Northpower

Amendments to correct issues in the new TPM

31 October 2022

Overview

Northpower welcomes the opportunity to provide feedback on the Electricity Authority's consultation on proposed amendments to the Transmission Pricing Methodology to correct issues that have been identified during its implementation.

This submission focuses on **Issue 10: Residual Charge Reduction Event**. We recently brought this issue to the Authority's attention and submitted a Code Change proposal to resolve it. We do not have feedback on the other issues raised in the consultation document.

We agree with the Authority's summary of the issue, in that the wording of the TPM does not properly capture the intent of the adjustment because there is no requirement on Transpower to reduce the customer's lagged average total gross energy (**LATGE**) when it calculates a reduction event. We also agree that the TPM correctly complies with the exact wording of the TPM guidelines, but the current TPM guidelines themselves contain the same error, meaning the intent is not properly achieved if the error is not corrected.

However, we do not support the solution proposed by Transpower and adopted by the Authority in its consultation, as it does not achieve the intended policy outcomes. Our detailed reasoning is set out below.

Our proposal

Currently under 72(1) Transpower may reduce a pre-existing load customer's AMDR baseline by an amount determined by Transpower, and if it does so, it must also reduce the pre-existing load customer's ATGE baseline.

In our Code Change proposal, we proposed that Transpower be required to adjust *both* the customer's ATGE baseline and LATGE to be consistent with the reduction in the pre-existing customer's AMDR baseline. The Authority originally sought technical feedback from Transpower on a similar proposal to ours, before adopting Transpower's proposal in its consultation.

While the Code does not state a formula for these calculations, we considered it implicit that the underlying data is adjusted as if the reduction event had already taken place by the baseline period, resulting in the change flowing through the formulas. This is because the TPM guidelines provide that Transpower may adjust the allocation of the residual charge where necessary to accommodate circumstances in which a designated transmission customer has experienced a substantial reduction in anytime maximum demand prior to the TPM coming into effect, due to factors that are largely beyond its control or influence. It follows that the most simple and accurate way to adjust the allocation, is to adjust all the inputs into the allocation formulas.

For example, consider a scenario where an embedded customer reduces their maximum load from 26MW to 4MW, triggering the reduction event clause. We would intuitively expect the historic peak demand to be reset to 4MW, resulting in the AMDR for 2014-2018 to also be 4MW:

	Maximum Demand		
	Pre Change	Post Change	Adjustment
FY14	22,710	4,000	-18,710
FY15	27,930	4,000	-23,930
FY16	27,312	4,000	-23,312
FY17	27,102	4,000	-23,102
AMDR	**26,264**	**4,000**	**-22,264**

Similarly, the Total Gross Energy for the relevant years would be reset, to enable the re-calculation of the ATGE and LATGE:

	Total Gross Energy			LATGE		
	Pre Change	Post Change	Adjustment	Pre Change	Post Change	Adjustment
FY14	180,343,263	20,000,000	-160,343,263			
FY15	195,902,293	20,000,000	-175,902,293			
FY16	211,492,611	20,000,000	-191,492,611			
FY17	221,514,120	20,000,000	-201,514,120			
FY18	202,151,432	20,000,000	-182,151,432			
FY19	216,830,787	20,000,000	-196,830,787			
FY20	148,620,720	20,000,000	-128,620,720			
FY21	185,623,876	20,000,000	-165,623,876			
FY22	20,000,000	20,000,000	0			
FY23	20,000,000	20,000,000	0	207,765,114	20,000,000	-187,765,114
FY24	20,000,000	20,000,000	0	212,997,238	20,000,000	-192,997,238
FY25	20,000,000	20,000,000	0	197,279,265	20,000,000	-177,279,265
FY26	20,000,000	20,000,000	0	188,306,704	20,000,000	-168,306,704
FY27	20,000,000	20,000,000	0	142,768,846	20,000,000	-122,768,846
FY28	20,000,000	20,000,000	0	93,561,149	20,000,000	-73,561,149
FY29	20,000,000	20,000,000	0	61,405,969	20,000,000	-41,405,969

This results in the final AMDR calculated for the purposes of applying the residual charge being adjusted to 4MW, which intuitively is the expected outcome given this is the new peak demand of the site:

	RCAF			AMDR for calculation of Residual		
	Pre Change	Post Change	Adjustment	Pre Change	Post Change	Adjustment
FY23	1.03	1.00	-0.03	26,971	4,000	-22,971
FY24	1.05	1.00	-0.05	27,650	4,000	-23,650
FY25	0.98	1.00	0.02	25,610	4,000	-21,610
FY26	0.93	1.00	0.07	24,445	4,000	-20,445
FY27	0.71	1.00	0.29	18,534	4,000	-14,534
FY28	0.46	1.00	0.54	12,146	4,000	-8,146
FY29	0.30	1.00	0.70	7,971	4,000	-3,971

Transpower proposal

Transpower has proposed an alternate adjustment, where it reduces LATGE by the same proportion ATGE is reduced by. It then phases this out as the measured LATGE catches up, using the simplifying assumption that the reduction event occurred exactly in the middle of the year.

In our example above, RCAF has risen to 1.03 for FY23 because the unadjusted LATGE (i.e. if a reduction event was not applied) has risen compared to the baseline. Transpower's proposal is that the same RCAF should apply *despite* a reduction event occurring. In this scenario, it would result in the customer being charged 103% of their new peak demand, or as if their peak demand was 4,108kW. While the purpose of the formula is to adjust the AMDR by changes in total consumption over time, the Authority states in its consultation that "the TPM provides for a customer's initial residual charge to accommodate circumstances where the customer has experienced a substantial reduction in anytime maximum demand prior to the TPM coming into effect" – in other words it provides for a reset in the case of a large charge. The proposal by Transpower does not achieve this, because it carries over the RCAF from prior to the change event (which is now irrelevant), and therefore we consider it doesn't meet the consulted policy intent.

In addition:

- The proposed change is much more complex than necessary, in particular the calculation of the phase out of the LATGE reduction as measured LATGE catches up.

- Transpower's stated purpose of their proposal was to address the possibility of multiple LATGE adjustments for the same customer, and to eliminate Transpower discretion. However, we consider that our solution above addresses both of these concerns in a simpler way.

Summary

We support the proposal to change the TPM to address this drafting error, but we do not support the solution proposed by Transpower and adopted by the EA, which we believe does not meet the consulted policy intent, and goes beyond merely correcting a minor drafting error in the TPM guidelines.

As such, we submit that the Authority should instead approve a minor correction in line with our Code Change proposal, which limits the change to correcting a clear and obvious error.

If you have any queries regarding this submission please contact Shane Ruxton (shane.ruxton@northpower.com)