

Values of Customer Reliability Consultative Committee Meeting Minutes

Date of Meeting: 13 June 2019
Location: AER Melbourne office
Time: 10:30 to 15:30

Attendees: Committee members: Mick Fell (on behalf of Lynne Gallagher ECA), Tom Walker (AEMC), Tom Hallam (ENA), Matt Webb (ENA), Rowan McKeown (ESCOSA), Annette Weier (ICRC), Duncan MacKinnon (AEC), Chris Murphy (Reliability Panel), Aaron Yuen (ESC), Craig Memery (PIAC), Reena Kwong (AEMO), Franklin Liu (AEMO), Jeremy Cross (ERAWA), Alisa Toomey (AEMC).

AER staff: Paul Dunn, George Huang, Ingrid Michel, Jimmy Criticos, Danielle Coronel, Alice Gilbert, Betty Lehman, Anthony Seipolt, Richard Hayes, Su Wu.

AER consultants: Terry Jones (MEI), James Garriock (Insync), Hannah Lawrence (KPMG), Ian Bycroft (Insync), Jane Tyquin (Insync), Professor Kenneth Train (MEI) (VCR Pilot survey/methodology only).

Apologies: Mike Smart (IPART), Kimberley McKay (UCNT), Chris Lock (OTTER), Gavin Dufty (Reliability Panel), Andrew Richards (EUAA), Lynne Gallagher (ECA)

1. Welcome

George Huang welcomed Committee members.

2. Introduction and apologies

Committee members, AER staff, Melbourne Energy Institute (MEI) representatives and KPMG/Insync representatives introduced themselves.

3. Minutes from previous meeting, High Impact Low Probability (HILP) minutes and matters arising / action list

Minutes from previous Values of Customer Reliability Consultative Committee (VCRCC) meeting and HILP sub-committee meetings were noted.

4. Update on VCR project

George Huang gave an overview of developments since the last VCRCC meeting, including:

- The process for developing the pilot survey, including Insync testing the design using customer focus groups and one-on-one interviews.
- Undertaking the pilot survey in May. KPMG/Insync is cleaning the data and starting analysis.
- An update on the development of the direct cost survey direct connect transmission and large distribution customers.
- HILP sub-committee met twice and discussed the definition and potential methodologies to derive VCRs for HILP events.

- AER published a Consultation Update Paper and received four submissions.
- AER engaged MEI for a revealed preference study to assist with future reviews and the findings may also help inform the development of the annual adjustment mechanism.

5. VCR Pilot survey/methodology

5.1. Presentation from Insync on pilot survey results and recommendations

James Garriock presented an overview of the pilot survey. Key points covered were:

- Overall, the outlook for the ability to conduct the survey is good.
- Focus groups and in-depth interviews were very helpful in determining appropriate question wording.
- Generally there was a good response rate in the pilot from most cohorts, but the agriculture sector presents a challenge.

Following the presentation, members:

- Queried how to test whether there is good coverage, such as using distribution or demographic information against Australian Bureau of Statistics (ABS) data as a check. AER staff confirmed that ABS numbers, such as percentages of customers with solar and gas, can be used as a check, but our focus is on ensuring we have sufficient numbers in each cohort to be statistically meaningful.
- Queried how comments given in the feedback question are used. AER staff and Insync noted a lot of thinking was done during the focus group stage to ensure participants understood question wording and noted the majority of comments were quite positive.
- Commented on the difficulty of developing a question to produce an appropriate quantitative answer.
- Suggested the idea of holding a series of focus groups, including for more difficult areas such as HILP events.
- Discussed how protest votes should be treated. AER staff noted we are taking a conservative approach and not ruling out responses without good reason – the general principle is it is not for us to stand in judgment of people's motives.
- Discussed how the choice model can be used to identify protest votes. It was noted that it is legitimate for a customer to refuse to pay more but not accept less reliability, but that this is unhelpful as it may not show their preference.
- Discussed the issue of uncertainty aversion bias and how question wording might respond to this issue, including phrasing questions in the positive, eg: 'You can have bill reduction, but the trade-off is more outages' or 'You can have fewer outages, but the trade-off is a bill increase'.
- Discussed whether to place more weight on ensuring accuracy of responses or consistency with previous survey methodology. AER staff noted that the pilot survey was intended to be comparable with the AEMO survey but, in the main survey, accuracy should be prioritised over consistency.

5.2. Discussion on survey methodology

Ingrid Michel gave an overview of AER staff's thinking to date in relation to placing a cap on responses to the open-ended willingness-to-pay (WTP) contingent valuation survey question. Key points covered were:

- AER's pilot survey tested asking an open-ended contingent valuation question. This sought to improve on the closed-ended style question used in AEMO's 2014 VCR review, where customers were asked whether they would be willing to pay a randomised cost prompt (between \$2 and \$15 per month) to avoid an outage. The open-ended approach sought to reduce respondents having their WTP answers unduly influenced by the randomised cost prompts.
- The pilot survey results found that a small number of open-ended responses provided very high WTP values. It may be problematic to include these responses as:
 - they could be an indicator of an irrational responses
 - if fully accepted, would bring up the average WTP number significantly above the WTP value which the majority of respondents provided.
- Therefore, we are interested in whether to apply a cap for the WTP question on the basis that, if a customer knows there is an alternative back-up system that costs less than their WTP, they should choose that.
- If we do apply a cap, we are interested in whether we should exclude answers above the cap, or replace them with the cap.
- The cap would need to be an appropriate substitutable alternative.
- The cap may need to be different for residential and business customers.
- We have evaluated several options and consider the most appropriate cap for residential customers would be the cost of a back-up generator because of its availability and relatively low cost.

In relation to whether to apply a cap, members:

- Acknowledged that high WTP responses may significantly increase the WTP average and there is a need to consider the cost to all consumers, not just the small number of individual customers who are willing to pay a high amount. However, it is important to determine a rational basis for the calculation of a cap.
- Considered the fact the effect of the form of the contingent valuation question in the AEMO 2014 VCR review was that it limited the upper end of WTP responses which could be provided. This is because, AEMO's survey did not have an open-ended WTP question, but rather it only used two cost prompts. In the first question, respondents were required to state whether they were willing to pay a randomly generated dollar amount to avoid a standard outage. If they answered 'yes', they were then asked if they were willing to pay an amount double the first. If they responded 'yes', they were assumed to have a WTP of the second cost prompt.
- Considered whether applying a cap could create unintended consequences, noting that the cap focuses on estimating the point where supply equals demand, not the demand curve itself. Other members noted we are looking at demand relating to grid supply, not a demand curve for all electricity.

In relation to the appropriate cap to apply, members:

- Discussed whether a back-up power supply would be truly substitutable for a reliable supply from the grid, noting that certain customers may not be able to install a substitute (eg renters), and others may not want to go to the effort of installation.

In relation to whether to include the cap in the survey questions, members:

- Considered the option suggested by MEI of adding a follow-up question later in the survey (for either those with a high WTP, or all participants) asking if they would be willing to pay the cap amount to install a substitutable system to avoid an outage. If the participant answers 'no', that would indicate a protest answer.
- Commented that mentioning a cap in the question may create bias and that we should only be aiming to cap high responses.
- Considered, if the survey states the cost of a substitutable alternative, how to treat respondents who still indicate they are willing to pay for electricity from the grid. Some members stated this could indicate their responses are irrational and should be discounted.

As part of this agenda item the members also discussed the following issues:

- Whether it would be useful to consider the rationality of all responses, not just those at the high end. For example, some people may state 0 WTP because they have solar panels and do not realise this alone will not prevent them losing power during an outage. Members acknowledged there is no easy way to identify all responses that are based on misconceptions.
- Suggested that an alternative to a cap might be to emphasise the consequences of answers, such as putting a statement at the beginning and/or end of the survey stating that answers might impact on bills.
- Members considered there should be quality control to identify consumers who are functionally or numerically illiterate. However, it was also noted there is an issue of striking a balance between overburdening participants with information and not giving enough information.
- Considered whether the responses could be placed on a bell curve. AER staff and Insync confirmed this would not be appropriate because the distribution is not a typical bell curve and there are a high number of zeros.
- Commented that a high number of zeros may indicate incremental cost above what people now pay and queried whether negative responses should be allowed, to indicate willingness to reduce reliability. However, it was acknowledged that the way the WTP question is phrased, a negative response is not useful because it indicates a participant would require payment to avoid an outage, which is not helpful for our purposes. It was noted that the choice modelling questions ask about customers' willingness to accept (WTA) a reduction in reliability, so allow negative responses in that sense.
- Queried whether the choice modelling questions suffer from a similar in-built cap as the cost prompt WTP question used in AEMO's survey.
- Noted it would be useful to understand different approaches to calculating a customer's WTP.

Following this discussion, Ingrid Michel presented a list of options for applying a cap. It was noted that we are currently concerned with the question of whether and how to apply a cap for the survey results, rather than whether to include a cap in the survey itself (such as in the form of an additional question).

Members:

- Mostly agreed that:
 - There should be a cap; and
 - Where a response given is higher than the cap, the cap should be substituted, rather than excluding those responses entirely.
- Discussed whether to apply an average cap or a whether a different cap may be appropriate for different types of consumers (eg people living in an apartment may not be able to install a gas generator).
- Suggested choosing the cheapest practical solution as the cap, but noting it needs to be easily costed.
- Discussed the typical types of generators currently used by customers, noting many customers use a petrol or diesel generator rather than gas, depending on the purpose it is used for.
- Suggested that the cap needs to take into account any ongoing costs such as maintenance.

ACTION item: AER to further develop cap options and present at the next VCRCC meeting.

6. Approach to direct connect customer survey & discussion

Danielle Coronel outlined the planned survey approach for direct connect transmission customers and large distribution customers, and sought members' views on methods for reaching these customers.

In relation to survey distribution approaches, members:

- Noted that retailers may be the only parties with full customer details, but networks may also be a good touchpoint because they regularly communicate with the relevant parties.
- Agreed there needs to be informed consent from customers to use their details.
- Indicated there is reluctance to contact customers because of a fear it will have consequences for relationships.
- Suggested there may not be sufficient incentive for customers to complete the survey and so it was important for the survey to be promoted by VCRCC members. Discussed the option of distributing surveys through several different avenues at once, including ENA, EUAA, MEU, all sending the same message out. This may help improve the response rate. Further, it was suggested AER, ENA and AEMO could sign a joint letter and send it out to customers.
- Suggested the NMI number could be used as a check to ensure the same customer site does not complete the survey more than once.
- Considered ways of differentiating between large and smaller distribution customers if the survey is distributed randomly. AER staff suggested asking an initial question about whether average consumption is over the given threshold -

customers' responses would determine whether they are given the direct connect survey or the small business survey.

In relation to the direct connect methodology, members:

- Suggested asking an additional freeform question to capture any costs not otherwise quantified.
- Suggested including in the scope of the survey: datacentres, generator businesses (as they can be large consumers of energy).
- Agreed that distribution customers should be included in the direct connect survey because there is inconsistency across jurisdictions as to how transmission and distribution customers are defined, and because a larger number of customers is more statistically meaningful.
- Agreed that 10 MW is an appropriate threshold for the definition of 'large' distribution customers.
- Commented it is important customers understand what an 'outage' is. It was noted that some businesses may be greatly impacted by variations in power quality and may think of this when answering questions about outages.
- Discussed weighting of customers according to energy uses. There was support for disaggregating by sector and estimating both load-sensitive and non-load-sensitive VCRs.

ACTION item: AER to follow up with ENA, EUAA and other parties in relation to survey distribution options.

7. HILP update & discussion

Jimmy Criticos gave an overview of the discussion and outcomes from the HILP subcommittee meetings. Key points covered were:

- The current survey design only asks about outages up to 12 hours. Stakeholders have raised doubts about extending the survey beyond this duration as it is difficult for customers to envisage widespread, long duration outages.
- The HILP subcommittee was formed to consider these kinds of outages. The subcommittee has had involvement from a range of groups and has convened twice so far. There has also been a meeting between AER, AEMO and ENA to discuss more technical HILP issues.
- Given the timeframe and practical considerations, if the AER was to develop HILP VCRs, staff consider a macro-economic approach is the best option.
- The HILP subcommittee discussed the possibility of modelling several scenarios of increasing severity as a way to generate data points for a HILP VCR curve.
- We need to be mindful of separating costs due to an outage from cost due to the cause of the outage (eg, natural disaster), and avoid duplicating costs. This may require discussion with disaster recovery organisations.

Following the presentation, members:

- Noted the concurrent Value of Lost Load study by Electricity North West in Great Britain ([Manchester study](#)¹) identified by MEI may be useful as it also exploring the cost of widespread and long duration outages. Members noted the study could indicate whether it is appropriate to use the standard VCR for HILP events or not.
- Noted that disaster recovery and emergency services organisations may be able to assist in our thinking on costs.

ACTION item: AER to seek input from disaster recovery organisations.

ACTION item: AER to investigate if Manchester study may be taken into account.

ACTION item: AER to progress development of macroeconomic modelling approach for widespread, long duration outages.

8. Customer contacts (small business) discussion

Betty Lehman gave an overview of the approach to reaching small businesses for completion of the survey.

Following the presentation, members:

- Discussed approaching both business-to-customer (B2C) organisations as well as business-to-business (B2B) organisations.
- Considered the option that the AER use the ACCC's small business newsletter.
- Discussed the option of a monetary incentive for small businesses to complete the survey, noting that some business owners may be too busy and paying them may not help.

9. Next steps & close meeting

The next VCRCC meeting will be held on 25 July 2019 in Melbourne, where AER staff plan to discuss the following with the VCRCC:

- Pilot survey results and potential implications for the main survey. The intention is to commence the main survey in August.
- Further discussion on a cap for the WTP responses.

¹ Available at: <https://www.enwl.co.uk/zero-carbon/smaller-projects/network-innovation-allowance/enw010--value-of-lost-load-to-customers/>.