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14th August 2015

John Rampton
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By email: submissions@ea.govt.nz

Dear John

Code Change Omnibus 2015

This is Transpower NZ Ltd.'s submission to the Authority's Code Change Omnibus, published 30th June 2015.

We welcome the opportunity to comment on the Code Changes presented in this omnibus package and we have responded in the appendix to several of the proposed changes as relevant. We also make some observations and suggestions regarding the Authority's Code change process, intended to improve transparency, simplify the review exercise for participants, and allow better targeted and effective feedback.

'Omnibus' Code change process

We note that the 21 discrete changes presented under Appendix B for consultation is a very large number of substantive proposals to assess and respond to in a consultation window that is the same length as other single-issue Code Changes.

It wasn't clear from the consultation paper what basis each of the other 28 matters presented under Appendix C were being proposed. We conclude that they are being advanced under the 'technical and non-controversial' limb of clause 39 (3) of the Electricity Industry Act as it is the only route for Code Change without any consultation. While we agree this process provides a mechanism for informing participants of pending changes we wonder whether there should also be an overt consultation on these points. For example, although we have not identified any material concerns with the proposals presented as "information only" in the current review we have had such concerns in the past. In that instance (in 2014) we did not agree with the "technical and non-controversial" assessment for a specific change. Although the Authority eventually agreed that the change in question should not be progressed the process for arriving at that conclusions was ad-hoc and

opaque. We consider it would be cleaner and more transparent if the Authority simply invited comment on all the Code change proposals it is making – including for participants to challenge its 'technical and non-controversial" assessment.

For the next omnibus review, and possibly other Code change processes, we suggest adoption of some communication steps the Authority could take to assist participants' understanding of the proposals and to help improve transparency and confidence in the process.

1. *Categorisation* of change proposals: to help participants focus on proposals most relevant to them, we consider each change could be framed with an indication from the Authority of parties it thinks are most affected.

2. *Basis* for change proposals: it would also be informative if the Authority could communicate the genesis of each code change, for example whether the change arose from the code change register (which participant made the proposal, and when) or from within the Authority.

3. *Application of Electricity Industry Act clause 39 (3)*

    a. indicate how each change qualifies under clause 39 (3)

    b. develop criteria, with industry, for assessing that edits to the rules are technical and non-controversial . This would also assist participants to submit Code Changes via this route if appropriate.

Please do contact me if you have any questions about this submission,

Yours sincerely

Micky Cave

Senior Regulatory Analyst

Code Changes under Appendix B

Table 1 Publication of information about transmission agreements

Reference number for amendment you are submitting on:	047-012
Question 1: Do you agree with the Authority's problem definition? If not, please provide comments.	
Yes	
Question 2: Do you agree with the Authority's proposed solution? If not, please provide comments.	
Yes	
Question 3: Do you have any comments on the Authority's proposed Code drafting?	
We suggest that proposed sub clauses (1)(c) and (d) should refer to material inconsistency with the benchmark agreement, as follows: (c) whether the **transmission agreement** is consistent in all material respects with the **benchmark agreement**; and (d) if the **transmission agreement** is not consistent in all material respects with the **benchmark agreement**, a description of the inconsistency; and This wording mirrors the wording, and underlying requirement, in clause 12.14 and the other clauses cross-referenced in it. It would also avoid any possible interpretation that the population of parts of the benchmark agreement with customer-specific details constitutes a "variation" that needs to be described. A materiality threshold would ensure effort is not spent on describing very minor changes, which would be of little or no benefit to anyone. We also suggest an "avoidance of doubt" clause to remove any risk that the 12.15 provision could be interpreted to apply to our commercial agreements.	
Question 4: Do you agree with the objectives of the proposed amendment? If not, why not?	
Yes	
Question 5: Do you agree the benefits of the proposed amendment outweigh its costs?	
Yes	
Question 6: Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objective in section 15 of the Electricity Industry Act 2010.	
Yes	

Table 2 Quantification errors and metering interrogation systems

Reference number for amendment you are submitting on	074 - 021
Question 1: Do you agree with the Authority's problem definition? If not, please provide comments.	
No.	
Question 2: Do you agree with the Authority's proposed solution? If not, please provide comments.	

No. We have identified several issues with the proposed amendment

- The new clause refers to a **meter** rather than a **data storage device.**
- There is an assumption that data is always held in the data storage device as scaled engineering values with decimal places and this may not be the case.
- The context has changed from the accuracy requirements of schedule 10.1 table 1 to one of decimal places.
- The number of decimals held in the data storage device may become meaningless once the correction factor is applied. For example 2400/1 CTs and 11kV/110V VT may have a factor of 240000. If the device records 0.0001 kWh the raw data value will be 24 kWh. The 4 decimals will always be zero.
- The proposal is very specific and assumes that it is possible to determine how the data is recorded (not displayed) in the data storage device.
- The proposal does not allow an interrogation system to have more decimals than the data storage device. This would be essential if the data storage device counts pulses.

It is a change from defining an accuracy requirement into a very specific requirement on how the interrogation system must handle data. It is possible a meter my hold data as secondary values to several decimal places that will become meaningless when a scale factor is applied. The cost benefit analysis is also flawed as it can only be made on untested assumptions. If an audit finds that a participant system does not meet the new very specific requirement then they will be required to fix or replace the system. This could cost several hundred thousand dollars.

Question 3: Do you have any comments on the Authority's proposed Code drafting?

The two problems identified could be easily resolved by adding a participant obligation to the existing clause and correcting the cross-reference.

14 Quantification error

The participant responsible for any **interrogation** system used for the collection of **raw metering data** used to derive **volume information** must ensure that the requirements of clause 4(1)(b) are complied with

Question 4: Do you agree with the objectives of the proposed amendment? If not, why not?

No

Question 5: Do you agree the benefits of the proposed amendment outweigh its costs?

No. There is an untested assumption in the cost/benefit evaluation that there will be no cost to participants. Until a participants system is audited against the now very specific requirements this can't be known. If a system is found to be non-compliant (say it uses floating point decimals) then it could cost hundreds of thousands of dollars to resolve without necessarily gaining anything in terms of accuracy.

Question 6: Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objective in section 15 of the Electricity Industry Act 2010.

We propose an alternative option see question 3.

Table 3 Recalibration requirements for installation of category 1 metering installations

Reference number for amendment you are submitting on:	087 - 009
Question 1: Do you agree with the Authority's problem definition? If not, please provide	

comments.
Yes
Question 2: Do you agree with the Authority's proposed solution? If not, please provide comments.
Yes
Question 3: Do you have any comments on the Authority's proposed Code drafting?
We consider there is drafting error in (2) (b); the recent 12 months context has been removed so a meter that was used for a short period several years ago can be reused without being recertified which we think is not the intent. Revised drafting is below Clause 43(2)(b) of Schedule 10.7 (b) has confirmed that it has been no more than 12 months since the **meter** was installed in the previous **metering installation**; and
Question 4: Do you agree with the objectives of the proposed amendment? If not, why not?
Yes
Question 5: Do you agree the benefits of the proposed amendment outweigh its costs?
Yes
Question 6: Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objective in section 15 of the Electricity Industry Act 2010.
Yes

Code Changes under Appendix C

Table 4 Replacing the definition of Distributor

Reference number for amendment you are submitting on:	007-024
Question 3: Do you have any comments on the Authority's proposed Code drafting?	
The definition of "specified participant" in Part 1 could be simplified as follows: **specified participant** ~~for the purposes of Part 9,~~ means any of the following— ~~(a) means any of the following:~~ (~~i~~a) a **distributor**: (~~ii~~b) a **retailer**: (~~iii~~c) a person who owns **lines**: ~~**owner**; and~~ (~~b~~d) a **direct consumer** ~~includes a person who uses **electricity** that is conveyed to the person directly from the **grid**~~ This change would allow for the removal of the definition of "line owner" from Part 1, which is used only in the current definition of "specified participant". "Specified participant" should also be bolded in paragraph (b) of the definition of "retailer" in Part 1. The proposed definition of "connected asset owner" would be better as "connected *load* asset owner". That would avoid any misapprehension that the definition includes owners of generation assets connected to the grid. Clause 1 of Schedule 12.1 could be simplified by combining subclauses (1) (a) and (b) into a single subclause referring to "connected [load] asset owners". In any event, the words "that have a point of connection to the grid" should be deleted from subclause (1) (a) because that is already a condition of being a direct consumer.	

Table 5 Amending the definitions of "energisation' and "de-energisation"

Reference number for amendment you are submitting on:	005-026
Question 1: Do you agree with the Authority's problem definition? If not, please provide comments.	
Yes, as far as the problem definition goes. However, a related problem not addressed by the proposed Code amendment is the Code's use of the defined term "de-energise" as well as the undefined term "disconnect" without clarity as to whether or not they mean the same thing. In Transpower's view they do mean the same thing. On that basis we consider the grid owner's "disconnection" obligations under clause 14.49 of the Code are satisfied by its "de-energisation" right under clause 37.5 of the benchmark agreement (as contained in transmission agreements). We note that that position is supported by the use of the word "disconnection" in the definition of "de-energisation" in the benchmark agreement (although, oddly, not in either the current or proposed definition of "de-energisation" in the Code). In our view a full review of the Code's use of the terms "de-energise", "disconnect" and their derivatives is needed, and the preference should be to use the defined term when appropriate to do so. We note that "disconnected" is defined in Part 1 in relation to the system model (and used inappropriately as a defined term at least once in the Code – clause 2(3) (e) (i) of Schedule 6.1).	

Replacing, where appropriate, undefined occurrences of “disconnect” with “de-energise” would help avoid confusion with the defined term “disconnected”.
Question 3: Do you have any comments on the Authority's proposed Code drafting?
We note the difference between the current definitions of “de-energisation” in the Code and Benchmark Agreement, which we doubt is intentional.

Table 6 Amending the definition of “special protection scheme”

Reference number for amendment you are submitting on:	013-029
Question 3: Do you have any comments on the Authority's proposed Code drafting?	
The references to “automatic under frequency load shedding systems” and “instantaneous reserves” in the definition of “special protection scheme” could be generalised to “extended reserve” and “ancillary services” respectively.	

Table 7 Amending the definition of "value of unserved energy"

Reference number for amendment you are submitting on:	015-030
Question 3: Do you have any comments on the Authority's proposed Code drafting?	
The objective for clause 12.39 is that “value of unserved energy” can mean a value that is different from the value in clause 4 of schedule 12.2. We consider that the drafting proposed for clause 12.39 subclause (1) contradicts the policy intent. We have proposed corrected drafting, including the correction of some cross-referencing errors in the clause. **value of expected unserved energy** means the value of any **expected unserved energy** ~~expected unserved energy~~ that applies under clause 4 of Schedule 12.2 or clause 12.39 **12.39 Customer specific value of unserved energy [subclauses not renumbered]** ~~(1) In this clause, a reference to the value of unserved energy must be read as a reference to the value of **expected unserved energy** in clause 4 of Schedule 12.2.~~ (2) **Transpower** or a **designated transmission customer** may apply to the **Authority**— (a) if permitted under a **transmission agreement**, for provisional approval to use a different value of **expected unserved energy** ~~unserved energy~~ than the value specified in clause 4 of Schedule 12.2 for the purposes of determining whether to replace or enhance **connection assets** as provided for under that **transmission agreement**; or (b) for approval to use a different value of **expected unserved energy** ~~unserved energy~~ than ~~from~~ the value specified in clause 4 of Schedule 12.2 for the purposes of applying the **grid reliability standards** under clauses 12.35 to 12.37 for a **grid injection point** or **grid exit point**, regardless of whether **Transpower** or the **designated transmission customer** has applied for the **Authority's** provisional approval under subclause(4). … (4) If **Transpower** or a **designated transmission customer** apply for approval of a different value of **expected unserved energy** ~~unserved energy~~ under subclause (2)(b~~a~~), the **Authority** may provisionally approve that value if the **Authority** considers that the value is a reasonable estimate of the value of **expected unserved energy** ~~unserved energy~~ in respect of the **grid injection point** or **grid exit point** for the **designated transmission customer** concerned. (5) If **Transpower** or a **designated transmission customer** applies for approval of a different

value of **expected unserved energy** ~~unserved energy~~ under subclause (2)(b) the **Authority**—

(a) may approve that value if the **Authority** considers that the value is a reasonable estimate of the value of **expected unserved energy** ~~unserved energy~~ in respect of the **grid injection point** or **grid exit point** for the **designated transmission customer** concerned; and

(b) may decline to approve that value despite having provisionally approved that value under subclause (4).

(6) If the **Authority** approves the value of **expected unserved energy** ~~unserved energy~~ proposed by **Transpower** or the **designated transmission customer** under subclause (2)(b~~a~~), that value of **expected unserved energy** ~~unserved energy~~ applies for the purposes of applying the **grid reliability standards** under clause 4 of Schedule 12.2 for the **grid injection point** or **grid exit point** instead of the value of **expected unserved energy** specified under clause 4 of Schedule 12.2.

(7) If the **Authority** does not approve the value of **expected unserved energy** ~~unserved energy~~ proposed by **Transpower** or the **designated transmission customer** under subclause (2)(b), the value of **expected unserved energy** under clause 4 of Schedule 12.2 applies for the purposes of applying the **grid reliability standards** under clauses 12.35 to 12.37 for the **grid injection point** or **grid exit point**.

Table 8 Audit provision ambiguity

Reference number for amendment you are submitting on:	017A-038, 017B-033
Question 3: Do you have any comments on the Authority's proposed Code drafting?	
We consider the clause as drafted creates the opportunity for potentially inadequately qualified personnel carrying out an audit (albeit a problem that already exists in the drafting of clause 3(1) of Schedule 10.2). We submit that a Part 10 audit must always be undertaken by an auditor approved under clause 1(7) of Schedule 10.2, and so the Code should be amended to remove any suggestion otherwise.	

Table 9 Amending the definition of "Sub-station dispatch groups"

Reference number for amendment you are submitting on:	004-031
Question 3: Do you have any comments on the Authority's proposed Code drafting?	
The definition of "sub-station dispatch group" should refer to "a grouping" not "that grouping". No station security constraints are notified by the system operator under clause 13.73(1)(j). The appropriate cross-reference in the definition of "sub-station dispatch group" is clause 13.75(1)(g) (consistent with the cross-reference in clause 13.102(1)(d)). In clauses 13.75(1)(f) and (g) there are singular/plural disagreements. These can be fixed by changing "the [block/station] security constraints that occur" to "any [block/station] security constraint that occurs".	

Table 10 Registry metering records, settlement indicator

Reference number for amendment you are submitting on:	045A-040
Question 2: Do you agree with the Authority's proposed solution? If not, please provide comments.	
No, and we consider this is a substantive issue for consultation. The main purpose of the settlement indicator should be to tell a participant if values from this meter channel should be included in a submission file. The message is lost under the proposed change.	

Table 11 Publication of report relating to Grid Emergency

Reference number for amendment you are submitting on:	056-042
Question 2: Do you agree with the Authority's proposed solution? If not, please provide comments.	
Yes, provided the defined information system for the purposes of clause 13.101(1)(a) is the system operator's website. This will keep the publication process consistent with what the system operator already does.	