27 March 2020

**Origin Energy’s Response to Electricity End Point URI’s**

General Comments

There appears to be an assumption that the banking and energy sectors are closely aligned in how the data standards can be developed.  While there may be some synergies, both the data exchange models and system language significantly differ.  Banking has in place a decentralised model with unique account identifiers whereas the energy sector will use a centralised “gateway” AEMO model where data will be sourced from multiple data holders.

Origin is concerned about the lack of a transparent work plan for integrating the energy sector into the Consumer Data Right (CDR) project. Origin requests that the Data Standards Body (DSB) provide the energy sector with a briefing on the proposed:

* governance framework for energy, including the establishment of energy specific working groups;
* workplan proposal for both the development of systems and data standards; and
* proposed engagement and consultation process.

Our concerns with the paper are discussed further below.

**Issues**

*Use of “site” as an identifier*

Origin notes that the paper makes a recommendation that the CDR data standards should use the term ‘site’ rather than ‘NMI’ as a URI identifier to reduce ambiguities for participants that may not be immersed in the electricity sector. While this recommendation is made, there is no proposed definition of ‘site in the paper.

The use of the term ‘site’ in the electricity industry is very broad. Energy uses the term ‘NMI’ for a reason as it is a unique identifier of a customer at a premises. For example, is ‘site’ the 1) supply address or 2) the billing address? These will differ based on the location of the meter at a site (especially for corner blocks) and the Australia Post billing address. It will also differ if a customer has aggregated accounts and requested that bills be directed to one address.

A site can also have multiple customers, over multiple blocks of land and multiple NMI’s. A site may have a house at the front of the site with a residential customer and a shed at the back of the site with a different commercial business.

Further, current systems work on the premises of NMI’s where AEMO can validate which retailer is or was financially responsible for a NMI for any defined period and direct a data request to each relevant retailer for the period the retailer was responsible. Each retailer can undertake their own validations and, once confirmed, provide AEMO with their proportion of the data set. AEMO can then provide the various data sets to the accredited third party. Market and retailer systems do not operate on the bases of providing data based on ‘site’ and it would be significantly costly to rebuild systems to provide data based on these URI’s.

Origin wishes to highlight that the energy sector differs significantly from the banking sector in that the unique identifier of a person’s consumption data is a meter – which is not unique to the person themselves but the premises at which they are consuming energy. The energy retailer is the only person in the market today who can match a meter number (National Meter Identifier or NMI for electricity) with the authorised person at the premises. However, across a year, the same customer could have different retailers at a single house (NMI).

By contrast in banking, a person’s account only includes that person’s transactions. If they move their account from one bank to another, the transactions stop at the first bank and then start up at the next. No one new starts accruing new transactions in the closed account at the first bank. Energy is unique in how it requires a combination of identifying both the authorised person and their meter number to access consumption data – at all relevant properties within a time period.

As noted above, the energy sector will be utilising a centralised ‘gateway’ model for the collation and dissemination of data to accredited third parties. This reinforces the need for consistent and energy specific language so that current systems of all data holders can be utilised to extract and provide information through AEMO’s gateway.

**Entity Relationship Assumptions**

The paper has made a number of assumptions that are to apply to the relationship between data sets. The paper notes that the ACCC is still considering these relationships and is yet to develop rules on the relationships. Origin’s comments on specific DSB assumptions are included below:

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| **No.** | **DSB Assumption** | **Origin Comment** |
| 1 | A customer may be an individual or a business (in which case data sharing is being authorised by an authenticated and authorised agent) | Consideration needs to be given to the size and geographical location of customers. Residential consumers have a much more prescriptive consumer protections framework compared to the more generic protections covering larger, commercial and industrial consumers. The variances in the framework are appropriate given the significant differences between the energy services required by a residential consumer compared to an aluminium smelter. The Rules framework, when developed, will define the customer and variances for the different customer classes. It is difficult to define this relationship at this time. |
| 2 | A customer must have one, but may have many, current contracted plans. | Customers can move between retailers and contracted plans on a free basis. Generally, there are no termination fees and it is proposed by AEMO that transfer can occur within 2 days of signing a contract. If a customer requests say 12 months of data, the customer may have been with 2 retailers and on 2 different plans. The information requested of a data holder (ie retailer) for data may not relate to a “current” plan as the customer has moved onto another plan. This assumption should be tested further. |
| 3 | A contracted plan must have one, but may have many, associated sites (denoted by a NMI) | As discussed above, the use of the term “sites” is confusing for the energy sector.  |
| 4 | A customer must have one, but may have many, sites | No comment at this time. |
| 5 | A site must have one, but may have many, meters | No comment at this time |
| 6 | All distributed energy resources are linked to one, and only one, site | This needs to be tested further. The use of ‘site’ is being interchanged with ‘NMI’ and it’s confusing. A customer may have multiple NMIs at a site and the DER linked to each of the NMIs (ie battery and solar) if the customer has them attached to different NMIs at the one site. There could also be multiple customers at the one site that each have DER which would mean the above assumption is not correct. |
| 7 | Usage data is attributable to one, and only one, site | See comments above regarding the use of sites. There may be situations where usage spans over a number of sites. We will need a clear definition of ‘site’ in order to comment on this. |
| 8 | Billing charges are attributable to one, and only one, contracted plan | No comments at this time |
| 9 | Billing charges may arise that are unrelated to usage (such as fees) | No comments at this time. |
| 10 | Payments are attributable to one, and only one, customer | Energy has allowances for joint account holders. This statement may need to be reviewed. |
| 11 | Current balance is attributable to one, and only one, customer | As above, there is an allowance for joint account holders in energy  |

Further, the DSB make a comment in the detailed section on end points for each of the assumptions that it is expected that “only a single account per customer exists”. We wish to highlight that a customer may have multiple accounts. Accounts are not unique to a customer. If a customer moves between standing and market offers, a new account may be established. If the customer moves between products and offers with the same retailer, a new account may be established. This assumption needs to be tested further.

It is also not clear to Origin how the generic and tailored plan data sets will be dealt with. Tariff structures and pricing arrangements vary per retailer, per state, per distribution area and per customer class (small, medium, large and industrial). For example, the tariff arrangements for some Queensland customers are not aligned with the rest of the country in the fact that there is a subset of Queensland customers attached the NSW distribution network, but billed Qld retail prices with NSW underlying network charges. Further, Victoria operates under a separate pricing arrangement to the rest of the National Electricity Market (NEM). It is unclear in the paper whether “tariff data” is bundled into “billing charges” or there will be a separate consultation on this issue. “Tariff data” and “billing charges” are separate data sets and need to be dealt with in a separate manner.

**Technical Comments:**

* Response/ Request Structures of the API calls need to be standardized for design level discussions.
* Need to add security authentication standards for API Calls and data access.
* Are we adding API standards around testing, documentation, automation, versioning etc ?
* Is there a decision register for architecture or design choices that are being reviewed and agreed upon
* Do the API standards cover 3rd party to AEMO and AEMO to retailer ?
* Is there any further documentation around what Energy industry assumptions have been made and haw have these assumptions been validated?