

# AER 2024 VCR Methodology Review

Public forum

Date: 4<sup>th</sup> April 2024

Time: 10:00am - 11:30am AEDT

# Agenda

Time	Item
10:00 – 10:05	Welcome and introduction – Jarrod Ball, AER Board
10:05 – 10:20	Reliability Panel/AEMC presentation
10:20 – 10:30	Discussion / Q & A
10:30 – 10:45	VCR methodology and proposed amendments—Jarrod Ball, AER Board
10:45 – 11:00	Discussion / Q & A
11:00 – 11:15	EUAA presentation
11:15 – 11:25	Discussion/Q & A
11:25 – 11:30	AER: Thank you & Close

# Scope of the 2024 VCR review and our resilience work

## VCR 2019

- Unplanned outages of up to 12 hours in duration\*
- Survey-based; uses contingent valuation & choice modelling
- Delivers granular VCR, e.g. climate zone, duration, time of day/week, season etc.
- Probability & load weighted to cover bulk of typical outages
- Fit for purpose for most VCR uses



## VCR 2024

- Consistent with the 2019 methodology, as much as practicable
- Covers same outage durations and aims at the same level of granularity
- Exploratory survey questions:
  - on serial, correlated outages (residential and business surveys) – to assist the Reliability Panel
  - On longer durations (e.g., 7 days) – may be included in direct cost survey



## Outside the scope of the VCR methodology:

- Outages longer than 12 hours
- New patterns of outages that may occur in future as energy transition progresses
- Other outages (planned, momentary)

These have different challenges (e.g., data availability) and may require a different methodology and different levels of granularity and precision.



ECMC request

\*Widespread outages of up to 12 hours in duration are included in surveys but VCR are not calculated

## What are the Values of Customer Reliability (VCR)?

- VCR seek to reflect the value different customers place on reliable electricity supply under different conditions.
  - Usually expressed in dollar per kilowatt hour of unserved energy (\$/kWh).
  - Difficult to observe directly and must be estimated.
  - Collection of numerical values covering different customer segments and outage types.
  - Play a role in ensuring customers pay no more than necessary for safe and reliable energy.

# Two separate issues we are consulting on:

## 1. Use of the expedited rules consultation procedure

- Our draft decision is that we consider our proposed changes to the VCR methodology are non-material. Therefore, we are using the expedited rules consultation procedure in the National Electricity Rules (NER).
- If you consider our proposed changes are not a Non-material Proposal, you can request that we use the standard rules consultation procedures by 9 April 2024.

## 2. The proposed VCR methodology

- The VCR methodology we propose to use to update the VCR later this year, as set out in our draft determination.

## The VCR rule (NER, r. 8.12)

- AER to review the VCR methodology every 5 years prior to updating the VCR
- **The VCR objective:** The VCR methodology and VCR should be fit for purpose for any current or potential uses of VCR that the AER considers to be relevant
- The VCR methodology should include:
  - mechanism for directly engaging with retail customers and customers (other than retailers), which may include the use of surveys
  - mechanism for adjusting the VCR on an annual basis

## 2024 Methodology

- Propose using the 2019 VCR methodology, with minor amendments, to update the VCR. The minor amendments are:
  - removing the reference to the specific nominal dollar value for the maximum willingness to pay in the residential survey
  - clarifying that when we update the VCR, we may revise cost prompts and bill discounts in the residential and business surveys to account for inflation impacts and changes in consumer preferences. We have updated the residential \$ cost prompts and bill discounts.
  - refining some text and footnotes to improve clarity, correct minor typographical errors and make references easier to identify going forward.

# Current and potential uses of VCR

- input into cost benefit analysis for network planning and the assessment of future network expenditure for capital projects
- setting transmission and distribution reliability standards and targets
- reviews of the wholesale market reliability standard and settings
- reviews of the system restart standard
- reliability and emergency reserve trader procurement
- assessment of requests to declare certain risks as protected events
- linking outcome performance with service target performance incentive schemes incentives



# Why the proposed 2024 VCR methodology is fit for purpose

- Scope and granularity:
  - It allows coverage of a wide range of outage scenarios (in terms of duration and timing), geographic locations (by remoteness and climate zone, by jurisdiction) and customer types – relatively easily and cheaply, compared to alternative approaches (such as modelling or deliberative forums).
- Economic interpretation:
  - The obtained VCR are a good match for what we need to measure to conceptually align with how VCR are used: that is, social benefit of greater reliability.
  - Comparable over time.
- Adaptable and contemporary:
  - Surveys seek information about willingness to pay to avoid power outages directly from residential and business customers.
  - VCR are reflective of customer reliability preferences even when circumstances change, like the transition to net zero.
- There are difficulties with using alternative methodologies, including data, methodological, resourcing and timing constraints.
- PLUS: Other things being equal, regulatory consistency helps promote efficient investment.

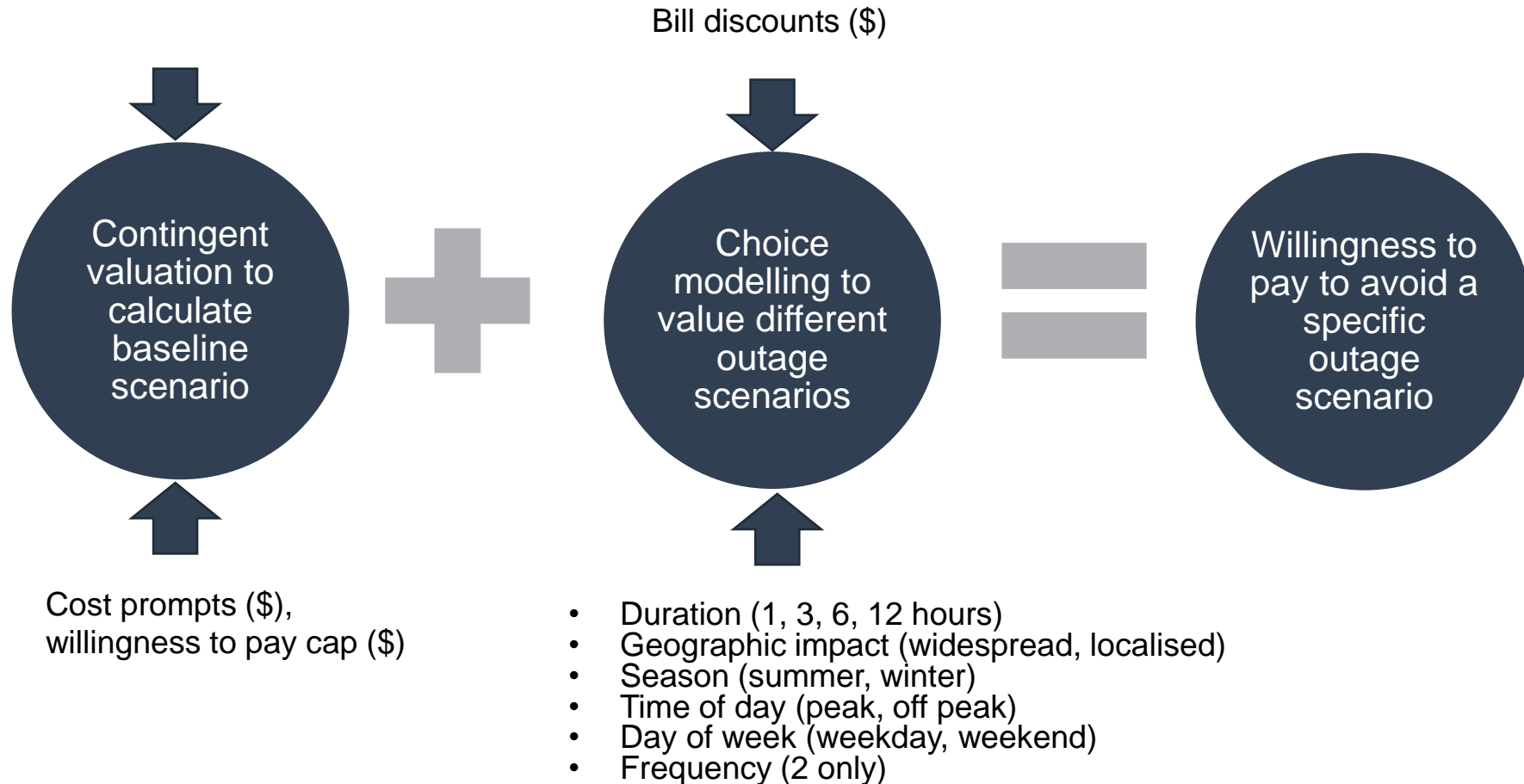
# Non-material proposal and expedited rules consultation procedure

- We are using the expedited rules consultation procedure, which applies to Non-material Proposal.
  - A ‘Non-material Proposal’ means a Proposal that, if implemented, will be unlikely to have a significant effect on the NEM or on the activities of the Registered Participants to which the Proposal relates.
- We consider our proposed amendments to the 2019 VCR methodology constitute a ‘Non-material Proposal’ because they are limited to:
  - amending the statement of methodology to clarify that the dollar value parameters may be adjusted for inflation, changes in consumer preferences and changes in the set of available backup technologies when we update the VCR in the future; and then updating nominal dollar values in the stated preference surveys
  - refining some text and footnotes to improve clarity, correct minor typographical errors, remove detail specific to the 2019 VCR methodology and make references easier to identify going forward.

# Methodology: stated preferences surveys for residential and business customers <10MVA

## *Baseline scenario:*

Two unexpected power outages a year, each occurs on a random weekday in winter (Jun, Jul, Aug) and lasts for one hour in off peak times (outside of 7-10 am, 5-8pm). Each one only affects respondent's local area.



# Methodology: direct cost survey for large business customers

- Targets the largest customers  $\geq 10\text{MVA}$  peak demand in the previous 12 months.
- Both transmission and distribution connected customers – approximately 300 eligible sites.
- All respondents are asked to outline and quantify the costs they would expect to include for an unplanned outages of the different durations (10 mins, 1 hr, 3 hr, 6 hrs, 12 hrs, 24 hrs, 48 hrs).
- For respondents with non-continuous (not 24/7) operations, a further distinction is made between outages that start at peak and off-peak times (for 10 mins, 1 hr, 3 hr and 6 hr outages).

# Converting to \$/kwh VCR values

Willingness to pay (\$) to avoid each outage scenario

Derive \$/kwh value for each outage scenario

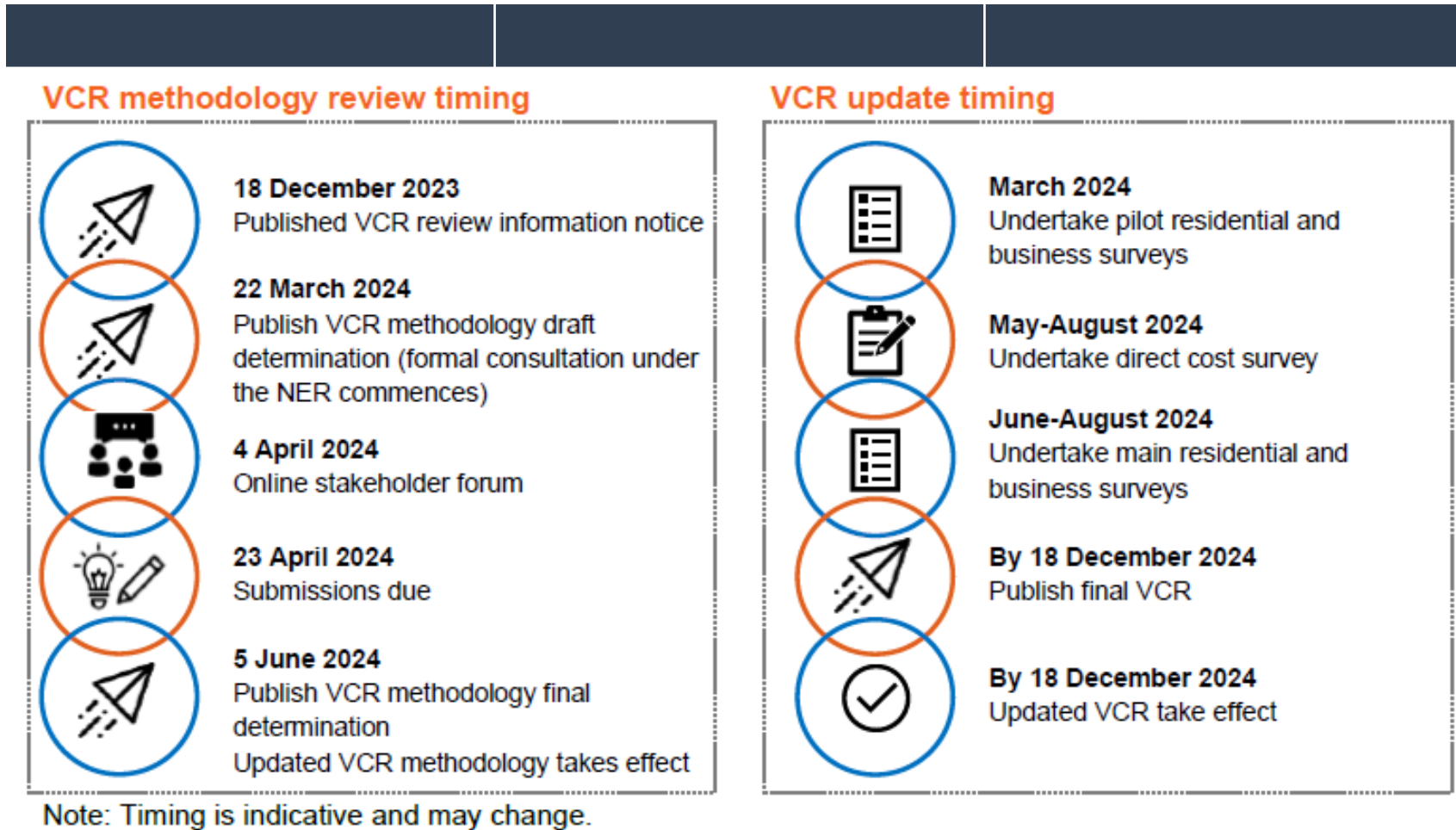
Weight each outage scenario by relative frequency

Sum load-weighted \$/kWh numbers to derive area/regional VCR

## Annual adjustments

- In 2019 we proposed to use a CPI-X approach for the annual adjustment of published VCR values.
- We initially set X to zero due to the lack of available information on what the key drivers of changes in customer reliability preferences are and how they affect VCR.
- Our current proposal is to continue setting X to zero, however we are happy to hear stakeholders' proposals.

# AER 2024 VCR methodology review and update timing



# Submissions

- Submissions on the draft methodology due by 23 April 2024 to:

[VCR2024@aer.gov.au](mailto:VCR2024@aer.gov.au)

or

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