The future of the Radio Teleswitching Arrangements

February 2020

Introduction and history of Energy UKs involvement in Radio Teleswitching

Following the publication of the Electricity Networks Association (the ENA) consultation on the future of the Radio Teleswitching Arrangements beyond January 2018, the Energy UK Smart Project Team took responsibility for all of Energy UK’s activities associated with Radio Teleswitching, including submitting the Energy UK response to consultation in June 2016, and all ongoing engagement with the ENA since.

When the ENA published its response in March 2017, confirming its intention to cease providing the RTS arrangements at the end of March 2020, Energy UK continued discussions on behalf of its members with the ENA, with a view to seeking to secure a service beyond the proposed date.

Following a series of bilateral meetings between the ENA and Energy UK during H2 2018, in January 2019 the ENA confirmed that following discussions with the ENA’s members, an agreement had been reached that would allow the ENA to continue the RTS arrangements beyond March 2020, but the ENA noted that it’s DNO members would not meet any of the costs associated with the provision of RTS services beyond 31st March 2020, with the exception of SSE Electricity Networks (SSEN) who remain reliant on the RTS service in the far North of Scotland for network resilience purposes.

In the period between February and May 2019, it became clear that Energy UK’s members were unwilling to meet the supplier-based costs of providing the RTS service alone, instead highlighting the need for a fair and equitable cost recovery mechanism that ensured all electricity suppliers with RTS-based customers contribute to the ongoing costs of providing the service.

Through collaborative engagement with Elexon, the concept of recovering the supplier costs for RTS was investigated, which eventually led to a new BSC Issue, Issue 84, being raised. Issue 84 proposed that the supplier costs for RTS be recovered under the BSC on a ‘per-RTS site’ basis, with a number of options of how this could be achieved under the BSC arrangements. In September 2019, the BSC Panel approved an approach that will result in Elexon and the ENA making changes to an existing contractual arrangement for RTS, to enable costs to be recovered from suppliers via the BSC and passed on to the ENA for onward distribution to the relevant RTS service providers.

The current landscape for RTS-based customers and meters

The vast majority of RTS-based customers are metered through legacy-based metering systems, with radio-based teleswitches providing the ability for load to be switched and usage recorded on separate meter registers. There are circa 1.4m MPANs with identifiers that suggest they are sites utilising the current RTS arrangements.

The rollout of smart meters has always been assumed as the natural technology replacement for the RTS arrangements, with specific 5-terminal and twin-element smart meters included with Government’s Smart Metering Equipment Technical Specifications (SMETS). However, no manufacturer has any devices ready for suppliers to test – largely as a result of the ongoing drive to stabilise the functionality of 4-terminal meters needed for the vast majority of smart meter installs. BEIS continues to monitor the readiness of all smart meter variants, with the latest reports to the BEIS IMF forum suggesting H2 2020 delivery for both 5-terminal and twin element meters.
We are now at the stage where there are very few legacy 5-terminal/twin element meters available, with Energy UK being aware of only one electricity supplier actively recertifying assets they replace. As the age profile of existing legacy RTS assets lengthens, it is highly likely we will soon be in a position where there is a real shortage of asset replacements available. Energy UK is already aware that some electricity suppliers cannot source any legacy 5-terminal/twin element meters, noting that the Electricity Ombudsman has made recent determinations for meters to be replaced which electricity suppliers are unable to action.

We are aware that some electricity suppliers have replaced legacy RTS meters with standard 4-terminal smart electricity meters, with external contactors included in the installation in the absence of any 5-terminal/twin element SMETS2 meters. However, to-date, the numbers are very limited. We are also aware that there are up to 80,000 5 or 7 terminal SMETS1 meters (the Secure Liberty 112 (5-terminal) and Liberty 114 (7-terminal) models) installed in consumer’s homes.

The immediate and longer-term future

Through engagement with its members, Energy UK has now confirmed that based on the expected readiness and delivery timescales of 5-terminal/twin element SMETS2 meters, the existing RTS arrangements need to remain in place until 31st March 2022. This has been communicated both to the ENA – to allow conclusion to the contractual negotiations with the BBC (for continued RTS message transmission), and the BSC Panel – to ensure the expected time period for supplier costs to be recovered is understood (under the new BSC RTS cost recovery mechanism).

However, noting the immediate shortage of legacy 5-terminal/twin element meters and the expected H2 2020 delivery for SMETS2 equivalents, electricity suppliers will need to consider what they need to put in place for the immediate/shorter-term, when legacy 5-terminal/twin element meters must be replaced.

Through our engagement with Secure Meters recently, their SMETS1 Liberty 112/114 models are still in production and available for suppliers/MAPs to procure. Secure Meters are also willing to offer a data service to all electricity suppliers that will enable the relevant consumption information (required to bill customers) to be provided to any non-Secure Meters customer in the event of CoS prior to the Secure Meters SMETS1 cohorts being enrolled into the DCC’s eco-system. Whilst the SMETS1 end-date has passed, both Ofgem and BEIS accept that in certain circumstances (for example, where there is no alternative and a SMETS1 install is in the best interests of the consumer) SMETS1 meters will continue to be installed until SMETS2 equivalent solutions are available.

Electricity suppliers can also install standard 4-terminal SMETS2 meters alongside an external contactor in the absence of 5-terminal/twin element SMETS2 variants. However, it is noted that such installations are deemed to be more technically difficult which may be beyond the capabilities of a less-experienced smart meter installation workforce. If this is the case, then electricity suppliers and third-party installation contractors will need to ensure that appropriate training and competency arrangements are developed and implemented to facilitate this type of installation activity.

Whilst the current RTS arrangements will remain in place until 31st March 2022, it is clear that the transition away from them must be managed collaboratively with all relevant industry stakeholders involved. The majority of the preparation for the transition lies firmly with electricity suppliers themselves, ensuring they are able to source the necessary meters and upskilling their installation workforces to replace all legacy RTS metering installations by the 31st March 2022 deadline.

Energy UK remains committed to supporting its members wherever possible in relation to the transition away from Legacy RTS arrangements. Any questions or clarifications relating to this subject should be directed to jason.stevens@energy-uk.org.uk.