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1st November 2017

Delivering Faster and More Reliable Switching: proposed new switching arrangements

Dear Rachel,

Electron is a technology company working with suppliers and other industry participants to develop and demonstrate the feasibility of blockchain solutions for the energy industry. Specifically, we are developing a scalable decentralised platform for tracking the registration of assets to fulfil the specifications of the Central Switching Service, as outlined in the faster switching consultation.

We believe that the proposed asset register at the core of the Central Switching Service is fundamentally important to many future industry processes above and beyond the provision of faster switching. A shared register, which records confirmed location and billing relationships for assets, is required for scaling future local energy and flexibility markets. It could also provide a foundation for additional services such as a shared Priority Services Register. We hope the implementation of this asset register for the Central Switching Service does not create a new data silo and preclude other sanctioned uses for the data, which would then require further industry infrastructure and expense.

Below I have outlined our view on some of the questions posed in the referenced consultation. I can confirm that the details of this response are non-confidential and suitable for publication on the switching programme website.

If you have any questions about our response we would be happy to discuss them further.

Yours sincerely

Paul Ellis
CEO, Electron

Question 4: Do you agree that use of the annulment and CoO features should be backed by a strong performance assurance regime? Please comment on ways in which such a regime could be made most effective, and backup your response with evidence.

Should an annulment process be specified for the CSS (it seems sensible to include a mechanism to reverse incorrect switches without having to repeat the whole process) then our view is that the key to its success is data transparency. Siloing data and creating additional reporting requirements is a heavy handed and inefficient means of process monitoring.

The opaque nature of existing industry infrastructure means that any investigation to monitor these mechanisms requires a slow and expensive data consultation process between suppliers and other participants. Creating open and accessible data platforms (subject to relevant industry code and data protection obligations) would reduce the cost of data collection and significantly improve the ability to monitor competition in the market.

Question 5: Do you agree with our proposal to require DCC to competitively procure the communications network capability required to deliver the new switching arrangements?

Depending on the technology employed by the winning bid, the procurement of a separate network solution (or additional capacity on an existing network) may not be required.

Employing a decentralised blockchain platform for the CSS would mean that all participant nodes are already connected and communicating on the same platform without having to send messages on external communication networks; this highlights some of the benefits of utilising software that changes the topology of the network (peer-to-peer as opposed to server-client). By creating a shared platform on which participants can operate and communicate, the number of interfaces that they must communicate across is reduced and in turn processes can be made more efficient.

Question 10: Do you agree with our proposal to modify the DCC's licence, in order to extend its obligation to include the management and support of the DBT and initial live operation of the CSS?

Extending the licence obligation of the DCC to include the DBT and initial operation phases potentially excludes some of the more innovative and cost-effective options for the asset register (CRS).

Implementing a decentralised blockchain solution for this platform provides the opportunity to create collaborative, shared infrastructure that is led by an industry consortium. Creating a more open platform would allow companies to innovate through better access to data and platform functionality.

A shared asset registration platform will be a requirement for future energy or flexibility trading in the industry. Creating a closed system, led by the DCC would likely necessitate the development of additional platforms in the future. A decentralised solution allows new functionality to be built on top of the underlying asset register (such as a Priority Services Register and Demand Side Response register) at a significantly reduced cost compared to a purpose built platform for each system.

We believe such a collaborative and open approach to the platform design should be accounted for and care should be taken not to preclude this option through involvement of an existing central body.