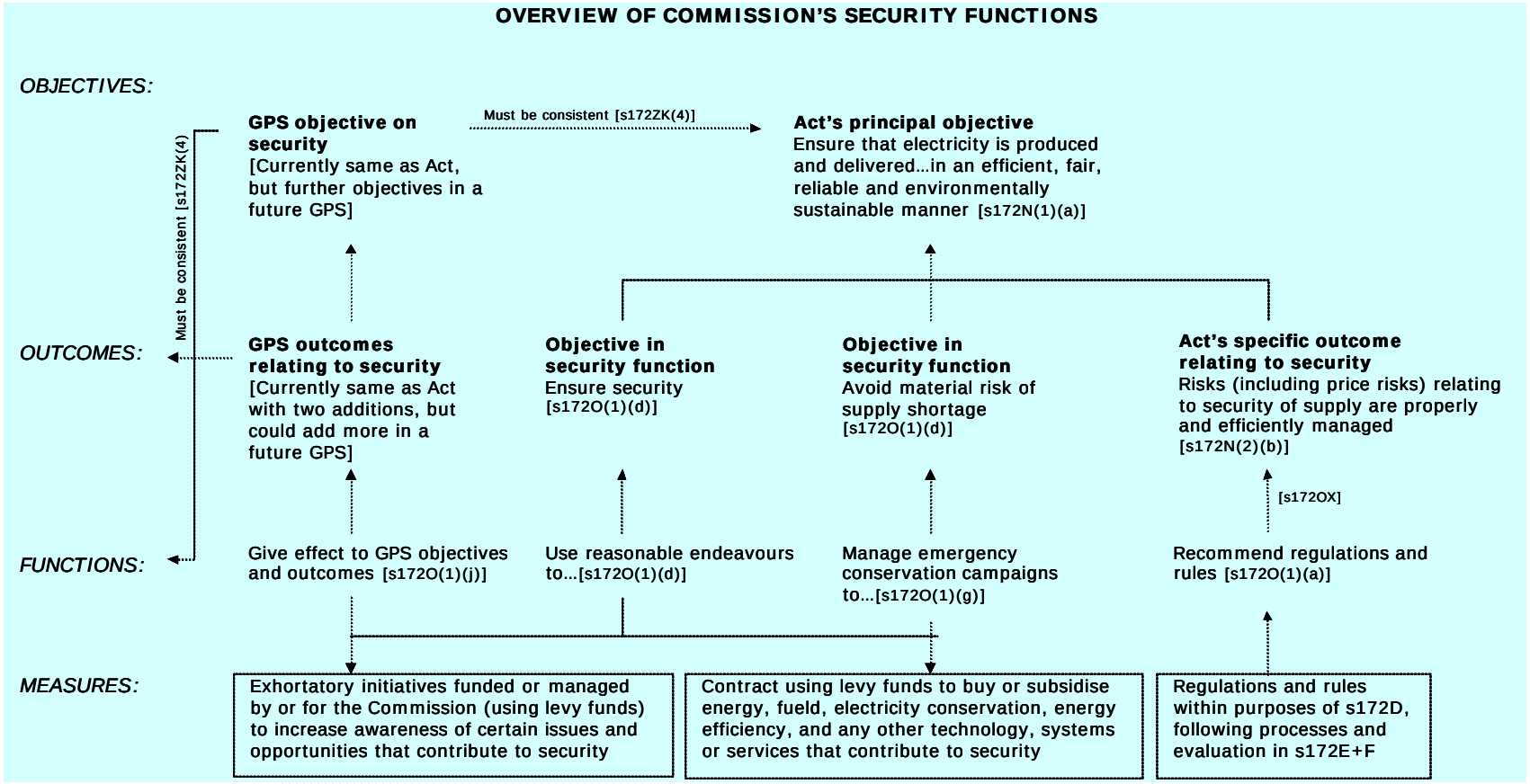
APPENDIX 1



END NOTES FROM PAGE 1

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i R v Barnet London Borough Council, ex parte Shah [1983] 2 AC 309 at 341 per Lord Scarman

ii Kingston v Keprose Pty Limited (1987) 11 NSWLR 404 at 423

iii *Statute Law in New Zealand*, Prof J F Burrows, 2003, 3rd edition, at p154