

4 August 2016

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**ERANZ submission in response to consultation on the application of electricity legislation to secondary networks and publically accessible charging infrastructure for electric vehicles**

ERANZ welcomes the opportunity to make a submission on the Ministry of Business Innovation and Employment (MBIE) consultation on the Application of Electricity Legislation to Secondary Networks and Publically Accessible Charging Infrastructure (the Consultation).

We agree that there are some issues with the existing legal framework and how it is applied to secondary networks and Electric Vehicle (EV) charging infrastructure. To this end we would support a first principles review of certain definitions in the Electricity Industry Act 2010 (Electricity Industry Act) and the Electricity Act 1992 (Electricity Act).

While MBIE has identified some relevant issues relating to secondary networks and EV charging infrastructure, it does not appear to have considered how addressing those issues in isolation would have a wider impact on other areas. Further, MBIE has not explained how it intends to address these specific issues in a way that does not impact on these other areas. In our view, we do not think it is possible to isolate those issues and that altering a statutory definition is very likely to affect how it is applied in other contexts.

We suggest that MBIE should also consider how the application of the Electricity Industry Participation Code 2010 (the Code), Part 3 of the Electricity Industry Act, the Electricity (Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (LFC Regulations), and the Electricity Industry (Levy of Industry Participants) Regulations 2010 (Levy Regulations), will impact the application of other legislation that uses the same definitions. In particular, and as MBIE will be aware, the Commerce Commission (the Commission) is currently reviewing the Input Methodologies that determine how local network distribution companies are regulated under the Commerce Act 1986

(the Commerce Act). This review is timely as the electricity sector is currently witnessing the rapid emergence of new technologies (including grid-scale and in-home batteries, EV charging infrastructure, and solar PV) that will potentially disrupt the traditional roles of the relevant players in the sector and/or blur the established boundaries between participants in the electricity supply chain. While the emergence of new technologies is an extremely positive development for consumers, to ensure these technologies deliver on their potential, it is extremely important that the regulatory settings are correct.

In its submission to the Commission as part of the Input Methodologies review, ERANZ has made the point that the Commission's proposed approach to, and interpretation of, "electricity lines services" under the Commerce Act, and its reading and application of the definitions of "fittings" and "electrical installation" under the Electricity Act (which are incorporated into the Commerce Act) are not correct. In practical and policy terms the impact of the Commission's proposed approach is that distributors will be able to expand the natural monopolies they operate in well beyond their traditional boundaries, and into sectors which currently operate as competitive markets. Given the advantages the network companies enjoy from having a guaranteed return funded at the expense of consumers on their networks, this is likely to kill off or at least reduce competition in those parts of the economy with attendant losses of efficiency from an NZ Inc perspective. It is also likely to result in a need for the Commission to expand its operations to adequately supervise the expanded and growing businesses operated by distributors.

In legal terms the Commission's approach amounts, in ERANZ's view, to an error of law – this means that even as they proceed to expand into new areas of operation, investing in new technologies and incorporating them into their regulated asset bases (and recovering the investment costs from captive consumers), there must be a degree of uncertainty over whether distributors, and the Commission, will ultimately be able to sustain this approach if challenged, or whether at some future point those investments will need to be unwound and refunds made. Full details of this issue are set out in ERANZ's submission to the Commission dated 4 August 2016 which is, or shortly will be available on the Commission's website and in the accompanying legal opinion from Alan Lear. We have also **attached** the legal opinion to this submission.

ERANZ considers that, as part of its consideration of the definitions in Appendix 2 of the Consultation, MBIE needs to consider how those definitions are applied in other contexts, with the most important current one being the Commission's consideration of Input Methodologies. EV charging is part of emerging technology that should develop through competitive, and not regulated, markets. To limit its consideration to the legislation currently being considered when MBIE is aware of the critical importance of those definitions in other pieces of legislation would not be appropriate.

Accordingly, for these reasons we are extremely wary of MBIE's proposal. We would urge MBIE to undertake a thorough first principles review of the relevant statutory definitions and an impact assessment for consultation.

Our answers to MBIE's specific questions are set out in the Appendix. If you have any queries, please contact Jenny Cameron at [jenny.cameron@eranz.org.nz](mailto:jenny.cameron@eranz.org.nz)

Yours sincerely



Jenny Cameron  
**Chief Executive**

Attachment: Legal Opinion from Alan Lear, Barrister 2 August 2016

## Appendix

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### Question 1

**Do you agree that owners of secondary networks should be required to belong to the EGCC? Please explain why or why not.**

We agree that secondary network owners should all be members of the EGCC. There have been instances where disputes have not been able to be resolved via the EGCC because they have involved a secondary network owner who is not a member.

The EGCC is intended to be a cost efficient forum for resolving customer disputes and complaints relating to the electricity and gas sectors. As participants in the electricity sector there is no “in principle” reason for owners of secondary networks to be exempt by default from the obligation to be members of the EGCC or for their customers to not have available to them the option of taking complaints to the EGCC. It is also important that customer-related indemnity disputes between retailers and network owners (e.g. disputes relating to outage notification requirements) are able to be resolved in the EGCC.

For these reasons and for the reasons identified in the Consultation, our view is that secondary network owners should belong to the EGCC. As MBIE recognises, if secondary network owners are prima facie members of the EGCC there is always scope for individual owners of secondary networks to seek exemptions from the obligation to belong if their own individual circumstances truly merit it.

On this topic ERANZ disagrees with one point in the Consultation. At paragraph 27 MBIE states that the EGCC is the only body that can consider indemnity disputes. This is not correct – the language in both the Consumer Guarantees Act and Electricity Industry Act allowing the EGCC to consider such disputes is permissive i.e. the EGCC “may” consider such disputes. It does not preclude other bodies (e.g. the High Court) from considering such disputes. If MBIE is correct then given the current EGCC jurisdictional limits retailers would have no remedy if an indemnity dispute exceeded \$50,000 in value.

### Question 2

**Do you agree that there should be consistency in the application of the Code, Part 3 of the Electricity Industry Act, and the LFC and levy regulations for owners of secondary networks where their activities are similar to those of a local distribution network owner? Please explain why or why not.**

We agree that there should be consistency in the application of the Code, Part 3 of the Electricity Industry Act, the LFC Regulations and the Levy Regulations for owners

of secondary networks where their activities are akin to that of a local distribution network owner. We note the ability, under all four pieces of legislation for the relevant administering body to grant exemptions.

In our view, embedded networks should all be classified as 'distributors' so they become subject to the industry participant requirements.

Customer networks may differ however in that the network owner will provide the retail service as well as the network service. Accordingly, customer network owners would be 'retailers' meaning they are subject to a regulatory regime. They would be 'industry participants' and therefore subject to registration requirements, the LFC, and EGCC membership. This appears to be sufficient to bring their relevant activities within the scope of the listed regulatory regimes.

We understand that the Retail Advisory Group (RAG) and the Authority have been looking at issues around secondary networks and that the policy work around customer networks is not yet complete. We therefore think that MBIE should leave the Authority and RAG to work through the issues rather than acting prematurely. Making statutory changes without undertaking a thorough analysis could potentially lead to an unfavorable outcome for industry participants and customers.

Whether or not customer networks are differentiated for the purposes of the legislation, we do not think that MBIE has sufficiently considered how the definition of distributor should be amended. Widening the definition of distributor would have effect on other areas not just secondary networks. In particular we note the recent discussions around battery storage and other emerging technologies falling within scope of distribution services. To this end, ERANZ is wary of a definitional change to deal with one specific issue without a first principles review of the definition of distributor generally. We reiterate the points made in respect of the Commission's review of Input Methodologies in our cover letter.

As an interim measure, MBIE may wish to define embedded network in the Electricity Industry Act so that these networks are for legal purposes considered distributors. The Authority could then align the Code definition.

Once a first principles review of the definition of distributor is complete, MBIE may then want to redefine this term and/or other terms.

### Question 3

**Do you think having a consistent approach to classifying charging infrastructure is necessary and/or beneficial? Do you think they should be classified differently for access rights and electrical safety purposes? Please explain why or why not.**

ERANZ agrees that in principle there should be a consistent approach as, particularly from a safety perspective; the requirements applicable to publically accessible charging infrastructure should generally be the same. However we also consider that in practice there is likely to be a need to for differences in approach in relation to access rights perspective. This is inevitable if publically accessible charging infrastructure is sited both on private land and public land. See below questions 4 and 6 for further details.

### Question 4

**Do you think, for access right purposes, charging infrastructure should be categorised as works or electrical installations? Please explain why you consider it to be one or the other.**

According to the MBIE website a total of 51 electricity distribution, generation and other entities have the status of being an 'electricity operator' under the Electricity Act. Some have that status for the purposes of all sections of the Electricity Act and some for only some sections. In the current context, as the Consultation notes, the relevance of this is that electricity operators have rights to construct and maintain "works" on roads. This right does not apply to electrical installations and does not apply to private land. Electricity operators also have rights to enter private land to maintain existing works. This right does not apply to electrical installations.

In ERANZ's view, EV charging infrastructure could be classified as either works or electrical installations. Which category particular infrastructure falls into would need to be assessed on a case-by-case basis applying the definitions in the current Electricity Act to the particular infrastructure concerned. It is not possible or appropriate in our view to classify all EV charging infrastructure as one or the other. However, and regardless of which category it currently falls into, it seems to ERANZ unlikely that those responsible for drafting the current definitions of "works" and "electrical installations" had clearly in mind the possibility that those definitions would one day be applied to a national network of publically accessible EV charging infrastructure. This means there is the strong potential for unintended consequences. ERANZ would support a review by MBIE of those definitions to determine whether they remain fit for purpose in the light of the emergence of new technologies such as EVs and batteries.

In relation to the specific issue of access, those contemplating constructing EV charging infrastructure on private land should be able to reach appropriate agreements with the owners of that land for ongoing access to that land. It is not clear to ERANZ that a statutory right of access to EV charging infrastructure is necessary or appropriate to facilitate the development and national roll out of such infrastructure. ERANZ's view is that negotiation of such access should be left to the ordinary market mechanisms. Certainly, based on the information in MBIE's paper it is not clear to ERANZ that the issue of access rights, on its own, provides justification for changes to the existing categorisation of charging infrastructure under the relevant definitions. The better view, as indicated, is that the emergence of new technologies such as EVs and batteries means there should be a considered review of the relevant definitions in the various statutory contexts in which they are applied.

#### **Question 5**

**Do you think the provision of national information and guidance from the NZTA would be sufficient to clarify the access rights as they apply to charging infrastructure? Please explain why or why not.**

It is unclear whether MBIE are proposing that NZTA put out guidance on whether charging infrastructure is 'works' or 'electrical installation'; or guidance in the event charging infrastructure was either/or a mixture of both works and electrical installation; or indeed something different altogether. Accordingly, it is difficult to comment meaningfully.

In any event, as ERANZ understands it NZTA only deals with state highways so there would be uncertainty in respect of other roads and it seems at least questionable whether NZTA would be the appropriate body to issue such guidance.

Thirdly, it is not clear whether there would be any consultation process by NZTA on issuing guidance and the extent of its legal status (i.e. would it be enforceable and how).

ERANZ can see that provision of national information and guidance from the NZTA would potentially be useful but, for the reasons given above, it seems unlikely to achieve the goal of providing definitive clarification – even on the relatively narrow issue of access rights to charging infrastructure on state highways. As indicated above, ERANZ's view is that now is the appropriate time for a more considered and fuller review of various electricity-related statutory provisions to ensure that the emergence of new technologies is appropriately catered for and facilitated by those provisions.

### **Question 6**

**For the purpose of electrical safety, if all publically accessible EV charging infrastructure was to be categorised, do you think it is better categorised as works or electrical installations? Please explain why you take this view.**

The appropriate answer to this question may depend first on an expert assessment of the appropriate “first principles” electrical safety requirements for publically accessible EV charging structure followed by a comparative assessment of whether those requirements are fully met by classifying the infrastructure as “works” or an “electrical installation”. It is possible that neither categorisation as “works” nor categorisation as “electrical installations” fully achieves the necessary level of safety. In fact the MBIE paper specifically states that “...other electrical safety measures may also be necessary to maintain a level of safety for those using the charging infrastructure.”

ERANZ has not obtained an expert assessment of the appropriate “first principles” treatment of publically accessible EV charging infrastructure from the perspective of electrical safety, however we consider that this question and the possibility that the answer to it is “neither”, perfectly illustrates the broader point that MBIE should in our view be considering the relevant definitions more broadly and making an assessment of whether their application in this context and in other legislative contexts remains “fit for purpose” in the light of the emergence of new technologies.

### **Question 7**

**For the purposes of electricity safety, what consequences would categorising all charging infrastructure as either works or electrical installations have? Please explain the consequences and impacts you think this would have if charging infrastructure was classified as works and if it was classified as electrical installations.**

As should be clear from the comments above, ERANZ view is that forcing EV charging infrastructure into one or the other of the ‘works’ or ‘electrical installation’ categories may miss the point that neither category is appropriate for this type of new technology. This may result in various unintended consequences. ERANZ view is that the increasing viability of EVs and related charging infrastructure along with other new technologies such as batteries should prompt a wider review of electricity legislation and definitions to assess whether they appropriately cater for these new technologies.

## Question 8

**How do you think electrical safety for charging infrastructure can best be addressed? Please explain any measures you have identified and why you think they are needed.**

ERANZ view is that the likely best approach is for specific requirements for the electrical safety of charging infrastructure to be added to the Electricity (Safety) Regulations 2010 (ESRs) under the Electricity Act. These requirements can either be specific details added to the ESRs or can be in the form of a code or standard mandated by the ESRs. There may also need to be amendments to the definitions of “works” and / or “electrical installation”. As far as ERANZ is aware there are currently no specific safety requirements addressing installation testing or ongoing maintenance of EV charge stations.

2 August 2016

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**Input Methodologies Review: Treatment of Emerging Technologies in the Electricity Industry under Part 4 of the Commerce Act 1986: legal definition and interpretation of *electricity lines services***

**Background**

1. On 16 June 2016, the Commerce Commission released draft decisions on its review of input methodologies for consultation. Included among those draft decisions are its proposals on how the impact of emerging technologies in the energy sector will be treated under the Input Methodologies (IM) which are set out in “Topic paper 3: The future impact of emerging technologies in the energy sector” (TP3).
2. I have been asked to review the Commission’s intended approach to the legal definition and interpretation of *electricity lines services* under s54E of the Commerce Act (the Act) as set out in TP3 and provide independent advice on whether that approach is correct in relation to certain emerging technologies, particularly for fixed storage batteries and electric vehicles (EVs).
3. I understand the approach has implications in terms of whether assets such as storage batteries can, under the Act, properly be included in the Regulated Asset Base (RAB) if owned by an electricity distribution business (EDB). The Commission is proposing that where an EDB can show that the batteries are being used by it to support the *conveyance of electricity by lines*, those batteries can form part of the RAB (subject to any cost allocations set out in the IM if they are only being used partly this way) notwithstanding that they be located on property owned by consumers, or are batteries installed in electric vehicles.

**Summary**

4. The question posed for me is whether the Commission’s proposed approach and interpretation of *electricity lines services* under s54E of the Act are correct in relation to certain emerging technologies, particularly customer storage batteries and EVs?
5. It is my conclusion that the proposed approach and interpretation are not correct for the following reasons:
  - (a) Customer storage batteries (including those in EVs) located “behind the meter” are not included as forming part of the electricity conveyance services that are regulated under s54E of the Act even where they are used in association with the conveyance of electricity. This is because:
    - The electricity conveyance service regulated by s54E is defined as comprising the monopoly part of a distribution lines network that ends at customers’ *points of supply*;

- *Fittings* that store electricity (i.e. batteries) located after the *point of supply* are specifically identified as an *electrical installation*. Accordingly they are not *works* and do not form part of *lines*, as those terms are defined in the Electricity Act 1992 (EAct);
  - Customer and EV batteries may also be regarded as *electrical appliances*, which is an exception to *electrical installations*. However, in the context of the EAct, *electrical appliances* are not *fittings* for the purposes of *works* (and therefore do not come within the meaning of *lines*) under the EAct;
  - The “in association” exception to *electrical installations* is limited to electricity conveyance related fittings, and not storage fittings such as batteries, nor to electrical appliances.
- (b) This interpretation is consistent with the context of Part 4 of the Act. This is because customer storage and EV batteries are/ will be positioned in the competitive part of the electricity market which should be allowed to develop without any distorting effects from the regulated/monopoly part.
- (c) My conclusion does not undermine the inclusion of “non line” assets otherwise used by EDB’s to provide regulated services “up to the meter” in the RAB. This is because they are not specifically excluded as batteries are.
6. Moreover, my conclusion does not prevent EDB’s from investing in customer batteries as they see fit in an open market but with the knowledge such will not be included wholly or in part in their RABs.
7. The reasons for my conclusions are discussed in more detail below

## Discussion

### Storage Batteries

8. I understand from the background documents that the batteries attracting most attention in the context of emerging technologies in the electricity industry are the domestic ‘Powerwall’ or similar designed batteries that are designed to be installed in residential premises. These batteries can be charged during off-peak periods (and from PV solar panels) and be available for households to draw from during peak periods (when prices are higher) and also potentially have spare capacity to discharge electricity back into the network/grid. Either way, they can reduce the load that might otherwise be required to service that location during peak periods and thereby reduce or postpone the need to invest in reinforcing the network servicing that area. There is also mention of EV batteries being similarly used from being plugged into residential wiring systems. Intuitively EV batteries give rise to greater complications (e.g. they may out “on the road” or “flat” during peak periods and they come packaged with the vehicle used primarily for travel). However, if they can be used the same as for fixed batteries, then the analysis below for domestic batteries would apply similarly to them.

### Outline of Relevant Provisions

9. ERANZ and its members are reasonably conversant with subpart 9 of Part 4 of the Act which regulates *electricity lines services*<sup>1</sup> and the issues being discussed. Therefore, I have not set out the relevant sections in full or explained them in detail.
10. *Electricity lines services* are regulated under Part 4 of the Act by virtue of section 54E. For EDBs, *electricity lines services* is defined as meaning “the conveyance of electricity by line in New Zealand”<sup>2</sup> but excludes certain small scale systems and situations where competition is present (none of which are relevant to the issue here)<sup>3</sup>.
11. The “lines” component of the definition is further defined in s54C(4) of the Act as having the same meaning in s2(1) of the EAct unless the context otherwise requires. Under the EAct, *lines* are defined as meaning “works that are used or intended to be used for the conveyance of electricity”. As this reads very similar to meaning of *electricity lines services*, the purpose of *lines* being incorporated into subpart 9 of Part 4 logically centres on the meaning of *works*.
12. *Works* is defined in the EAct as *fittings* that are or could be used in the conveyance of electricity, but also for generation, conversion or transformation. (The references to generation, conversion and transformation are not relevant as *lines* are restricted to the conveyance of electricity and their presence is because the EAct applies to other parts of the industry.) In other words, what is being regulated is a service described as the conveyance of electricity on *works*. However, expressly excluded from *works* are those fittings that come within the definition of *electrical installations*.
13. The definition of *electrical installations* sets a boundary or demarcation at the customers’ end of the network, beyond which *fittings* employed do not form part of the conveyance of electricity on *works (lines)*. Relevantly *electrical installation* means:

“in relation to a property with a point of supply, all *fittings* beyond that 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”
14. The demarcation being set is both by physical location and by type of the *fittings*. *Fittings* are relevantly defined as everything used, or designed etc in connection with the conveyance of electricity.
15. The definition also refers to the situation of properties without a point of supply and to fittings that are excluded from being *electrical installations*. Two exceptions are potentially relevant in terms of storage batteries. They are:
  - Electrical appliances (b)(i): These are defined as any appliance that uses electricity or is designed or intended to do so. These are excluded from being *electrical installations* because different exemptions and testing provisions apply to appliances elsewhere in the EAct.<sup>4</sup> In that context, by being an exception to *electrical installation* does not result in appliances becoming *works*<sup>5</sup> (and therefore not becoming part of *lines*). It would be nonsensical to treat items such as household toasters as *works*. This exception has not previously been referred to that I am aware of. Domestic storage batteries appear to come within the appliance definition because they use electricity but that does not bring them inside the scope of regulated lines services as they are not *works*.<sup>6</sup>

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<sup>1</sup> s54E of the Act

<sup>2</sup> s54C(1) of the Act

<sup>3</sup> s54C(2) of the Act

<sup>4</sup> See s80 and s82 of the EAct

<sup>5</sup> *Works* describe network type assets over which certain powers are afforded to EDBs under the EAct; see Part 3

<sup>6</sup> Energy efficient lighting discussed at footnote 131 of TP3 would also come within the meaning of appliances.

- Fittings used in association with the conveyance of electricity (b)(iii): The Commission, in TP3, has referred to this exception to *electrical installation* as supporting its approach to the treatment to storage batteries.<sup>7</sup> For the reasons set out below in paragraphs 19-22, I do not agree that this exception applies to storage batteries.
16. Finally, *point of supply* is defined as the point on the boundary of a property that consumes electricity where fittings exclusive to that property are located. I understand that the industry uses the concept “behind the meter” as a proxy to mean the *point of supply*, but it does not appear to be strictly accurate.<sup>8</sup> I note *points of supply* to a property can also be set by specific agreement with the consumer or property owner.<sup>9</sup>

#### The Commission’s Approach

17. At paragraphs 184 to 199 of TP3, the Commission sets out arguments contained in earlier submissions (made on its preliminary views set out in the earlier pre-workshop paper<sup>10</sup>) for and against its approach to allow RDB’s to include customer storage batteries they own in their RABs, where they are used for the conveyance of electricity in their networks. The Commission reaffirmed its approach as being appropriate and put forward three grounds in support which is summarised as follows:

- What is being regulated is a “service” (and not specific assets) and so long as the asset is used in a way that supports that service, its costs can be attributed to the regulated service, subject to any cost allocation IMs if it is also used for non-regulated services;<sup>11</sup>
- The context of Part 4 when applied to the definition of *lines*, makes it unlikely that certain classes of assets are excluded to restrict the scope of the regulated service under Part 4 (as all “non-lines” assets such as office chairs would be excluded too);<sup>12</sup> and
- Even if assets are excluded from the definition of *lines* they can be brought into the RAB where they are used “in association with” the conveyance of electricity by distribution line by virtue of the (b)(iii) exception to *electrical installations*.<sup>13</sup>

#### Analysis

18. Applying the legal definition of *electricity lines services* to how assets such as storage batteries should be treated is not without complication because the underlying definitions are used for multiple purposes. Nevertheless, the definitions of *works* and *electrical installation* were inserted on 1 November 2010 by the Electricity Industry Act 2010 (EIAct). This means they were consciously intended by Parliament to apply in the context of subpart 9 of Part 4 of the Act that had been enacted a few years earlier.<sup>14</sup> The EIAct also uses the same definitions of *lines* and *works* for the

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<sup>7</sup> See Paragraph 199 of TP3

<sup>8</sup> For example Vector defines point of supply to be the isolating fuse located either on the boundary of the property or on the pole nearest to the property. The property owner owns the service line between the point of supply and the meter.

<sup>9</sup> s2(3)(d) of the EAct. I anticipate that moving the *point of supply* to the location of the battery will require the EDB to take ownership of the wiring system etc up to the battery installation.

<sup>10</sup> Input Methodologies Review: Emerging technology pre-workshop paper dated 30 November 2015

<sup>11</sup> TP3 at paragraphs 194-195

<sup>12</sup> TP3 at paragraphs 197-198

<sup>13</sup> TP3 at paragraph 199

<sup>14</sup> ERANZ has been advised by MBIE that the policy intent in amending the definitions of *electrical installations* and *works* in 2010 – to provide for certain types of generators (e.g. industrial co-gen) to be treated as ‘works’, and ensuring there is a clear distinction between works and installations, for the purposes of promoting electrical safety. This is consistent with the Select Committee’s report to Parliament.

purposes of that Act so there would be consistency between the three statutes that regulate the industry.

19. While I agree with the Commission that the focus of what is being regulated is a “service” (and not the other alternative which are goods) that service is clearly proscribed by statute through the setting of physical (location) boundaries and by the nature of certain equipment/assets. In particular assets (*fittings*) used for services related to the storage (and generation) of electricity that are located beyond the *point of supply* are expressly not included in the definition of *lines* which forms the base upon which the regulated service is defined.
20. The problem with the Commission’s approach is that by not restricting the scope to the *lines* assets as defined, begs the very question as to what is the regulated service that assets have to be “used for” if no boundary is set as to where those assets may be located or of their nature. In other words, by being able to include service related assets that are specifically excluded (such as customer storage, generation and appliances) will, overtime, blur the business boundaries and facilitate regulatory creep away from the core monopoly lines distribution service.
21. This exclusion of assets is consistent with the context of Part 4 of the Act as s54E regulates a monopoly service whereas such storage (and generation) of electricity do not have those attributes (but are nevertheless connected to monopoly networks as are consumer premises beyond the *point of supply*). Consequently, I do not agree that the context of Part 4 favours the Commission’s interpretation; in fact arguably quite the opposite.
22. The Commission has referred to the (b)(iii) exception to the *electrical installation* exclusion to *works* as allowing customer located batteries to be treated as forming part of the regulated service, where they are used *in association with the .....conveyance of electricity by distribution...lines*. Aside from batteries being more in the nature of appliances (as opposed to network type *works* equipment – see above at paragraph 13), on close examination, this other exception does not apply to *fittings* used to store (or generate) electricity located beyond the *point of supply*. This is because the definition of *electrical installation* refers to *fittings* used for the conveyance, generation and storage of electricity, whereas the (b)(iii) exclusion is limited to the conveyance (and conversion and transformation – which are not relevant) of electricity and not to storage or generation. *Fittings* are defined as “*everything used, or designed ...in connection with generation, conversion, transformation, conveyance, or use of electricity*”. Moreover, I am instructed that batteries do not “convey” electricity in distribution or in private networks but are designed and used specifically to store electricity to be made available when required and conveyed using wiring systems or lines or both as the case may be.
23. This interpretation is consistent with why *fittings* that “store” electricity were added to the definition of *electrical installations* in 2010 by the EIA Act. Prior to that amendment being made, *electrical installations* were confined to the conveyance and generation related fittings located beyond the point of supply. Customer batteries would not be included within the ordinary meanings of *fittings* that “convey” or “generate” electricity and hence storage was specifically added to the definition of *electrical installation*. However, the more limited definition of *fittings* remained unaltered.
24. The (b)(iii) exception would foreseeably apply to assets such as ripple control devices located beyond the point of supply, as these are especially designed and used for load control in association with the conveyance of electricity. In my opinion, this exception would not apply to appliances that are designed primarily for other purposes (e.g. a refrigerator or an EV charging unit) that also incorporate technology that enabled a EDB to turn it off or on, depending on network requirements. Moreover, customer storage batteries fall outside the exception to the exclusion to *works* that the *electricity lines services* definition relies on, notwithstanding that they could be used in an indirect sense “in association” with the conveyance of electricity by distribution lines.

25. I have attached a diagram which sets out the steps to the definition of *electricity lines services* as described above.
26. The reasons for excluding beyond the meter storage batteries from the regulated services does not affect the practice of accepting “non lines” assets (such as office chairs, printers and telephones) as part of the RAB where they are used by EDBs to carry on their business of conveying electricity up to their customers’ *points of supply*. This is because they are not specifically excluded by statute from the regulated service as certain storage batteries are. As noted, I agree that focus is on the service (not the assets) but the service being regulated has set boundaries which exclude certain equipment beyond customers’ *points of supply*, and consequently services related to that equipment.
27. My interpretation is also consistent with s108(4) of the EIA Act. That section expressly requires the Commission to treat all costs related to EDBs discharging their obligation to supply a place from an alternative source (namely other than from a distributor’s network) as if they were costs of providing *electricity lines services*. If the Commission’s approach was correct, making such a direction was unnecessary.
28. A summary of this advice is provided at paragraphs 4 to 6 above. Please contact me if any further advice is required.

Yours faithfully



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# Definition of Electricity Lines Services

