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Dear Ms Prentice

TRUenergy does not support the retention of index reads. While there is a perception that the retention of this process may result in fewer changes for customers, as there are some fundamental differences in the way that AMI meter data is handled and processed compared with the older style meters, index reads will simply result in greater customer confusion and undermine confidence in the AMI roll-out and smart metering.

In the first round of submissions there was general agreement from retailers and distributors that greater effort needed to be directed at educating customers about the new way customers are billed under the smart meter environment rather than maintaining the existing way of doing things. There are a number of reasons for this position. Broadly, the arguments fall into two categories:

- Index reads are not as useful for AMI customers as they are for customers with older style, 'basic' meters and will lead to more confusion if included in bills than if removed.
- Existing rules and obligations within the national electricity market obstruct retailers' use of index read data and these rules will be time consuming and costly to change.

The reasons behind these two arguments are outlined below:

Index reads are not as useful for AMI customers as they are for customers with older style, 'basic' meters and will lead to more confusion if included in bills than if removed.

1. Index reads are a secondary data source for smart metered customers and can be misaligned with the total of the half hourly usage data

With old style 'basic' meters, the only data collected at meter readings is the index read, and therefore the only consumption value that can be used is the difference between the index reads for end of the current and prior bill periods.

For customers on half hourly reads (known as interval-metered customers), the consumption value used for billing is the total of their consumption for each half hour interval. These half-hourly readings are therefore the primary data source for billing. Index readings still show up on the meter for these customers but they are not as useful for billing purposes because the reads simply cannot align with what the customer sees on their bill.

This misalignment of interval data and index reads frequently arises when some of the interval meter data is not received properly and has to be constructed or substituted using agreed algorithms typically based on prior usage patterns at the site.

An attached example shows how this confusion will typically arise.

Another issue that can occur is that the final index read is lower than the start index read, as AMI meters may be reset back to zero when the following events occur:

- Reconfiguration of the meter when solar panels are installed
- Reconfiguration of the meter to alter the set up of peak and off-peak channels
- Re-setting of the meter due to a fault or other issue

TRUenergy believes that showing both index reads and usage data based on half hourly interval reads will increase customer complaints and decrease public confidence in AMI meters and the AMI program

2. Usefulness of index reads in detecting AMI meter reading errors

The main reason that customers and EWOV have found index reads to be useful in verifying bills in the past is that old style meters are manually read and therefore more prone to data entry errors that occur with the manual reading of dial-based meters. The practise of customers checking the index reads on their bills with the current reading on the meter is clearly less useful when trying to handle issues that arise with new automated electronic readings taken from the more accurate, digital AMI meters.

Index reads are of little use in detecting if a meter is incorrectly measuring electricity usage. For both old meters and new AMI meters, the only way to ensure the meter is measuring usage accurately is to have a 'meter test' carried out. This is common practice and will remain so in an AMI environment.

3. In the past, no higher rate of complaints has been seen from customers on half hourly meter reads who have not had index reads on their bills

Prior to the AMI rollout commencing, approximately 1 in 20 customers (or 140,000 residential and small business customers across Victoria) had a meter capable of providing half-hourly interval meter data. These customers are known as 'manually read interval-metered customers' and their bills have for years been calculated based on the interval data rather than index reads.

TRUenergy recognises that the number of complaints associated with smart metering have increased however it is important to understand that many of customer concerns relate to a lack of understanding time of use tariffs and their consumption. Complaints from these interval-metered customers have been successfully addressed in the past without the use index reads. In addressing such complaints TRUenergy has found it more effective to provide the customer with the detailed half-hourly reads which shows more detail about their usage pattern often helps them to understand why their bill might be higher than expected – e.g. due to visitors, higher use of appliances such as heating or air-conditioning on particular days, a high level of overnight power use possibly indicating a faulty fridge or other appliance, etc.

Historically, interval-metered customers have not had a higher rate of complaints compared to customers billed using index reads, nor have the interval-metered customers had complaints that are more difficult to resolve. On this basis, there is no reason to believe that customers or EWOV will be negatively impacted by the change in approach to verifying customers' bills.

4. Higher levels of AMI customers are unlikely to be driven by the lack of index reads on bills

In the submissions made prior to the Commission's draft decision, EWOV presented information regarding the higher number of complaints received from AMI customers and stated that a commonly reported issue was that this was due tother not being a meter reading on the bill.

TRUenergy believes this contradicts a recent briefing paper sent to the Victorian AMI Project Office by EWOV (dated 3rd June) which provides other reasons for higher numbers of complaints from AMI customers. The briefing paper did not conclude that the lack of index or meter reads on bills being was an explanation for metering complaints.

The briefing paper also referred to EWOV processes in resolving AMI customer complaints:

"*EWOV may review the interval data and billing issued, complete a meter test and or complete an energy audit at the property".*

This indicates that EWOV is already relying on the half hourly interval data provided by retailers to resolve customer billing complaints.

Internally, TRUenergy's complaints area is experienced in using interval data to address billing concerns with customers and does not consider that AMI customer complaints are being exacerbated by the lack of index reads on bills.

As such, TRUenergy considers the arguments put forward by EWOV and the consumer groups are inconsistent with the complaints data, and that the inclusion of index reads is likely to have any impact on the number of complaints associated with smart metering.

Existing rules and obligations within the national electricity market obstruct retailers' use of index read data and these rules will be time consuming and costly to change.

1. There is no obligation for index reads to be provided daily by distributors

If index reads are to be used, retailers will require this data to be provided reliably on a daily basis to ensure that it aligns with the start and end of the customer's bill period. However, there is inconsistency in the requirements for distributors to provide daily index reads for AMI customers.

- The existing industry obligation to provide an index read for interval-metered customers is only "mandatory where a manual read has been performed or attempted".
- The Victorian AMI Functional Specification, on the other hand, requires that distributors provide daily index reads to retailers.

Neither requirement is enforceable under the National Electricity Rules for AMI-metered customers, so it would therefore be difficult for retailers to take action through the normal industry channels if a distributor chose not to provide daily index reads for any customers.

TRUenergy considers that if index reads are required the Commission must make amendments to the National Electricity Rules to ensure retailers have some recourse if they are not provided with an index read by a distributor.

2. Even when index reads are provided, retailers have no rights to verify or query this data with distributors

The provision of electricity meter data to retailers is guided by the detailed national rules which govern turnaround times for resolving issues with missing or erroneous meter data and responding to meter data queries. In the case of index reads for interval-metered customers, retailers have no right to verify and query the index reads.

If the Commission's final decision requires that retailers publish start index reads on bills, retailers will have to trust on face value the index reads provided by distributors. Currently retailers have no way of verifying the data associated with a customer's index read, which would be problematic if a customer chose to query the read.

TRUenergy would insist that if index reads are introduced, the Commission requires distribution businesses to ensure they are accurate and verifiable by retailers.

3. To put in place the obligations and rights mentioned in points 6 & 7 would require a lengthy, national consultation process with no guarantee that these would be established

If there were to be an industry change requested on this topic, it is important that the Commission recognise that it would have to be reviewed by the relevant industry-working group and be subjected to a prioritisation process. Unless there was a very strong business case to implement these new obligations nationally, there is no guarantee these changes would be supported.

Even if the business case was accepted, then we estimate that the consultation process would take one to two years and further 4-6 months would be required before the new obligations became effective to allow time for the required IT system changes for retailers and distributors.

Implementing start index reads would require changes to retailers' meter data systems, billing systems and bill print processes. As these are national rules, many participants in the National Electricity Market would need to make changes to their systems also. There would need to be changes made to industry participants processes to allow the index reads to be verifiable. Retailers would have to ensure that call centre and billing consultants are trained to handle more complex enquires where index reads need to be verified or are misaligned with other data on the bill.

In all, there are a substantial number of businesses impacted by this change and it is difficult to estimate the costs to industry. While TRUenergy recognises that the Commission will from time to time make changes that impose costs on retail businesses at times; we believe that any costs should be carefully weighted up against the benefits. In the case of implementing index reads TRUenergy does not believe that the benefits to the customer justify the expense, and will if anything undermine confidence in smart metering.

Whilst we appreciate the need for transparency in billing and assisting customers with usage and billing enquiries, TRUenergy believes that retaining start index reads on bills is not as straightforward and as easy as it may appear. The most compelling reason for not proceeding with this proposal in our view is that it will actually lead to higher levels of confusion and increased customer complaints that are more difficult to resolve. In some cases, resolution of the complaint will not be possible due to lack of provision of the required data.

TRUenergy would be happy to discuss the content of this submission with the Commission. Should you be interested in convening such a meeting, please call Melinda Green (03) 8317 4758.

Yours sincerely,

Alastair Phillips
Regulatory Manager
TRUenergy

Misalignment of consumption when using interval data & index reads

Meter Data used for Billing

Start Index Read	**10,000**	
Interval	**Usage (kWh)**	**Data type**
Interval 1	15	Actual
Interval 2	15	Actual
Interval 3	15	Actual
…	…	…
Interval 9	15	Actual
Interval 10	15	Actual
Interval 11	40	Substitute
Interval 12	40	Substitute
Interval 13	40	Substitute
Interval 14	40	Substitute
Interval 15	40	Substitute
Interval 16	40	Substitute
Interval 17	40	Substitute
Interval 18	40	Substitute
Interval 19	40	Substitute
Interval 20	40	Substitute
Interval 21	15	Actual
Interval 22	15	Actual
…	…	…
Interval 46	15	Actual
Interval 47	15	Actual
Interval 48	15	Actual

Note: this example shows only the interval data for one day only

Total usage for bill **970** kWh

made up of: **400** kWh of substituted read data

570 kWh of actual read data

Meter Data seen by the Customer

In this case the AMI meter itself contains the 'actual' readings for intervals 11-20, but these were not able to be transmitted remotely and passed to the Retailer in time for billing on actual values.
Therefore, the Meter Data Provider has provided substitutes for the missing intervals in line with market requirements.

Say that the customer used a consistent amount of electricity i.e. 15 kWh per interval across the whole period then they would see the following on their AMI meter:

Start of the period: **10,000** kWh
End of the period: **10,720** kWh

Therefore the customer would think their consumption should equal 720kWh rather than 970kWh.

Customer concern

The difference between the start and end index read differs from the total usage based on interval meter reads available to the Retailer. This will confuse the customer and result in calls and complaints to the Retailer.

The retailer impact will be:

- Increased billing enquiries
- Increased call centre enquiries
- Increased requests within the industry to retrieve the actual metering data
- Lack of visibility to determine if the index read is correct*

*Current market requirements don't allow Retailers to verify or query index reads for AMI customers

In the above scenario, if the actual meter reads become available later for the subsituted intervals, the Retailer will be able to re-bill the customer. Thus the mis-match between the billed consumption and the difference between the index reads would eventually be resolved.
However this will not always be the case. Sometimes the interval data is substituted due to a meter error meaning that the actual values can never be obtained. When this occurs, the difference between index reads and the consumption being billed can't be reconciled for that period.