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**Submission on Electricity Information Exchange Protocols
(PUBLIC VERSION)**

1. Vector welcomes the opportunity to respond to the Retail Advisory Group's consultation paper entitled *Electricity Information Exchange Protocols – Proposed Amendments* (the "consultation paper").
2. Vector's contact person for this submission is:
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3. **Appendix A** contains Vector's responses to the specific questions asked in the consultation paper.
4. Parts of this submission are confidential and Vector has provided a confidential version and a public version.

Assessment of the benefits of the new EIEPs

5. Vector supports measures that improve industry-wide efficiency and reduce costs. We agree that standardising information exchange protocols is one way to achieve these outcomes. However, the Electricity Authority ("Authority") should be careful not to assume there will be net benefits without doing careful analysis to justify its proposals. For example, we note paragraph 2.2.7 of the consultation paper:

While the costs of negotiating and establishing existing information exchange arrangements have already been sunk (and shifting from these to

any different arrangement, including updating protocols to implement the latest version of a standard, would have additional cost implications with only limited benefits for existing participants), there should be competition benefits in terms of reduced market entry costs where entrants can establish retail operations using published standards-based information exchange protocols. The more that existing market participants have implemented a common standard, the lower are the entry costs.

6. This statement is true, but assumes that the costs of all participants updating their systems will be outweighed by the benefits to new entrants. That assumption is unlikely to be correct in all circumstances and any Authority decisions must be backed by a clearly identified net benefit.

Yours sincerely,



Bruce Girdwood
Manager Regulatory Affairs

APPENDIX A: ANSWERS TO SPECIFIC QUESTIONS

Question No.	Question detail	Submitter Response
1	What is your general view of the relative merits of voluntary vs mandatory approaches as they apply to the uptake of new or revised EIEPs over time?	<p>Where an EIEP is used by industry participants, there should be a requirement for them to use the latest version. This should ensure there are only 2 versions in play at any one time. It will be necessary to build in a lead time in order for systems to be updated. This should be 12 to 18 months in order to minimise costs.</p> <p>If there is a requirement to only use the latest version, the Authority should ensure that EIEP changes are as infrequent as possible. Constant requirements for participants to update their systems for only minor improvements will not be cost effective.</p>
2	Do you think that providing an “unless otherwise mutually agreed” provision within otherwise mandated protocols would be a workable mechanism?	Yes. This type of provision would allow for innovative commercial arrangements and flexibility. Parties would only agree to an alternative where it benefitted both of them.
3	Do you agree with allowing the EIEPs to become a default arrangement when the distributor or trader does not agree? Please give reasons.	Yes, provided the EIEPs cover the needed fields.
4	Are there specific EIEPs that you consider should be regulated? Please give reasons.	We consider that the use of EIEP1 and EIEP3 should be mandatory. These file exchanges are used monthly and form the basis of revenue and expense for the distributor and retailer respectively. These are key file exchanges that are similar to those used by the Registry and the Reconciliation Manager. Their importance justifies their regulation.
5	Do you agree with the issues noted with the EIEPs? Are there additional issues that should be listed? Please provide discussion on problems that you have identified or experienced.	<p>Vector agrees with the issues noted with the EIEPs.</p> <p>In addition, there are two other issues that should be noted.</p> <ul style="list-style-type: none"> Participants do not know which versions of the EIEPs they or the parties that they exchange the information with are using. To alleviate this issue, the header of files should include the version number.

Question No.	Question detail	Submitter Response
		<ul style="list-style-type: none"> • There are some hangovers of file formats from when contracts were originally completed. Hopefully this revision of the EIEPs combined with the MUoSA initiative will help resolve these issues.
6	Do you support the need for the Glossary of Standard Terms?	Yes. However, this is a data dictionary rather than a Glossary of Standard Terms. Vector considers that it should be re-named to Data Dictionary to better reflect what this document represents.
7	Are there aspects of the draft Glossary of Standard terms that you'd like to bring to the Authority's attention?	<p>The following terms are in the Glossary of Standard Terms twice and need to be combined:</p> <ul style="list-style-type: none"> • Consumption • Date <p>The addition of page numbers would be of assistance in using this glossary.</p>
8	Are there any other terms that you would like considered for inclusion in the Glossary of Standard Terms?	It would be useful if the acronyms were collated together in a central document.
9	Would changed field sizes pose problems for you (in general – please also provide specific feedback where field size changes are proposed in the discussion of each EIEP later in the paper)?	<p>Changed field sizes would not create problems for Vector <u>provided</u> the field lengths are the same as or less than the fields in our database.</p> <p>For EIEP1 the proposal is to increase the Network price category description from 50 to 75 field size. This would create problems for Vector as the length of the field in Gentrack screen is 48. The increase also seems unnecessary as the length actually utilised in this field in less than 20. Vector recommends this field size is set at between 20 and 48.</p>
10	Do you agree with incorporation of the proposed global amendments outlined in this section?	Yes. It will require some work in order to implement the amendments, but this is a useful opportunity to standardise the numerous file formats and to create a new “starting” point.
11	Do you agree with the revised definitions and reporting methods for the purposes of creating EIEP1 files? If you disagree, please provide your reasons and	<p>No.</p> <p>Vector submits that if you align methodologies to types of contract, then the billing methodology and reporting becomes clearer, as we set out below.</p>

Question No.	Question detail	Submitter Response	
	alternatives.	<p>Methodology</p> <p>As billed</p> <p>Normalised</p> <p>Vector considers the proposed normalised definitions are confusing.</p> <p>A simplified version of billing definitions are as follows:</p> <p><u>As billed</u> – what has been billed to the customer by the retailer,</p> <p><u>Normalised</u> – based on a calendar month. Generally “As billed” plus accrual.</p> <p>The accrual can be completed in a number of ways;</p> <ul style="list-style-type: none"> • Based on previous month; • Based on same period last year; • Estimate if a new ICP; • Based on the Reconciliation Manager seasonal shape. <p>Given that the accruals are reversed out the following month and replaced with actual readings over time, the methodology used does not really matter.</p> <p>The other method now starting to be used is an actual advanced meter reading for the calendar month. This methodology will be considerably more accurate for the consumption exchange between participants and with the Reconciliation Manager.</p> <p>Vector considers that the renaming of the As billed normalised file to incremental normalised is confusing. The existing name better describes what happens in practice.</p> <p><u>As billed.</u></p> <p>Vector agrees with most of the revised definition.</p> <p>Vacant energised properties are an area of concern. We understand that the original reasoning was that it was cheaper to pay the lines charges than to disconnect and then reconnect. With advanced</p>	<p>Contract</p> <p>Conveyance</p> <p>Interposed (ICP or GXP based)</p>

Question No.	Question detail	Submitter Response
		<p>metering the cost to disconnect/ connect is substantially less than sending someone out to disconnect/connect.</p> <p>If the property is consuming electricity (e.g. a hot water cylinder is left on) then it becomes a non-technical loss. When the property is next occupied then the next reading will pick up this energy usage.</p> <p>[</p> <p style="text-align: center;">] VCI</p> <p>With regard to clause 3.3.16 & 3.3.17, Vector considers there should be a maximum timeframe for which a property can be left in a vacant energised state. The time period should be either added into the MUoSAs or the Code.</p> <p><u>As Billed Normalised.</u></p> <p>Some retailers on Vector’s networks provide “as billed” files and some provide “normalised” files. As part of our contracts with the retailers, Vector can estimate when no information is provided for an ICP.</p> <p>Vacant energised sites cause an issue for some retailers to report on consumption as they have no end customer against that ICP. Vector recommends that a new status be established on the Registry for vacant energised properties. Distributors can use this reference to only bill fixed charges.</p> <p>Vector has the following comments about specific parts of the proposed definition:</p> <p>3.3.23 (a) For disconnects and reconnects Vector currently relies on EIEP7 information to maintain ICP statuses within its system. If the changes proposed regarding disconnection codes loaded on the Registry (paragraph 3.9) are implemented then Vector could comply with this definition, following some system development.</p> <p>3.3.23 (d) The Retailers can and do provide prior period corrections in their current month files. However, as Vector does scaling the Distributor module of Gentrack has been designed to ignore prior period adjustments and only bill for the current month.</p> <p>This is because the scaling ties the consumption at</p>

Question No.	Question detail	Submitter Response
		<p>each GXP less loss factor to the consumption information provided by Retailers. Vector therefore does wash-ups and scaling in terms of agreements with Retailers.</p> <p>As Vector uses the scaling and wash-up methodologies we support the full disclosure option for corrections. The delta option for corrections is not supported for the following reasons:</p> <ul style="list-style-type: none"> • It would not work with scaling; • It provides no clear audit trail; • Consumption is not in correct month; • Corrections could span price plan years but would pick up the current price plan. This could then cause disputes. • Corrections could cover any length of time ie for last 3 years and there is no mechanism to check this. Most contracts have a period in which corrections can be made.
12	Are the consumption volume reporting methods appropriately described, including within the draft business requirements section of EIEP1?	<p>No.</p> <p><u>EIEP1</u></p> <p>No. 7 of business rules needs further clarification. For an interposed contract HH data should be an EIEP3 file. For a conveyance contract the statement is correct.</p> <p>No. 10 of business rules. Vector recommends adding a statement to this rule that states that full estimation may occur for that month by Distributor dependant on contractual terms and timing of replacement file.</p> <p>No.13. Refer to comments above in response to question 11 concerning incremental normalised methodology.</p>
13	Are there any other matters relating to standardisation of the consumption volume reporting methods that should be considered?	<p>Advanced meters will, in time, eliminate the need for the majority of algorithms for estimating accruals, as the technology could provide actual readings for a calendar month. NB: This is different to the "As Billed" methodology as does not relate to what the end customer is billed.</p>
14	If the billing methodology requirements are updated as indicated, do you consider that one of the methodologies should be mandated as the default	<p>No. The methodologies align to contract type, as discussed below.</p> <p>Interposed – as billed normalised with the accrual being calculated in a number of ways:</p> <ul style="list-style-type: none"> • Based on previous month;

Question No.	Question detail	Submitter Response
	<p>method that must be used if the distributor and trader cannot agree on the methodology to be used? Please provide reasons for your view. If you agree, which methodology do you consider should become the default method.</p>	<ul style="list-style-type: none"> • Based on same period last year; • Estimate if a new ICP; • Based on the Reconciliation Manager seasonal shape. <p>Conveyance – as billed</p> <p>To align to one billing methodology fundamentally means changing to one type of contract.</p> <p>Having multiple billing methodologies does work for an interposed network. For example, if Vector gets an “as billed” file, Vector runs the algorithms to migrate this to an “as billed normalised” file.</p> <p>With a conveyance contract the billing methodology is “as billed” and links to contractual implications such as the trigger to transfer the debtor to the retailer. In the case of default, it also determines the point at which legal remedies come into play.</p>
15	<p>Would the adoption of the revised definitions above require you to make system or process changes? If so, please outline what would be needed and provide estimated costs. (You may prefer to mark these confidential.)</p>	<p>Yes.</p> <p>[</p> <p style="text-align: right;">] VCI</p>
16	<p>Do you agree with the proposal to set all revised EIEPs to version 10? If you disagree, please provide your reasons and alternatives.</p>	<p>Yes. While it will require some implementation work it is an opportunity to standardise the numerous file formats and to create a new “starting” point.</p>
17	<p>Do you agree with the proposal to remove XML tags from the proposed version 10 of the EIEPs?</p>	<p>Yes. These are not used and, as there is no schema, are unlikely to be used.</p>

Question No.	Question detail	Submitter Response
18	Is your company ready to use XML or are you considering this possible step? If so, please indicate possible time frames.	No to both questions.
19	Have you developed an XML schema that you consider would assist the Authority to consult further on web services and that you'd be prepared to share with the Authority and potentially other participants?	No.
20	What other considerations relating to the technical aspects of the EIEP formats should be considered?	File transfer protocols should be more secure as participants are exchanging confidential information. The industry should be moving to secure FTP.
21	Do you see any issues with the proposed prohibition of commas in EIEP data fields, as outlined above?	No.
22	What indicative cost would this change require to implement in your system?	None for Gentrack.
23	Would the modifications to the CSV format outlined here raise any concerns for you? If so, please indicate what these are and provide alternatives.	No.
24	Do you consider that the retailer types have been defined correctly?	Yes.
25	Do you agree with the proposed substitution of the defined term "retailer" with "trader"?	Vector is indifferent to this proposal. Vector notes that distributors may not have sufficient information to determine which "type" of retailer each retailer on their network is. Distributors will not necessarily enquire about where retailers purchase

Question No.	Question detail	Submitter Response
		their electricity as that is a commercial matter for the retailer and does not generally impact on the retailer – distributor relationship.
26	Are there other considerations where the change from “retailer” to “trader” could present problems? What are these?	We note that the MUoSA refers to Retailers. However, the EIEPs are proposed to refer to traders. This may be confusing for participants. We consider that alignment of the terminology between the MUoSAs and the EIEPs would improve clarity within the industry.
27	Do you support the proposed definition of the status reason code?	Yes. Vector considers this to be an excellent move as information will be publically available regarding where and how a property has been de-energised.
28	Are the proposed status reason codes sufficient to record practical information for current conditions or should additional codes be considered?	The proposed status reason codes are sufficient.
29	If the Authority does implement the use of an expanded status reason code, what costs would be involved and how long would it take you to prepare for this change? Responses may be marked as confidential.	[] VCI
30	Are there other considerations for reason codes?	If these codes were available on the Registry, once system changes are implemented, EIEP7 could be dispensed with.
31	Do you consider that there is a need for critical disconnection alert codes?	No. Vector considers that these codes are unnecessary.
32	If the Authority does implement this change, what costs and benefits would apply to your business and how long would it take you to prepare for this change? Responses may be marked as confidential.	No comment.

Question No.	Question detail	Submitter Response
33	If you believe these codes are warranted, is the suggested table appropriate? If not, what would your recommendation be?	No comment.
34	Are there other considerations for use of critical disconnection alert codes in other EIEPs?	No comment.
35	Do you agree with the addition of agent information in the header of a file?	Yes. Some of the file formats already have this. This will provide consistency across the headers.
36	If the Authority does implement this change, what costs would be involved and how long would it take you to prepare for this change? Responses may be marked as confidential.	This has been included in the costs and timeframes provided in our response to question 29, above.
37	Does the use of the "F" and the "FL" code cause issues for your business? Please provide reasons.	No.
38	Do you agree with the removal of the "VA" code?	Yes.
39	Are there other codes or fields that you think require clarification as to their appropriate use or meaning?	No.
40	What EIEPs do you use and for what purposes?	<p>Vector uses EIEP1 and EIEP3 for billing purposes.</p> <p>Vector uses EIEP4 to a limited extent, but would aim to make more use of it.</p> <p>Vector uses EIEP7 for connection statuses which impact on billing. If the changes to disconnection codes (section 3.9) that are being consulted on are adopted then, following system changes, Vector would no longer require EIEP7.</p>
41	What changes, if any, do you make to data	Vector changes the headers in some files, this is necessary to upload them into our system. Also, one

Question No.	Question detail	Submitter Response
	contained in a received EIEP file? If you do make changes to the received formats, please provide details.	retailer sends us two mass market files for the Vector network as they consider their smart meters are HH files – as the retailer should only be sending us one file, Vector needs to combine them. Vector has requested clarification of this under question 12.
42	Where relevant, how do you manage billing data revisions?	Billing data revisions are loaded into the billing system and dealt with during the wash-up process. Refer to our answer to question 43.
43	Where relevant, how do you manage billing data wash-ups?	Vector’s billing works on a calendar month. Two wash-ups and scaling to GXP are completed on a three and 12 month cycle on our Northern network. The wash-up process reverses all original billing and then re-bills for that month. A new EIEP1 file is provided to Retailers at the time wash-ups are completed.
44	Do you agree with the proposed changes to the EIEPs? Where you disagree, please provide details for each EIEP that you disagree with.	<p>Generally yes.</p> <p>For EIEP4, clarification is required regarding certain data inputs:</p> <ul style="list-style-type: none"> • What is meant by the Physical address property name – for example, would a school name be acceptable here? • It would be helpful to include location notes and meter number.
45	Are there any other changes to EIEPs that the Authority should consider?	<p>Yes.</p> <p>One of the difficulties at the moment is that participants are unsure which version they or the participant that they are exchanging information with is using. It would be useful to have an additional field added to the headers of files to specify which version of the file format a participant is using. That way there could be checks built into the system to match the appropriate formats.</p>
46	What costs would you incur to implement the changes proposed in the draft version 10 EIEPs?	[] VCI
47	What benefits would you see from implementing the changes proposed in the draft version 10 EIEPs?	It would ensure that there is consistency through all the file formats with common definitions and field lengths.
48	Is the proposed draft EIEP1 and EIEP2	Yes, for EIEP1.

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	specification sufficient to implement the four consumption volume reporting methods described and to incorporate the needs of GXP-priced networks?	Vector does not use EIEP2.
49	Do you think the addition of a loss category code field in EIEP2 would be a benefit? Please provide details.	Vector does not use EIEP2.
50	Is the proposed draft EIEP3 specification sufficient to report half hourly consumption volume information?	Yes.
51	Do you currently use EIEP4 and, if so, what specifically are you using it for?	See answer to question 40.
52	For the purpose of supporting network rebate payments, do you favour making further modifications to EIEP4 as discussed or alternatively creating a new EIEP13?	No comment.
53	Do you think that the creation of two separate but related protocols for outage notifications from EIEP5 better serves the purpose of providing the information required in respect of service interruptions?	Vector does not use EIEPs 5 and 6. We currently have systems and processes in place for communicating outage information with retailers and these are working well. We are not aware of retailers wishing to change these systems. To change from our current systems to the EIEPs would be costly and deliver no benefit.
54	While it is not being proposed at this time, do you consider that use of EIEP5A should be mandatory by distributors?	No.
55	Do you think that creating two separate but related	No comment.

Question No.	Question detail	Submitter Response
	protocols in place of the current EIEP6 better serves the purpose of providing the information required in respect of fault and non-fault related service requests?	
56	As all the information contained in EIEP 7 can be obtained directly from the registry, is there an ongoing need for EIEP7?	<p>Before Vector could dispense with EIEP7, Vector would need:</p> <ul style="list-style-type: none"> • implementation of the disconnection code change proposed in this consultation; and • to make system changes.
57	Do you favour retention of EIEP8?	Vector does not use this EIEP. It should only be retained if participants are using it.
58	Do you agree with the Authority's proposal that a standardised format for EIEP10 is not provided? Please give reasons and details of a proposed EIEP10 if you consider that the format should be standardised.	Yes. EIEP4 can be used.
59	Do you use EIEP11 and, if so, for what purpose?	No.
60	Do you consider there is a need to retain EIEP11?	No. It seems to contain only limited information.
61	Assuming you consider there are grounds for its retention, are there any other changes to the current EIEP11 that the Authority should consider?	No comment.
62	Do you agree to the changes proposed here that seek to keep EIEP12 globally consistent with the other EIEP formats?	No comment.
63	What other EIEPs should be considered by the	None.

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	Authority?	
64	If you haven't previously provided your views regarding the possible withdrawal of individual EIEP formats, are there any EIEPs that you consider should be removed?	EIEP7 could be dispensed with if changes to disconnection codes are regulated as proposed. EIEP11 seems unnecessary. EIEPs 4 and 9 could be combined.
65	Are there other considerations in respect of EIEPs in general that should be considered at this time?	No.
66	Do you agree with the views, as outlined in this section? Please provide your reasons.	Yes, subject to the cost-benefit analysis being robust, and recognising that changes to theoretically more efficient processes may carry costs that are not outweighed by any benefits. By standardising information exchange, it makes it cost effective for all parties. However, when there are different versions for different participants and different file standards/ naming conventions it makes it more difficult. This review of EIEPs should deliver formats that are relevant to the majority of participants. There should be no need to change the EIEPs unless something changes in the electricity market.
67	Which are the highest priority EIEPs for consideration in respect of attaining more universal adoption?	Vector considers EIEP1 and EIEP3 are the highest priorities.
68	What costs would you incur should the protocol and version of EIEPs 1, 2 and 3 be mandated?	See response to question 46.
69	What benefit would you see should the protocol and version of EIEPs 1, 2 and 3 be mandated?	These file exchanges are used monthly and form the basis of revenue and expense for the distributor and Retailer respectively. A mandated format should reduce our transaction costs.
70	Do you favour mandatory use requirements being set by the Authority and, if so, of which EIEPs? If not,	Yes for EIEP1 and 3, for reasons outlined in the response to question 4.

Question No.	Question detail	Submitter Response
	what alternatives might deliver greater net benefits and what are these benefits?	