Submission on Consultation Paper 2B and 2C –TOU Pricing

Submitter	Alister Gardiner, [redacted]

Questions	Comments
Q1. Do you agree the issues identified by the Authority are worthy of attention? If not, why not?	Agree. But are two specific issues I would like to see addressed: • Mandate a common "benchmark" TOU consumption-injection plan • Account for time/demand variable supply losses.
Q2. Which option do you consider best addresses the issues and promotes the Authority's main objective? Are there other options we have not considered?	I agree with the option proposed.
Q3. Should we require retailers to offer a price plan with time-varying prices for both consumption and injection? Why or why not?	Most strongly agree. There is insufficient space here to give all the reasons, but I think a mandated integrated plan including both consumption and injection is required to benchmark retailer offerings. See more details on this under comments on 8 at the end of this submission.
Q4. Do you have any feedback on the design requirements?	Yes, see additional comments on Q4 at the end of this submission.
Q5. Is there a risk that injection rebates will not be passed through to the consumers targeted? If so, how could we safeguard against this risk?	ABSOLUTELY. I have zero confidence that the retailers will pass through any distributor cost signals unless it is in their direct interest, or mandated. Simple solution is to mandate pass through.
Q6. Which retailers should be captured by the proposal and why?	I agree that retailers with more than 5% market share initially be captured. I consider that if only one plan is mandated, it should be relatively prescriptive in terms of on/off peak times and common to all participants, so as to allow reasonable comparisons to be made. Two of the biggest issues with comparing offerings at present are the lack of demand data available in the necessary form, and the complexity of the different tariff structures. EG, you can't get annual or seasonal on/off peak summaries from retailers, and you can't compare them easily because they use different time periods for switching rates. Etc.
Q7. What are your views on the proposed timeframe for implementation of 1 January 2026? Would 1 April 2026 be preferable, and if so why?	Agree. As soon as possible. Fair pricing for demand response is already at least a decade overdue. Smart meters make accurate TOU pricing possible. The market has not delivered on this customer benefit.
Q8. What are your views on Part 2 of our proposal that would require retailers to promote the time-varying price plans?	Agree in principle, although I would expect promotion to this extent will be difficult to implement and get customer value from. Instead, retailers could be required to promote in detail just one integrated consumption-injection plan that is mandated for on/off peak times, eg all must offer a plan with peaks 7am-9am, 5pm-11pm, and a single off peak rate for the rest of the time, along

	with an associated variable injection plan with the same time periods. Thus is the ONLY way to eliminate the smoke and mirrors and through a like for like comparison get true competition in the retail market. Retailers would of course be free to offer as many variations on this as they like.
Q9. What should the Authority consider when establishing the approach to and format of the reporting regime?	I have no comment as I do not understand the market or reconciliation processes.
Q10. Should the Authority include a sunset provision in the Code, or a review provision? Why?	A review provision in perhaps 5years to allow for adjustments would be satisfactory.
Q11. What are your overall views on Part 3 of the proposal?	As a customer I do not have a strong understanding of the processes and data accessibility of the various actors. However as discussed elsewhere in this submission I think it is possible to have a very limited mandated "prescriptive" tariff requirement that sits alongside less regulated plans. The mandated plan would be the only one that requires close monitoring and reporting under Part3 as this would be relatively easy and cheap for retailers to demonstrate compliance as noted in 6.54. Such an approach would automatically yield extremely useful comparisons on the relative performance of retailers across the country.
Q12. What are your views on Part 4 of our proposal to amend the Code to require that consumers are assigned to time-varying distribution charges, that retailers provide half-hourly data to distributors for settlement	Agree. Absolutely essential. Cannot believe that this is not already done as a matter of course for all ICPs with half hourly metering. I understood that this was a justification for the cost of the half hour metering roll out. Another example of the need for better market regulation.

Questions	Comments
Q13. Do you agree with the objective of the proposed amendment? If not, why not?	Agree.
Q14. Do you agree the benefits of the proposed amendment outweigh its costs?	Yes, absolutely.
Q15. 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 objectives in section 15 of the Electricity Industry Act 2010.	Agree in principle, within the context of the comments in this submission.
Q16. Do you have any comments on the drafting of the proposed amendments?	In my view the drafting should take into account the suggestions in this submission, which would change the prescriptive content.

Additional comments that I feel are of note or important to address:

The need for a mandated common “benchmark” TOU tariff structure

Additional comments on Q4 – design requirements:

In my view the main reason why customer switching has been so poor is that it is pretty much impossible to compare one offer with another. A
ICP consumption data is not provided in a convenient form, and rates for the plethora of plans have to be specifically asked for. The Powerswitch site is of very limited value because it is inaccurate and many retailers appear to have opted out. Many customers switch once and have such a poor outcome that the never do it again.

As identified in Q8 I think it is **essential to mandate that all participants offer a common “benchmark” TOU tariff that allows some sort of relatively straight forward comparison between retailers**. They could be required to promote in detail only this one plan, saving greatly on the current proposal requiring all TOU plans to be promoted. This would be an integrated consumption-injection plan that has common mandated on/off peak times, for example, all retailers must offer a plan with every day (same price) peaks 7am-9am, 5pm-11pm, and with a single off peak rate for the rest of the time, along with an associated variable injection plan sing the same time periods. This plan could be the primary method by which retailer compliance is cost effectively scrutinized, also minimizing compliance costs.

Forcing all retailers to offer a price for a common prescribed plan is in my view the ONLY way to eliminate the smoke and mirrors and promote true competition in the retail market. (I consider the same requirement should also be mandated for a fixed rate plan, but that is not the topic of this consultation.) Retailers would of course be free to offer as many variations on this as they like. These retailer specific alternative “innovative” plans would not be expected to be subjected to the same level of audit and scrutiny.

Comments on 8: Consumer financial impacts.

As indicated above, I think the proposed plans in 8.1 a) and b) should be integrated and mandated for common on-peak and off-peak time periods, ie as a “benchmark” variable price plan which is required for all retailers over the 5% threshold to offer to all ICPs with half hour meters in the distributor regions in which they operate.

There is tremendous value to the consumer in being able to simply compare the ability of retailers to competitively deliver to a basic common “specification” in their area. This is the value “going to tender” provides for any procurer in a truly competitive market (which the general electricity customer retail market is currently not). Despite the rhetoric about service differentiation etc. price is the only true indicator of competitiveness in a market where suppliers sell exactly the same product across the whole country.

Supply System Losses and possible impact on cost reflective TOU pricing

Overall average system losses and unmetered load in the NZ supply system are estimated at around 7-10%, and at retail prices could represent up to **$1.2 billion** annually. Because of the square law relationship with power flow, peak time losses could be 2 to 6x off peak.

Under 3.3, 3.4 system losses are missing from the list of cost components. Variable system losses could have a significant impact on time of use costs. For example losses during off peak, at say 40% on peak power flow, could be less than 1/6 of those during peak. On peak retail prices should account for the extra costs due to the higher losses (and off peak prices adjusted down appropriately). And accordingly, peak time exports or injections (which typically involve negligible losses) should also be refunded at least this extra differential cost.

To not do so means customers who act to reduce their demand at times of peaks are subsidizing the others. This is not a fair market. If this time variable system loss is real and

significant, it should to be taken into account in any time varying prices. If this is not addressed by the market alone it should be mandated, although not necessarily in a prescriptive manner.

The cost analysis in 8 omits to take into account any overall savings in system losses that result from a more constant load profile. This represents additional end use energy that would generate revenue, the benefits of which should be distributed across those customers that flatten the curve.

The suggestion in 8.2 b) that customers who generate the remaining peak will have to pay more to remove the cross subsidy is only true if the additional revenue from saved losses is distributed to those customers who reduce their peak demand. If as in the present proposal any saved losses are not directly attributed to those who flatten their profile, some savings will fall back on those who do nothing to reduce the peak.

Possible impact of not fairly attributing system losses:

In 2023 New Zealand generated approximately 43,000GWh, and a consumption of 39,000GWh was recorded. This leaves 4,000GWh or 10% of consumption unaccounted for. At a retail price of say 30c/kWh this represents $1.2billion annually. I do not recollect how T&D losses and unmetered load are addressed in the reconciliation process, but inevitably the customer pays. If this substantial cost is not attributed in proportion to how it is incurred, it represents a very substantial cross subsidy to some customers from others. In the move to mandating TOU pricing options, this risk of cross subsidy must be addressed.

Fortunately it is relatively easy to establish the extent of the relationship between demand and system losses. Detailed load flow analysis which reveals loss factors has been undertaken extensively by power engineers for decades and so calculated data should be available. However, because of the extensive half hour metering now available enough empirical data should be available to interpolate actual relationships across the system.

I believe that this work should be undertaken with urgency, and if the relationship between load and losses is shown to be significantly non-linear, this must be taken into account in the price differentials offered for TOU tariffs.