

CMP343 – Minded-to decision and draft impact assessment Sembcorp Energy UK's response

05 July 2021

Thank you for the opportunity to respond further to this Code Modification. Sembcorp have been active through in responding to the Targeted Charging Review (TCR) and throughout the Modification process which enacts Ofgem's decisions. This has been a complicated journey, with high impacts on users and end consumers. We are therefore supportive of a second Impact Assessment, given the tariffs proposed are radically different from those used in the TCR Impact Assessment.

Background

Sembcorp Energy UK (SEUK), a wholly-owned subsidiary of Sembcorp Industries, is a leading provider of sustainable solutions supporting the UK's transition to Net Zero. With a 968MW portfolio of energy generation and battery storage in operation, our expertise helps major energy users and suppliers improve their efficiency, profitability, and sustainability, while supporting the growth of renewables and strengthening the UK's electricity system. At Wilton International in Teesside, we supply private wire electricity, world-scale utilities, and specialist services to energy-intensive industrial businesses on the site, providing energy resilience, security, and cost advantages. Demand TNUoS plays a significant role in operational costs for our customers and this Modification is important when considering the UK's ability to compete internationally for these types of consumers.

Do you agree with our assessment of the distributional impacts of the flooring approaches?

Yes. As charging is a "zero-sum game" – in that the appropriate revenue must be collected – the impacts of changes to TNUoS affect all demand users, including those connected at distribution level. Without a floor, distribution connected users would be paying more so that some transmission-connected customers can receive a negative charge. We also believe that some types of users would be able to respond to the signal sent by negative charges more than others, and so impact users differently depending on their reasons for electricity use.

Do you agree that, of the flooring options presented, flooring at 0 best meets the TCR Principles and Applicable CUSC Charging Objectives?

Yes. Flooring at 0 prevents sending a signal to users to increase demand at system peak, which is likely to be at the opposite direction to wholesale market signals at the time. Not having a floor would introduce a distortion between those users who are able to increase their demand at times of triad in areas with a negative charge and those who cannot. The locational adjustment mimics cost-reflectivity in the residual, without actually being cost-reflective, and so creates a regional distortion that users cannot respond to through behavioural signals and so would serve as a long-term, investment signal. The residual should not be sending any signal and so the locational adjustment runs counter to the TCR conclusion. We consider the floor to be the fairest approach, as it does not recover revenue from demand users to pay other demand users. Distribution connected users would not have a similar opportunity, so would be

treated unfairly compared to transmission connected users in an area with a negative charge. The floor at 0 maintains the status quo and avoids the counterintuitive signal to increase consumption at times of system peak.

Against the Applicable Charging Objectives (ACOs), having no floor is potentially more cost-reflective, as it reflects the locational signal from the T&T model most faithfully. However, those users who have invested in load-shifting equipment, due to the high charging signal sent by the existing residual, may have the ability to increase demand at times of system peak. This could be advantageous, as it is users responding to a cost-reflective signal, it is likely to be on a larger scale than the signal would suggest, as the decision to invest in load-shifting was a result of the distortion from the current residual and therefore not cost reflective. The locational adjustment is the least cost-reflective, as the nature of the fixed charge means it doesn't represent constraint costs at times of system peak, but instead smears the relative costs across the year. It also makes the purpose of the charge harder to understand, as well as the methodology, and so could be argued to be slightly negative against ACO e).

Do you agree with our assessment of the distributional impacts of the banding approaches?

Yes. Given the wide range of sizes (by consumption) connected to the transmission network, a comparison to the distribution network is warranted, especially for the smaller sites, who may have connected to the transmission network for reasons other than connection capacity (an existing available connection, location, speed of connection etc).

Do you agree that, of the banding options presented, four bands best meets the TCR Principles and Applicable CUSC Charging Objectives?

Two bands by consumption have the potential to create a distortion: for sites that towards the top of the lower band, the risk of moving into the upper band at the next price control period is very alarming, as it would increase the residual charge by more than 7 times. This could incentivise those users to change their consumption (by scheduling maintenance shutdowns etc) during the period that will be used for the next bands. Having a single band removes this potential gaming opportunity and having four bands lessens the incentive significantly, as the increase is much less severe.

The 132kV voltage cut off for two bands by voltage will apply slightly differently in Scotland versus England. This means that similar sites, connected at 132 kV, may be in a band based on consumption in England (as an EHV distribution connection) but a band based on voltage in Scotland (as a transmission connection). We believe this is unlikely to create any significant distortions (other than those already in place) but could be viewed as impacting the fairness of the voltage band solution.

While the residual charge does not have a 'cost' to reflect in the same way as a network charge, the ability of users to bear it should be considered. From this viewpoint, a single band is not appropriate, as it would charge very small users the same as the largest sites on the networks, when the impact of the small users on the network is much less, so logic would suggest they should pay less. More bands, with a smaller range of consumption, keep the residual charge within "reasonable" levels for the size of site, as illustrated in Table 7. This is the main advantage of four bands versus a single band.

A single band removes the risk of similar sites being charged significantly differently when their impact on the system is the same. There will be an incentive, although difficult to act on, to lower consumption ahead of a price control period and remain in the same band if close to the upper boundary, or move to a lower band, if close to a lower boundary. More bands mean more sites will be in that position. This incentive does not occur with a single band.

Multiple bands with smaller number of sites increases the risk that an individual site's charge will be affected by the behaviour of other sites in that band, which is not fair nor cost-reflective, as nothing about the network or other charges has changed to affect the residual.

All transmission connected sites have the same access to the transmission network, opportunities and obligations, so there is an argument that they should pay the same, leading to a single band.

If multiple bands are necessary, bands based on consumption are preferable to the voltage. The voltage band option is negative against ACO a), as there is no reason to believe voltage of connection corresponds to any 'use' of the system and deepens the distortion between Scotland and England. When users want to connect, they can request a voltage, but ultimately the network operator will offer the voltage that is best for the network and users could find themselves incentivised to take an offer that is less beneficial to the network, on the grounds that the higher connection cost will be recovered in lower residual charges. This therefore means voltage bands are less positive against ACO b) than other options. Bands based on consumption will also be recalculated and so will adjust as the industry changes in the future. Any changes to a voltage-based banding system will have to be through a Modification, so is negative against ACO e).

A single band, two bands by consumption and four bands satisfy ACOs a) and b) but on balance, it is more suitable that sites bear a proportionate share of the residual charge, and that is best achieved through four bands. Two bands by consumption creates a cliff edge that users will either attempt to avoid or be painfully surprised by at a new price control period.

Do you consider that any of the options presented adequately addresses very small users (including those associated with mixed use sites)?

The only option that adequately addresses very small users is the option of four bands by consumption. While the smallest users will still have a relatively high charge, these sites are less likely to have been actively avoiding consuming over Triads (behaviour driven by the high residual), so will experience less of a sudden impact that sites in the higher bands who had been avoiding consuming over Triads. Given the number of very small sites indicated, we do not believe an extra exemption process is necessary or appropriate. It will create a cut-off size which users can take advantage of to avoid paying the residual.

Do you agree with our minded-to decision to approve CMP343 WACM2?

Yes. We agree with the CUSC Panel and believe the Original and WACM2 are the best solutions, both in terms of the TCR principles and the ACOs.



Do you agree with on our minded-to decision that implementation should be delayed by a year, until April 2023?

A year's delay is essential. The tariffs and potential charges are significantly different, and more complicated, than the TCR Impact Assessment led industry to expect. There are still ongoing modifications around complicated sites and the reduction (or effective disappearance) of Triad charges will need to be understood by consumers, which takes time. TNUoS charges represent a significant out-going for large users and they must be given time to prepare. Some users will be facing a new cost that is over 4.6 times larger than they have been budgeting for, with less than ten months warning for an April 2022 implementation date.

We are concerned that April 2023 is also when the changes from the Reform of Access and Forward-Looking Charges SCR are due to be implemented. It would be preferable to have the changes happen at once, rather than prolonging the regulatory uncertainty, making long-term planning for users impossible. We hope that Ofgem will realise that implementing the decisions from a Significant Code Review is a complicated and resource-intensive undertaking and will be aware of that when setting timescales for the Access and Forward-Looking Charges SCR.