

1 October 2024

Grant Benvenuti
Principal Advisor – Operations
Electricity Authority
Wellington

By email: policyconsult@ea.govt.nz

Dear Grant,

Submission to the Electricity Authority (Authority) on Code review programme number six: September 2024

Counties Energy Limited (CEL) appreciates the opportunity to make a submission to the Authority on its consultation paper on “Code review programme number 6”.

CEL is a consumer owned electricity distribution company in the south rural Auckland and northern Waikato regions. Approximately 70% of CEL’s customers have load control managed by CEL through its ripple relay plants. Like other EDBs nearly all of CEL’s load control is through ripple plants that are normally housed within a substation. This load control then operates all customers load on that substation and is unable to target specific retailer customers. CEL is investigating an alternative load control system using its iTron communication network, which communicates to 98% of ICPs, to enable individual customer load control for both specific retailers and for specific network assets (e.g. target a single transformer that is overloaded during peak periods).

CEL supports and endorses the submission from the Electricity Networks Aotearoa (ENA).

Sharing control of load between distributors and others

Demand for electricity is anticipated to increase significantly by 2050 to at least 62 TWh (MBIE, EDGS 2024). Meeting this increased demand, whilst **ensuring security of supply and affordability** as the energy sector decarbonises, is crucial. Effective and managed load control can/should play a vital role in ensuring the energy sector meets these objectives. Traditionally, load control has almost exclusively been managed by electricity distribution businesses (EDBs) via the EDB’s hot water ripple relay infrastructure. EDBs have typically utilised load control to reduce peak demand, balance the supply of electricity across the network, push out network investment which otherwise would be necessary to meet this increased peak demand and, most importantly, to maintain network reliability.



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Whilst CEL supports the ongoing review and development of customer load control, and is supportive of the proposed “relatively small amendments” in isolation, we encourage the Authority to undertake a more comprehensive review and update as opposed to a series of ad-hoc Code changes. We are particularly concerned about the visibility and coordination of any controlled load, and its restoration. With this in mind, CEL is committed to ensuring that potential consequences of any proposed changes, unintended or otherwise, have been fully considered and addressed. CEL’s concerns are outlined below.

Hot Water Load Restoration

A vital part of the load control process is judicious restoration management of hot water controllable load. When hot water load is restored too quickly, it creates artificial peaks on the network and has the potential to damage vital network equipment. In the event that vital network equipment is damaged, the question then becomes who should pay for the repair/replacement of that equipment. One way to address this may be through further amendments to the DDA to set clear expectations and requirements on the restoration of contracted load. CEL considers that the Authority needs to consider this issue as part of a more comprehensive review/update of customer load control.

Visibility of contracted load

It is possible that consumers will contract with multiple parties for load control services. For example, hot water load with EDBs, EV chargers with an aggregator, smart appliances with a retailer. It needs to be clear who has responsibility for control of particular load (and for load restoration). This clarity will be particularly vital during grid emergencies if the System Operator expects all participants to make load control available and/or to ensure load (e.g. load associated with EV charging) is being curtailed.

Fault Call Outs

Typically consumers contact the EDB where there is “part power” to their property. This is most commonly in relation to hot water complaints. In circumstances where an EDB responds to a consumer complaint and find that the “part power” being experienced is as a result of load control being undertaken for longer than the consumer anticipated, who should bear the financial burden for the call out?

SIR/FIR bids

Contracted load control has the potential to become increasingly dynamic, making it difficult for reserve market bidders to accurately estimate the amount of load they can make available from one period to the next. CEL considers that in order to support a competitive and contestable market for flexibility services, there needs to be clear visibility of who has responsibility for controlling load, and when.

Administration

It will become increasingly difficult to administer who has contracted control at an individual ICP. Consumers regularly change retailers, move house, opt-out of contracted load control arrangements. CEL is concerned to understand who will retain responsibility for ensuring that only those with a current contractual relationship with the current/new consumer will seek to undertake load control at the ICP.

Access to Load Control

Electricity retailers and other flexibility traders/aggregators are wanting to use hot water load control to achieve value-stacking benefits for their customers. As an EDB, CEL has been lucky to have exclusive access to this flexible resource in the past to address transmission peaks and assist with network outage events/grid emergencies/storms. These new actors want the lowest cost mechanism to control customer hot water and in CEL’s case this would be via the smart meter. CEL supports this and, consequently, CEL’s preference is that the smart meter control device can be accessed by all electricity market participants and control executed by CEL based on an agreed priority of control. This will assure EDBs that would like to continue control hot water load for the purposes of local network optimisation and outage support, that their access to such services is not removed/displaced by the new actors. This would avoid the duplication of controlled devices for the same asset, which would put more cost on to the consumer.

Network investment

EDB’s have increasingly been encouraged by the Authority to send the correct price signals to consumers in order to defer network investment. This has principally been achieved via the introduction of TOU and controlled/uncontrolled pricing and maximising the use of consumer hot water load control. In recent times, flexible connections have become a valuable tool in minimising whole-system costs for consumers. Given Transpower’s, EDB’s core role is recognised as “keeping the lights on” it is highly probable that these proposed changes, if not managed properly, will introduce a level of risk unacceptable to the system operator and individual EDBs. This will ultimately result in network investment being accelerated. This is contrary to the sector aims of “ensuring security of supply and affordability”.

Proposal number	CRP6-002
Questions	Comments
Q1. Do you agree the issue(s) identified by the Authority need attention? Any comments?	CEL agrees in principle with the proposal.
Q2. Do you agree with the objectives of the proposed amendment? Any comments?	CEL agrees in principle with the proposal.
Q3. Do you agree the benefits of the proposed amendment outweigh its costs? Any comments?	CEL agrees the potential benefits will outweigh the costs.
Q4. Do you agree the proposed amendment is preferable to any other options? If you disagree, please explain your preferred option in terms consistent with the Authority’s statutory objectives in section 15 of the Electricity Industry Act 2010.	Yes

Q5. Do you have any comments on the drafting of the proposed amendment?	No
Q6. Do you have any further comments on the proposal?	<p>It would be helpful to all parties, in particular consumers, to ensure that there is clarity on how long a consumer's load control can be "controlled" by each party and a recognition that these periods may not necessarily be coincidental. It is possible that an EDB will seek to control for 6 hours in any given day, with a retailer seeking similar. This could result in a consumer's hot water being controlled 12 hours daily, undoubtedly leading to an increase in "part power"/no hot water complaints.</p> <p>In addition, CEL recommend that the Authority utilises the Registry in order to identify which parties have control over which load, identifying the method by which that load is controlled by the party ie ripple relay, behind the meter etc.</p>
Q7. Is any part of your submission confidential? If yes, please explain which part, why it is confidential and provide a publishable replacement (refer paragraphs Error! Reference source not found. to Error! Reference source not found. of the consultation paper)	The submission contains no confidential information and can be publicly disclosed.

Proposal number	CRP6-007
Questions	Comments
Q1. Do you agree the issue(s) identified by the Authority need attention? Any comments?	<p>We do not really understand problem 1 regarding recording the expiry date on the certification report.</p> <p>The expiry date is then clear, and the field can directly transfer form the certification report data directly into the required certification expiry date field in registry.</p> <p>We do not understand problem 2 regarding separate data storage devices / we do not use any separate data storage devices.</p> <p>(we do not think the code requires amendment for obsolete technology).</p>
Q2. Do you agree with the objectives of the proposed amendment? Any comments?	We do not agree. Meter component certification expiry should be able to be expressed in months or by date (or by both means).

	(Defining a date in fact saves the need of an MEP to calculate the expiry date from the months when populating registry).
Q3. Do you agree the benefits of the proposed amendment outweigh its costs? Any comments?	We do not agree. We would have to make changes to our systems to support this change - for negligible obvious benefit.
Q4. Do you agree the proposed amendment is preferable to any other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.	Our preferred option is to make no change to the code with respect to this proposal.
Q5. Do you have any comments on the drafting of the proposed amendment?	No
Q6. Do you have any further comments on the proposal?	The expiry date of any metering component in the metering installation is accounted for when the ATH is determining the overall ICP expiry date. (which is the key field of interest to the MEP / Registry).
Q7. Is any part of your submission confidential? If yes, please explain which part, why it is confidential and provide a publishable replacement (refer paragraphs Error! Reference source not found. to Error! Reference source not found. of the consultation paper)	The submission contains no confidential information and can be publicly disclosed.

If you have any questions about CEL's submission please contact Allen Sneddon on the below details



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