

TO: Graeme Peters, Electricity Networks Association
FROM: Russell McVeagh (Craig Shrive and Catherine Marks)
DATE: 17 August 2016
SUBJECT: Review of Alan Lear advice on definition of electricity lines services

Introduction and overview

1. We have been asked by the Electricity Networks Association ("**ENA**") to review the legal opinion of Alan Lear dated 2 August 2016 ("**Lear opinion**") commissioned by the Electricity Retailers Association of New Zealand ("**ERANZ**").
2. Alan Lear was asked by ERANZ to review the Commerce Commission's ("**Commission's**") intended approach to the legal definition and interpretation of electricity lines services ("**ELs**") under section 54E of the Commerce Act 1986 ("**Act**") as set out in its input methodology ("**IM**") draft decision paper: "Topic paper 3: The future impact of emerging technologies in the energy sector" ("**TP3**").¹
3. The Lear opinion is focused on whether the Commission's approach to the definition of ELS is correct in relation to certain emerging technologies and electric vehicles ("**EVs**"), specifically fixed storage batteries ("**batteries**") beyond the meter.

Summary

4. In our view, there are two separate issues, as follows:
 - (a) What is the scope of the ELS? This is determined by the relevant statutory definitions. The definition of "lines" is relevant to determining the nature of the service (conveyance of electricity by line). However, assets supporting the service do not have to fall within this definition in order to be included in the regulated asset base ("**RAB**").
 - (b) What can be included in the RAB? This is determined by the Commission's IMs. Since the IMs are a tool to determine the costs of providing the regulated service, they can and do include assets that fall outside the definition of "lines". We believe batteries can be included in the RAB, regardless of whether they fall within the definition of "lines" when used to provide ELSs (subject to the cost allocation IM).
5. We therefore agree with the Commission's analysis of the definition of the regulated service as set out in TP3 (summarised in this advice).
6. To the extent the Lear opinion argues that batteries are excluded from the definition of "lines" (noting that we do not agree that this is relevant to whether batteries can be included in the RAB) the arguments made are, in our view, not persuasive.

¹ Commerce Commission, *Input methodologies review draft decisions, Topic paper 3: The future impact of emerging technologies in the energy sector*, 16 June 2016. ("**TP3**").

7. The key premise for the Lear opinion is that batteries must fall within the statutory definition of "line" in order to be included in the RAB. The Lear opinion considers that:²
- (a) assets such as storage fittings and electrical appliances are excluded from the definition of "lines";
 - (b) these assets do not fall within the "in association with" exception to the exclusion because the exception relates to conveyance related fittings and not storage fittings such as batteries or electrical appliances; and
 - (c) this position does not undermine the inclusion of non-line assets because other non-line assets are not specifically excluded as batteries are.
8. In our view:
- (a) The Commission's interpretation of regulated service is correct - Part 4 regulates the service not the type of assets used to provide the service. The wording of the Act is unambiguous in this regard. The extent to which an asset is used to support a regulated or unregulated service is appropriately addressed by way of the cost allocation IM.
 - (b) The Lear opinion is based on the incorrect premise that batteries must be included in the statutory definition of "line" in order to be included in the RAB.
 - (c) Even if batteries must fall within the definition of "line" in order to be included in the RAB, the Lear opinion wrongly concludes that batteries are excluded from the definition and that the exception to the exclusion ("in association with") is limited to conveyance related fittings. As we explain in this advice we consider the exception to the exclusion captures batteries.
 - (d) The view that these arguments do not undermine the basis for including other non-line assets in the RAB is not persuasive. If it is correct that assets not within the definition of "line" cannot be in the RAB, then that approach needs to be applied consistently, regardless of the analysis used to conclude an asset is not within the definition.
9. The Lear opinion states that its interpretation is consistent with the context of Part 4 because batteries and EV batteries are well positioned to be a competitive part of the electricity market. In our view:
- (a) This position confuses the type of asset (which could have multiple uses) with its specific use. By way of analogy, IT and office equipment are assets that can be provided and used in a competitive market, however, when used to support the ELS, they are included in the RAB (or as an operating cost) of the electricity distribution business ("**EDB**").
 - (b) There does not appear to be any dispute that using batteries for demand management purposes is a use connected with the effective provision and operation of the ELS. For example, ERANZ accepts that, if demand management services were provided to the EDB by a third party or on an arm's-length basis, this would be a legitimate regulated operating cost for that EDB (meaning it is wholly attributable to the ELS under the cost allocation IM).

² Opinion of Alan Lear dated 2 August 2016 ("**Lear opinion**") where a summary of the arguments is set out at [5].

- (c) The Commission is correct that the concerns of ERANZ and others appear to be primarily concerned with structural change, where certain types of assets would be excluded from EDB ownership (irrespective of their use) in order to facilitate other competitive markets. This type of change is outside the scope of Part 4 and would require policy and legislative change. Further, we also agree with the Commission that anti-competitive behaviour can be addressed under Part 2 of the Act.³

Regulated services under Part 4

10. The Commission's view on the definition of the regulated service under Part 4 is that the definition is concerned with the service provided, not specific types of assets. There is no requirement for every asset included in the RAB to fall within the definition of a "line".⁴
11. To the extent an asset is used (or costs are incurred) to provide the ELS, it falls within the scope of regulation. That is, it is the use of the asset that determines whether an asset can be included in the RAB not the nature of the asset itself (as determined under the cost allocation IM).⁵ In this way, non-line assets such as office equipment used to support the service can be included in the RAB.⁶
12. The Commission noted that, *even if* batteries must fall within the definition of "line" in order to fall within the scope of Part 4 (which it says they do not), fittings used "in association with" the conveyance of electricity distribution lines are explicitly not excluded (the Commission's "**secondary argument**").⁷
13. In our view, as a matter of statutory interpretation, the Commission's position is clearly supported by the plain words and purpose of the Act:
14. Specifically:
- (a) Part 4 regulates the supply of specified goods and services, including ELSs. Section 54C(1)(a) of the Act defines ELSs as meaning "the conveyance of electricity by line in New Zealand (unless the context otherwise requires)".
- (b) It is the "service" that is regulated under Part 4 rather the physical network used to convey the electricity. Service is broadly defined in the Act including benefits or facilities provided granted or conferred in "trade",⁸ where "trade" is defined as "any trade, business, industry, profession, occupation, activity of commerce, or undertaking relating to the supply or acquisition of goods or services" among other things. That is, it is the business of conveying electricity by line, rather than the physical assets used to convey electricity, that is subject to the regulation under Part 4.
- (c) This means that it is the use of the asset by the EDB that is a key consideration rather than, for example, whether or not the asset is physically connected to the network or whether or not that asset, in other circumstances, could be used to provide a service in a contestable market.

³ TP3, at [181] - [183].

⁴ TP3, at [186].

⁵ TP3, at [184] - [199].

⁶ TP3, at [198].

⁷ TP3, at [199].

⁸ Commerce Act 1986, s 2.

15. Consistent with the Part 4 framework, the current (and proposed) asset valuation IMs apply to assets that are "used to provide" ELSs. Essentially, assets can be included in the RAB if their cost is incurred to provide the ELS. That is, the RAB is a critical building block in determining the recoverable cost of providing the service under Part 4 and is not used for the purpose of defining the service. The cost allocation IM is then applied to assets to determine the extent to which they can be included in the RAB. If the asset is "wholly and solely" related to the supply of electricity distribution services it is allocated to the regulated business.⁹ If the asset is also attributable to an unregulated service, it is allocated by applying the accounting based allocation approach ("**ABAA**") or, if certain immateriality thresholds are met, the avoidable cost allocation method ("**ACAM**").¹⁰ Similarly, costs incurred when providing the ELS can be included in the regulated operating costs.
16. Whether or not a particular asset is used to provide ELSs is ultimately a question of fact. For example, "non-line" assets such as office and IT equipment used by the supplier to provide the ELS can be included in the RAB. Investment in demand management is an accepted aspect of efficient network management and assets used for this purpose are being used to provide the ELS. That is, batteries can be included in the RAB to the extent such assets are used to facilitate the effective management and operations of the network by managing demand, deferring network reinforcement and better utilising existing assets.
17. To the extent batteries (or EV batteries) are used for purposes other than supporting the ELS, they would be excluded from the RAB under the cost allocation IM. In this respect, the inclusion of batteries in the RAB does not broaden the scope of the ELS.
18. In our view, the definitions in the Act are intended to include the broader activities and assets necessary for operating the ELS. This approach also accords with common sense - the relevant definitions must have been intended to be broad enough to capture the full range of assets that are connected with providing an effective and efficient distribution network. The assets do not extend the scope of the service; rather they enable a more efficient way of operating the service. As the Commission notes, the approach to regulation is rightly asset / technology agnostic.¹¹
19. ERANZ does not appear to dispute that batteries can be used to support provision of the ELS. Similarly, the Lear opinion does not seek to argue that batteries within the network cannot be included in the RAB (or regulated operating costs). Instead, ERANZ has argued that the provision of demand management services by way of batteries beyond the point of supply should be provided through an arm's-length related party, or by third parties, where the cost of these services would be a legitimate cost of the regulated service.¹² ERANZ's key concern, therefore, appears to be that certain assets should be restricted from the RAB irrespective of whether they are used to provide the ELS.¹³
20. We therefore agree with the Commission that the ERANZ proposal is more concerned with industry structure and the creation of markets which are matters not to be addressed under Part 4. In our view, Part 4 is not intended to empower the Commission to restrict the type of assets that can be used to provide the ELS or to require certain

⁹ Commerce Commission, *Electricity Distribution Services Input Methodologies Determination 2012*, published 3 February 2016, clauses 2.1.1(1) and 1.1.4.

¹⁰ *Ibid*, clauses 2.1.1(3); 2.1.3(2) and 1.1.4.

¹¹ TP3 at [170]. The Commission also notes that it regulates a service defined by Parliament where the assets and technologies involved in delivering the regulated service change over time.

¹² Discussed, for example, in TP3, at [152].

¹³ See TP3, at [153].

types of assets to be provided by way of arm's length arrangements in order to facilitate the creation of markets in non-regulated markets. Any IM that operated to exclude assets from the RAB for purposes other than regulating in accordance with the Part 4 purpose, would arguably be ultra vires. We agree that structural matters should be addressed through policy makers and legislation (which has previously been done under the Electricity Industry Act).¹⁴ We also agree with the Commission that, to the extent there are any future concerns that EDBs are engaging in predatory pricing or anti-competitive behaviour, the provisions under Part 2 of the Act would apply.¹⁵

Review of Lear opinion

21. In essence, the Lear opinion argues that, because batteries beyond the point of supply are specifically excluded from the definition of "lines", they cannot form part of the regulated ELS even when used "in association with" the conveyance of electricity.¹⁶
22. As a first and important point, the Lear opinion does not ultimately address the Commission's primary argument: that the Act regulates the service rather than the type of asset and that it is irrelevant whether an asset falls within the definition of "line". While the Lear opinion states that it agrees with the Commission that Part 4 regulates a service, it then conflates the provision of the service with the type of asset. In particular, it asserts that assets must be bound by the definition of "lines", because inclusion of assets that fall outside the definition of lines will facilitate creep away from the regulated service.¹⁷ As explained above, this misunderstands the correct legal position. An asset does not have to fall within the statutory definition of "lines" in order to be included in the RAB as a cost of providing the regulated service. It is **the use of** the asset that is the relevant question for determining whether an asset can fall within the RAB.
23. In effect, the Lear opinion is primarily concerned with the Commission's secondary argument; that *even if* batteries must fall within the definition of "line" in order to come within the scope of Part 4 (which the Commission says they do not), fittings used "in association with" the conveyance of electricity distribution lines are not excluded from the definition of "line". The Lear opinion disagrees with the Commission, arguing that batteries behind the meter are excluded from the definition of "line", even when used "in association with" the conveyance of electricity.
24. As set out above, in our view, the Lear opinion is founded on the erroneous premise that the definition of "line" determines whether an asset can be included in the RAB. In any event, the arguments made in relation to why batteries are excluded from the definition of "line" are not persuasive for the reasons set out below.
25. We first set out the relevant definitions in full.
 - (a) "lines" in the definition of ELS is given the same meaning as in section 2(1) of the Electricity Act 1992, unless the context otherwise requires, being "works that are used or intended to be used for the conveyance of electricity" where:
 - (b) "works" are defined in that Act as meaning:

¹⁴ TP3, at [181] - [183].

¹⁵ TP3, at [177].

¹⁶ See for example, Lear opinion at [5(a)].

¹⁷ See for example the reasoning in the Lear opinion at [20] - [21].

- (i) any fittings that are used, or designed or intended for use, in or in connection with¹⁸ the generation, conversion, transformation, or conveyance of electricity; but
 - (ii) not including any part of an "electrical installation".
- (c) "fittings" means everything used, or designed or intended for use, in or in connection with the generation, conversion, transformation, conveyance, or use of electricity.¹⁹
- (d) "electrical installation" is defined as follows:²⁰
- (a) means-
 - (i) in relation to a property with a point of supply, all fittings beyond the point of supply that form part of a system that is used to convey electricity to a point of consumption, or used to generate **or store electricity**; and
 - (ii) in relation to a property without a point of supply, all fittings that form part of a system that is used to convey electricity to a point of consumption, or used to generate or store electricity; but
 - (b) does not include any of the following:
 - (i) an electrical appliance:
 - (ii) any fittings that are owned or operated by an electricity generator and that are used, designed, or intended for use in or in association with the generation of electricity, or used to convey electricity from a source of generation to distribution or transmission lines:
 - (iii) any fittings that are used, designed, or intended for use in or **in association with** the conversion, transformation, or conveyance of electricity by distribution or transmission lines.

[Emphasis added]

26. It appears to be common ground that, on its face, batteries are "fittings" and therefore "works" and "lines". However, the Lear opinion argues that batteries beyond the point of supply are part of an electrical installation, and therefore are excluded from being works (and therefore lines) and, further, do not fall within the b(iii) exception to the electricity installation exclusion.
27. The Lear opinion states that the definition of electricity installation in the Electricity Act 1992 was amended to include fittings used "to store electricity" in 2010 and that these fittings are distinct from fittings used to convey or generate electricity.²¹ The Lear opinion then argues that the exception from electricity installation under b(iii) above cannot apply because it refers to fittings used "in association with the conversion, transformation, or conveyance of electricity by distribution or transmission lines" but not fittings used in association with storage or generation. Accordingly, it argues, batteries

¹⁸ In relation to the ELS, the phrase "in connection with" has been considered in a number of cases and, although each legislative context is different, is generally given a very broad meaning. For example it has been held that, in relation to the words 'in connection with' "[I]t will be enough if the one is 'bound up with' or 'having to do with' the other, and that the phrase "may signify no more than a relationship between one thing and another". The expression does not necessarily require that it be a causal relationship. *Timtech Chemicals Limited v QBE Insurance (International)* HC AK CIV 2009-404-2194 [28 March 2011]; *Strachan v Marriott* [1995] 3 NZLR 272.

¹⁹ Electricity Act 1992, s 2(1).

²⁰ Electricity Act 1992, s 2(1).

²¹ Lear opinion at [21].

do not fall within the scope of the b(iii) exception. The Lear opinion argues that this similarly applies to electrical appliances.²²

28. The difficulty with this reasoning is that it ignores the words "in association with" in b(iii) - words that do not appear in (a)(ii) of the definition. For the purposes of the exception in b(iii), these words enable a less direct relationship between a fitting and its ultimate use. That is, to the extent that the batteries are used for demand management purposes by an EDB, they are both being used to store electricity and, at the same time, to manage demand "in association with" the conveyance of electricity. The ordinary meaning of "in association with" is very broad, and, in our view, does not denote or require that the fitting must be designed to convey electricity in order to be used "in association with" the conveyance of electricity by an EDB.
29. The Lear opinion then argues that batteries cannot be fittings "in association with" under the b(iii) exception because they fall outside the exception to the exclusion to "works" (ie b(iii)) "notwithstanding that they could be used in an indirect sense "in association with" the conveyance of electricity". This argument appears to directly contradict the first argument: that batteries cannot be included in the b(iii) exception because they cannot be used "in association with" conveyance of electricity because they are designed for storage.
30. We note that load relays have previously been accepted as potential regulated assets by the Commission.²³ The Lear opinion appears to accept this approach but argues that load relays can be distinguished from batteries as, unlike load relays, batteries are not primarily designed to convey electricity (so are not "in association with" the conveyance of electricity). Similar arguments are made in relation to, for example, refrigerators or EV charger units that have other uses.²⁴ However: as noted above:
- (a) assets do not have to fall within the definition of "lines";
 - (b) in any event, batteries can be used "in association with" the conveyance of electricity, even if they are not designed to convey electricity; and
 - (c) if the batteries or EV chargers are being used for other purposes not connected to the ELS, then the asset value or operating cost would be allocated accordingly across the regulated and unregulated businesses under the cost allocation IM.
31. We note that the Lear opinion is focused only on batteries that are located behind the meter. That is, batteries used to provide demand management for the ELS in a different location would be able to be included in the RAB. In our view, this distinction is an arbitrary one in the context assessing the costs of providing a service under Part 4. The location of the asset should be irrelevant to the determination of whether it is an asset used to effectively manage the service. The arbitrary nature of this distinction further

²² Lear opinion at [22].

²³ See, for example, Commerce Commission, *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper*, December 2010 at para E2.34:

Genesis asked the Commission to reconsider whether load control relays should be treated as part of an EDB's regulated services, as it considers provision of them to be contestable. Where load control relays are owned by an electricity retailer, rather than an EDB, it is reasonable that the EDB would pay a fee for the use of these assets, which would appropriately be treated as operating expenditure under Part 4. Allowing inclusion of load control relays in the RAB value where these are owned by the EDBs, subject to the cost allocation IM, will ensure decisions on whether to own or rent these assets are not distorted.

²⁴ Lear opinion at [24].

reinforces our view that a court would be most unlikely to accept the technical and, in our view, incorrect, interpretation in the Lear opinion.

32. Further, under Part 4, the definition of "lines" in the Electricity Act 1992 is applied "unless the context otherwise requires".²⁵ That means that a court will focus on the context and purpose of Part 4 when considering the meaning of "lines" rather than the context of the Electricity Act 1992. Part 4 is not primarily concerned with whether assets are meter installations or behind the meter (noting these are relevant issues for matters regulated under the Electricity Act). Rather, as noted above, Part 4 is concerned with assessing the costs for an EDB of providing an ELS in order to determine the appropriate regulated prices / revenues that regulated suppliers can charge and / or the information that suppliers must disclose.
33. Finally, the Lear opinion suggests that the inclusion of the word "store electricity" in the definition of electricity installation in 2010, implies an intention that batteries should be excluded from regulation under Part 4. In our view, the inclusion of storage has no connection with the *service* regulated under Part 4 or the extent to which non-line assets can be used to support that service. It does not, in any way, suggest an intention to prevent batteries being used to support the provision of ELSs given both line and non-line assets can be used to provide the service or an intention to alter the definition of regulated service in Part 4 which concerns the service not the assets.

Conclusion

34. In conclusion, once it is accepted that assets do not have to fall within the definition of "line" to be included in the RAB (which we consider is the correct statutory interpretation), then the arguments in the Lear opinion are not persuasive. It makes no difference whether specific assets are excluded from the definition of "line" as the definition of "line" is relevant to defining the nature of the service - not what can go in the RAB. Regulation under Part 4 clearly regulates the provision of the service and, when determining the recoverable costs of providing that service (eg what can go in the RAB) the Commission is not limited to only including assets that convey electricity or are defined as such under the Electricity Act.

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²⁵ s 54C(4) of the Commerce Act 1986.