

Priority Energy Datasets Consultation - Consumer Data Right

UPowr Response

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Question 2: What advanced use cases could be supported by additional NMI standing data fields, and what fields are these?

Single or three phase sites require different solar and battery inverters and can support different solar export limits (thus placing a practical limit on the solar system that can be installed). This makes understanding whether a site is single or three phase an important aspect for quoting on these systems.

The NMI & the RegisterID's can be used to infer whether the site is single or three phase, and while not determinative it can be useful in determining what proposition is suitable at a consumer's home.

Question 3: Should the priority datasets designation cover all meter types? If not, which datasets should be outside the scope of the initial designation, and why?

Type 3-6 meters should be prioritised to deliver services to residential and SME customers. Approximately 30% of SME customers will have a type 3 CT metering configuration. Larger industrial customers typically engage in specialist firms to deliver energy solutions who work with the energy retailers to obtain data, therefore making sense to prioritise Type 3-6 for a fast start for CDR.

Question 4: What advanced CDR use cases might more frequent smart or interval meter reads support?

In order to accurately calculate solar savings, a solar system generation needs to be offset against the customer's historical energy consumption. Given the transitive nature of solar generation, more frequent (ideally hourly) interval meter data reads would support far more accurate solar savings calculations.

Further, hourly interval meter data for customers with existing solar systems (and also greenfield) can be used to accurately size a battery system.

Hourly meter reads can allow for estimating the health of the system when paired with aerial imagery of the installed solar system size i.e. whether the system is generating the amount of energy you would expect.

Question 5: Would the proposed data sets support the use cases identified above? What other use cases could smart meter data support and what specific datasets would be required?

Hourly in/out flows of energy are needed to understand time of use to enable “Helping customers evaluate the costs and benefits of adopting integrated solar PV and in-home battery systems to support the accelerated adoption of these technologies” as discussed in our answer to question 4.

Question 6: How can the above privacy risks be balanced against the significant potential consumer benefits of supporting new use cases?

It could be possible over time to require AEMO to apply differential privacy algorithms, or other methods, to provide an aggregated profile for the customer that preserves the signals while smoothing out individual events, based on geography, home size, types of appliances in the home, etc. However, this is a new area of research. At a minimum, recipients of CDR energy data should be required to treat any breach of data as a Notifiable data breach (NDB) under the Privacy Act. Further, a framework should be developed on educating customers about what they can do should their energy data be breached by a recipient.

Question 8: Is there commercial value in allowing consumers to port their historic metering data (and other data as appropriate) to a new retail service provider when they switch to a new product? Are there other solutions that may be more appropriate?

In the use case around solar quoting and brownfield solar system health, given the seasonality of sunlight, a full year is best to calculate solar savings and battery sizing. Without this, the missing data needs to be modelled which can be error prone.

Question 11: What consumer use cases might the priority designation of retail billing data support through the CDR?

Address information is required for solar/battery quoting and sizing as different geographies have different generation characteristics as well as cost base for installation.

Question 13: What other use cases do stakeholders consider may be supported by the designation of the Distributed Energy Resources Register as a priority dataset?

In Australia, it is estimated that 600,000+ of the 2,000,000+ solar systems were installed by a company that is no longer active. This necessitates third parties to offer maintenance services to customers over time. BYO obtaining the solar system size, inverter type and power rating, and other system specific datasets, it is possible to combine that with the energy outflows to estimate the solar system's health and whether maintenance is required.

Question 15: What other datasets do stakeholders believe should be considered for future implementation? Is there a strong case for bringing implementation of these datasets forward?

Site data captured by a Meter Provider (ie photos of meter boards and or switch boards) can help understand future costs of new energy infrastructure at the home without requiring a site visit to capture this.