

Electricity contract co-design

Workshop 3 discussion materials

4 September 2026

These materials are intended to supplement a discussion with L.E.K. Consulting. These perspectives will, therefore, only be meaningful to those in attendance. The contents of the materials are confidential and subject to obligations of non-disclosure. Your attention is drawn to the full disclaimer contained in this document.



Disclaimer

This document provides information and is for illustration purposes only. Accordingly, it must be considered in the context and purpose for which it has been prepared. It cannot be relied upon by any recipient.

It cannot be relied upon by any recipient. In accepting this document, you agree that **L.E.K. Consulting Australia Pty Ltd.** and its affiliates, members, directors, officers, employees and agents (collectively “L.E.K.”) neither owe nor accept any duty or responsibility or liability to you or any third party, whether in contract, tort (including negligence) or breach of statutory duty or otherwise, howsoever arising, in connection with or arising from this presentation or the use you or any third party make of it.

L.E.K. shall not be liable to you or any third party in respect of any loss, damage or expense of whatsoever nature which is caused by your or any third party’s reliance or for any use you or any third party may choose to make of the presentation, which you accept is at your or their own risk.

This presentation is based on information available at the time this presentation was prepared and on certain assumptions, including, but not limited to, assumptions regarding future events, developments and uncertainties, and contains “forward-looking statements” (statements that may include, without limitation, statements about projected market opportunities, strategies, competition, expected activities and expenditures, and at times may be identified by the use of words such as “may”, “could”, “should”, “would”, “project”, “believe”, “anticipate”, “expect”, “plan”, “estimate”, “forecast”, “potential”, “intend”, “continue” and variations of these words or comparable words).

L.E.K. is not able to predict future events, developments and uncertainties. Consequently, any of the forward-looking statements contained in this presentation may prove to be incorrect or incomplete, and actual results could differ materially from those projected or estimated in this presentation. L.E.K. undertakes no obligation to update any forward-looking statements for revisions or changes after the date of this presentation, and L.E.K. makes no representation or warranty that any of the projections or estimates in this presentation will be realized. Nothing contained herein is, or should be relied upon as, a promise or representation as to the future.

Acknowledgement of Country



We acknowledge the Traditional Owners of Country throughout Australia, and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present

Source: *Gadigal Country – Here and Now* by Dunghutti and Biripi Artist, Wanita Lowe, commissioned by L.E.K. as part of our Reflect RAP

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:20pm	70 mins	Bulk energy index design	- Context on index choice as a baseline reference, not a final decision - ASL presentation on design choices for reference index with options presented, for discussion and feedback
12:20-12:30pm	10 mins	Bulk energy index – evaluation of options	Polling on preferred index design options to be used as an initial position for modelling and analysis
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to an agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

Competition and Consumer law obligations and information sharing

The Competition and Consumer Acts prohibits anti-competitive conduct, including:

Cartel conduct

Contracts, arrangements or understandings between competitors to fix prices, restrict supply or acquisition of goods/services, allocate customers, suppliers, territories or rig bids

Concerted practices

Other cooperation between competitors with the purpose, effect or likely effect of substantially lessening competition

Substantially lessening competition

Any other contracts, arrangements or understandings which have the purpose, effect or likely effect of substantially lessening competition

Any conduct by a company with market power which has the purpose, effect or likely effect of substantially lessening competition

Under no circumstances may Working Group members share competitively sensitive information with one another. As a general rule, if a Working Group member considers information to be sensitive from a commercial perspective and the information is not publicly available, it should not be discussed during Working Group meetings

Source: ASL – Contract Co-design Working Group – Meeting Communication Protocols

Principles for how we will work together as a team

Public Purpose Mindset

- Bring your experience and perspectives, but also step outside of them to consider the effect across the market and the grid
- Act in line with the National Electricity Objectives

Constructive Participation

- A workable, imperfect, but standardised product beats many bespoke ones
- Constructive compromise is key
- Disagreement should always be clear and civil
- **Opinions without sufficient data to support them will not be treated as equal to evidence-backed perspectives**

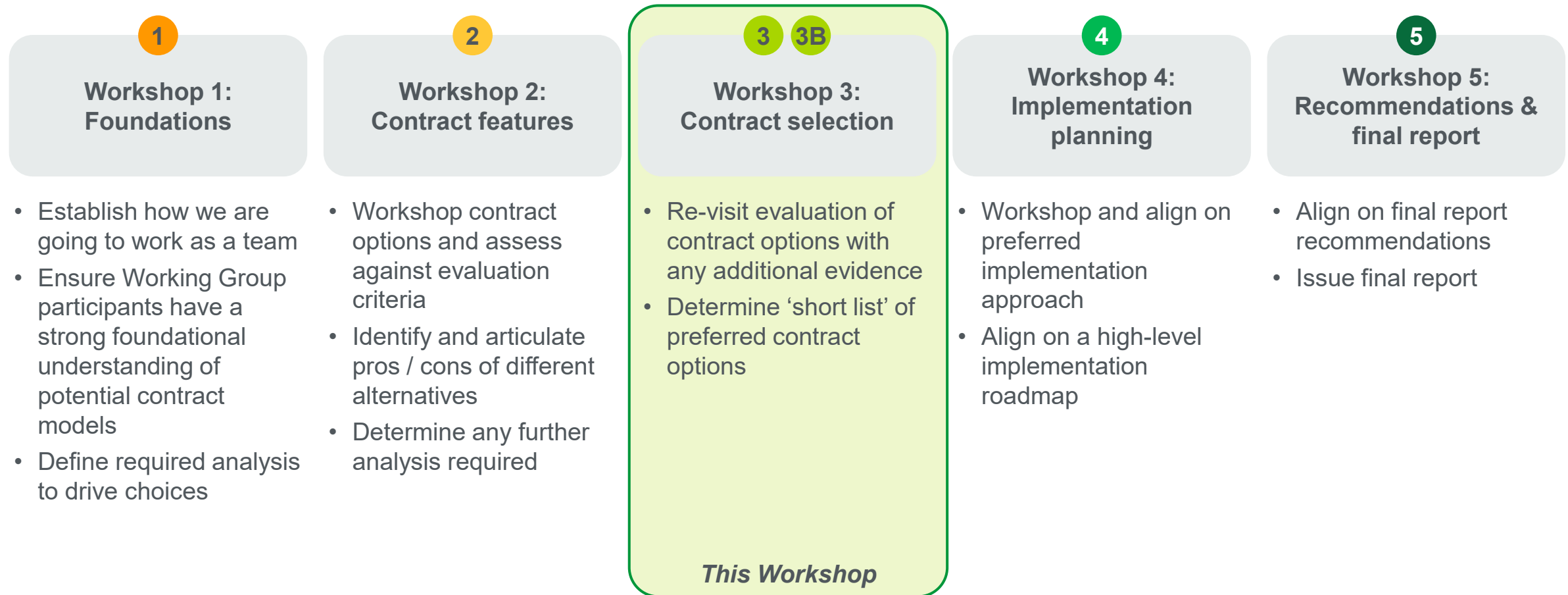
Ownership

- The Working Group, not the Convening Group, owns the recommendations
- We're looking for this group to lean in and help drive the process
- Decisions should aim to reach consensus and represent all sides of the market

Openness

- Chatham house rules apply – you can share externally but do not attribute. Where possible we will agree common talking points for what is shared across the industry
- We plan to invite participation of other industry representatives when their input would be valued

Workshop 3 will focus on evaluating evidence of contract suitability, and contract selection



Objectives for Workshop 3B

Workshop 3 will build on the preferred ESEM contract designs developed in 3B:

Bulk Energy

- 1 Clarify options for setting the reference index for the bulk energy swap, and aligning on an initial design to use for modelling and analysis
- 2 Consider performance of the preferred bulk energy contract design to support for solar generation investment

Shaping

- 3 Understand how an ex-ante shaping product could align with AEMO pre-dispatch processes, and the potential for market distortions
- 4 Refine the design of the shaping product through resolving key design choices

Other issues

- 5 Refine draft Terms Sheets for each of the preferred contracts
- 6 Test alignment among the Working Group on force majeure risk allocations
- 7 Share an initial draft for the structure of the Working Group Final Report

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:20pm	70 mins	Bulk energy index design	- Context on index choice as a baseline reference, not a final decision - ASL presentation on design choices for reference index with options presented, for discussion and feedback
12:20-12:30pm	10 mins	Bulk energy index – evaluation of options	Polling on preferred index design options to be used as an initial position for modelling and analysis
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to an agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:20pm	70 mins	Bulk energy index design	- Context on index choice as a baseline reference, not a final decision - ASL presentation on design choices for reference index with options presented, for discussion and feedback
12:20-12:30pm	10 mins	Bulk energy index – evaluation of options	Polling on preferred index design options to be used as an initial position for modelling and analysis
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4



ToD Block Spread Swap: Supporting Materials



Questions to consider today

1

**How are
charge/discharge
periods determined?**

2

**Are the
charge/discharge
blocks contiguous or
non-contiguous?**

3

**How is SoC assumed
and considered in
setting
charge/discharge
blocks?**

4

**When do Daily Shaping
Periods commence and
finish?**

Linked decision

Recap – historical analysis presented at WS3

1. Static time blocks would have performed significantly worse than dynamically set pre-dispatch and residual demand block spreads over the last ten years.

2. Residual demand and pre-dispatch signals performed similarly over the same period.

3. Non-contiguous blocks performed marginally better than contiguous blocks/

Figure: 10-Year Historical Achieved Spreads (NSW)

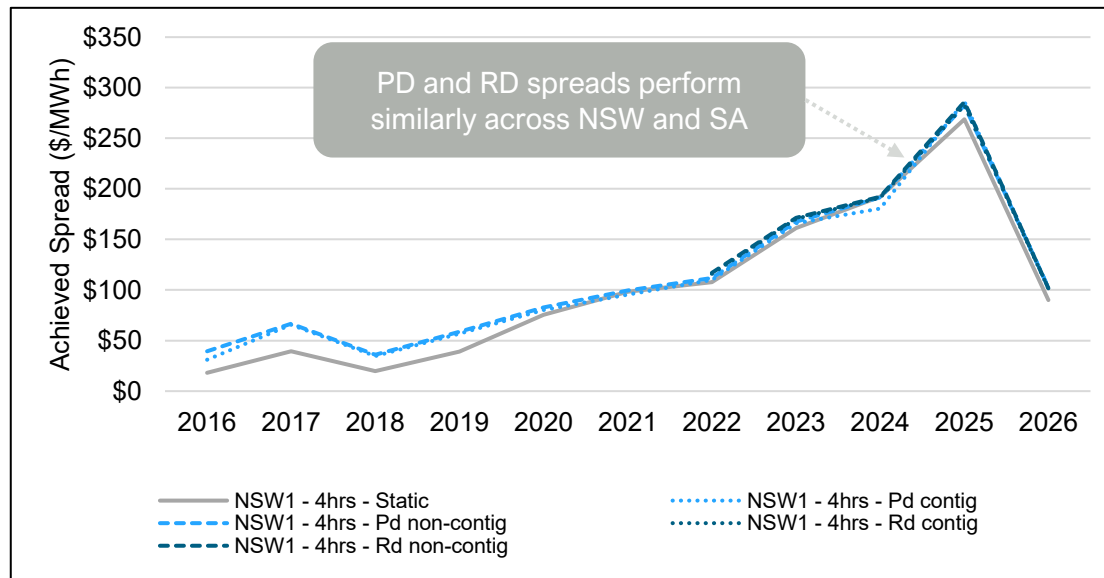
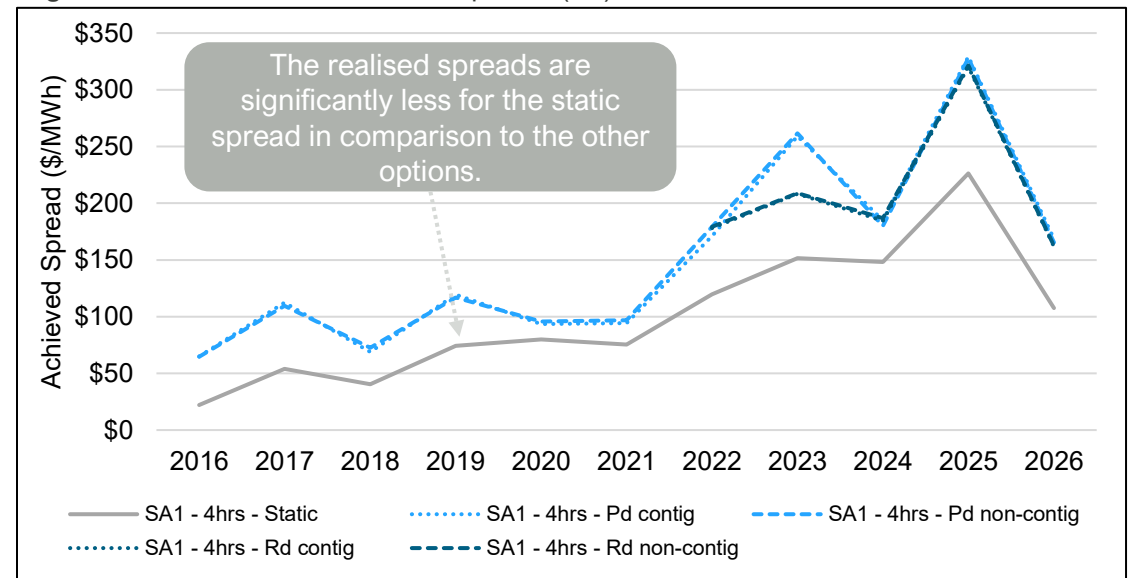


Figure: 10-Year Historical Achieved Spreads (SA)



Assessment Principles

We will use similar principles that were introduced in Workshop 3 for the Regional Reference PPA index to support decision making between options. We have replaced fungibility with operational complexity given all options were deemed to be fungible.



Basis risk

The extent to which a design choice can increase or decrease basis risk for both buyer and seller.

Can the seller and buyer adequately forecast and manage the risk in practice?



Investability

Ability of financiers to lend to a project.

Key tests: long-term certainty and the ability to model or forecast expected outcomes.



Transparency & verification

The market's ability - across financiers, developers, advisers and modellers - to understand and verify the calculations.



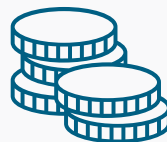
Operational Complexity

How easy is it for buyers, sellers and the ESEMA to understand and comply with obligations under each model?



Gaming / manipulation

Ability of participants to game or manipulate the contract



Value / relevance

Does the contract retain value for buyers / intermediaries over the long-term of the ESEM contract



Data governance / availability

If the contract relies on third-party or private data, its long-term availability must be assured.

RAG Key (relative scoring)

High risk

Medium risk

Low risk

Immaterial point of comparison

Question 1: Charge/discharge periods

RAG Key (relative scoring)

How are charge/discharge periods determined?

High risk

Medium risk

Low risk

Immaterial point of comparison

Criteria	Option 1: Ex-ante Residual Demand	Option 2: Ex-ante Pre-Dispatch prices	Option 3: Fixed Time Blocks	Option 3b: Periodically Set Fixed Time Blocks
Basis Risk	Modelled 75-85% capture rate of perfect foresight spreads	Modelled 75-85% capture rate of perfect foresight spreads		Periodically setting (i.e. seasonally) may have some benefit over blocks that are fixed over the contract life.
Investability	All options considered to be investable			
Transparency and verification	All proposed signals are transparent and can be verified from AEMO data.			
Operational Complexity	Daily nominations based on calculated values	Daily nominations based on raw values	Constant nominations	Nominations change periodically with some but reduced complexity to daily approach.
Gaming / manipulation	Some uncertainty over whether self-forecasts could impact RD signal.	Pre-dispatch price signals may be open to gaming.	Set by ESEMA.	Set by ESEMA.
Value / relevance	Linked to key physical driver of price in a high renewables system.	Day ahead pre-dispatch prices are subject to gaming/change.	Fixed time blocks may not capture seasonal variability and long-term changes.	Periodically set fixed time blocks may capture seasonal variability and/or manage drift.
Data governance / availability	All data is available from AEMO.			

Question 2: Block types

RAG Key (relative scoring)

Are the charge/discharge blocks contiguous or non-contiguous?

High risk

Medium risk

Low risk

Immaterial point of comparison

Criteria	Option 1: Contiguous	Option 2: Non-contiguous min [30] mins blocks	Option 3: Non-contiguous, maximum of [2] charge/discharge blocks per Daily Shaping Period
Basis Risk	May limit ability to capture morning and evening peaks in a day and any other intra-day volatility.	A closer match of intra-day high/low periods (assuming accurate forecast).	Allows for capturing of morning and evening peak periods (or other intra-day volatility).
Investability			
Transparency and verification		More complex to determine / understand.	
Operational Complexity	One charge/discharge period per day	Potential for up to [8] charge and discharge (16 total) periods for a 4-hour shaping product.	Two charge/discharge period per day
Gaming / manipulation			
Value / relevance			
Data governance / availability	Not a material factor.		

Question 3,4 Daily Shaping Periods

Draft RAG ratings for discussion purposes

When do Daily Shaping Periods commence and finish and what is the assumed starting SoC?

- Assumed rules for block setting:**
- 0% starting SoC: discharge blocks can only be placed and sized according to the number of charge blocks that have occurred in the Daily Shaping Period prior (e.g. for Option 1, if morning peak occurs but no charge blocks have occurred prior then discharge blocks would be placed later).
 - 100% starting SoC: charge blocks can only be placed and sized according to the number of discharge blocks that have occurred in the Daily Shaping Period prior (e.g. for Option 2, if evening wind drives a low price at 16:00, but no discharge blocks have occurred prior then charge blocks would be placed later).
 - We assume all ESEM contracts would have the same Daily Shaping Period to support liquidity.

RAG Key (relative scoring)

High risk	Medium risk	Low risk	Immaterial point of comparison
-----------	-------------	----------	--------------------------------

Criteria	Option 1: 0:00-23:59 (aligned to market conventions) SoC: 0%	Option 2: 16:00 – 15:59 (aligned to expected discharge period commencement) SoC: 100%	Option 3: 10:00 – 09:59 (aligned to expected charge period) SoC: 0%
Basis risk	• May limit ability to capture morning peak.	• Aligned to current understanding of high likelihood periods of charge/discharge.	• Aligned to current understanding of high likelihood periods of charge/discharge.
Investability			
Transparency and verification	• Not a major distinguishing factor.		
Operational Complexity		• More complex as likely need to consider time when blocks are published and timing of previous days nominations (to reduce risk of 100% starting SoC).	
Gaming / manipulation	• Not a major distinguishing factor.		
Value / relevance	• May limit ability to capture morning peak.		
Data governance / availability	• Not a major distinguishing factor.		

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:20pm	70 mins	Bulk energy index design	- Context on index choice as a baseline reference, not a final decision - ASL presentation on design choices for reference index with options presented, for discussion and feedback
12:20-12:30pm	10 mins	Bulk energy index – evaluation of options	Polling on preferred index design options to be used as an initial position for modelling and analysis
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to an agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4



Regional Reference PPA: Supporting Slides



Context – RRPPA Settlement

Excerpt from draft product sheet:

Key Term	Description
Reference Production Index	$\text{Reference Production Index}_{TI} = \frac{\text{Reference Power Output}_{TI}}{\text{Reference Power Capacity}}$ • Reference Power Output is the total generation output (MW) of the Reference Fleet in a Trading Interval. • Reference Power Capacity is the total capacity (MW) of generators within the Reference Fleet
Notional Quantity (MWh)	$\text{Notional Quantity} = \text{Contract Capacity} \times \frac{1}{12} \times \text{Reference Production Index}_{TI}$
Settlement Amount (\$)	$\text{Settlement Amount} = \sum_{1}^n \text{Notional Quantity}_{TI} \times (\text{Floating Price}_{TI} - \text{Fixed Price})$

Today we want to **narrow the options** for how Reference Power Output and Reference Power Capacity could be defined.



Where do we want to get to? – Reference Index Commercial Terms

Reference Power Output

- The Reference Power Output is the total generation output (MW) of the Reference Fleet in a Trading Interval [, accounting for contribution capping/normalisation?].
- The Reference Power Output will be calculated based on the sum of the [actual/forecast available/calculated theoretical] power output of each project within the Reference Fleet, using [XX].

Reference Power Capacity

- The Reference Power Capacity is the total capacity (MW) of generators within the Reference Fleet [, accounting for contribution capping/normalisation]

Reference Fleet

- The Reference Fleet for a specified period shall contain [all] of the relevant technology type within the specified [NEM region/sub-region] [with capacity > 30MW].
- [insert approach to normalising contribution (capping) if applicable]
- The Reference Fleet shall be published every [XX] and apply to [XX]

Questions to consider today

1

How is the **Reference Power Output** calculated?

2

Is the **Reference Fleet** defined at the regional or sub-regional level?

3

Does the **Reference Fleet** contain all projects or a sample?

4

Are all projects within the **Reference Fleet** weighted the same?

5

Is the **Reference Fleet** frozen or does it evolve over the term of the contract?

Assessment Principles

We will use the following principles that were introduced in Workshop 3 to support decision making between options.



Basis risk

The extent to which a design choice can increase or decrease basis risk for both buyer and seller.

Can the seller and buyer adequately forecast and manage the risk in practice?



Investability

Ability of financiers to lend to a project.

Key tests: long-term certainty and the ability to model or forecast expected outcomes.



Transparency & verification

The market's ability - across financiers, developers, advisers and modellers - to understand and verify the index calculation.



Standardisation / fungibility

The ability or desire of ESEMA, intermediaries or buyers to trade contracts as liquid, fungible structures.



Gaming / manipulation

Ability of participants to game or manipulate the index—directly through bidding or dispatch, or indirectly by building projects known to differ materially from it.



Value / relevance

Does the index retain value for buyers / intermediaries over the long-term of the ESEM contract



Data governance / availability

If the index relies on third-party or private data, its long-term availability must be assured.

Who maintains and publishes the index?

RAG Key (relative scoring)

High risk

Medium risk

Low risk

Immaterial point of comparison

DCCEEW Supporting Analysis Overview

Analysis	Approach	Findings
1. DCCEEW Cash-Modelling (Workshop 3)	Six years of historical market outcomes to model cash-flows at 44 hypothetical project sites, using contemporary fixed costs to demonstrate the performance of the contract structures under consideration across different locations and spot price scenarios.	- The work produced annual DSCR distributions across the various contract structures. - Case studies helped to quantify the order of magnitude of ‘tail-risk’ scenarios.
2. Griffith Dispersion Analysis	Considered the relative performance spreads of Run-of-Plant PPA, Reference Ex-Post Revenue Swap and Reference Ex Post DWA swap contractual models, using a hypothetical future year and a large set of weather reference years.	Work demonstrated the dispersion of earnings for each contract type and how each contract type investigated (noting the RRPPA was not modelled) materially narrowed the dispersion in contract to a merchant case.
3. DCCEEW Cash-Modelling Revised (Workshop 3)	Same approach as per 1., however, contract strike prices are set based on a high-level estimate of LCOE, rather than contract fair value.	No significant changes in trends observed from 1.
4. DCCEEW Index Modelling (today)	The impact on historical revenue variability of four index design features were tested over a 5-year period: dispatched v available power, evolving v fixed fleet, excluding older farms from the index, and capping the contribution of individual farms.	Analysis appears to show revenue variability is not significantly impacted by the index design features considered over the modelled period.

Key Decision 1: Underlying Reference Index

How is the **Reference Power Output** calculated?



Key Decision 1: Identified Options

How is the **Reference Power Output** calculated?

Option 1: Ex-post Actual Generation Production (MW)	Option 2: Forecast Generator Availability (UIGF) (MW)	Option 3: Ex-post Synthetic Generation Production (MW)
The actual power output of each project within the Reference Fleet for a Trading Interval, as determined by AEMO dispatch data.	The forecast available power output of each project within the Reference Fleet, determined using Unconstrained Intermittent Generation Forecast (UIGF) OR self-forecasts submitted to AEMO.	The power output measured windspeed/irradiance is measured at each site within the Reference Fleet and with site specific Power Conversion Factors for each member of the Reference Fleet.
$Reference\ Power\ Output_{TI} = \sum Dispatched\ Output_{TI,Project}$	$Reference\ Power\ Output_{TI} = \sum Availability_{TI,Project}$	$Reference\ Power\ Output_{TI} = \sum \left(\begin{matrix} Measured\ Wind\ Speed_{TI,Project} \\ \times Power\ Conversion\ Factor_{Project} \end{matrix} \right)$
This actual power output includes the impact of binding network/dispatch constraints.	Forecast available output excludes the impact of binding network/dispatch constraints.	The Power Conversion Factor would likely include a long-term average approximation of (systemic) network/dispatch constraints.

DCCEEW Index Modelling

Quantitative Approach to Assessing Index Design Options

Scope - Historical Analysis

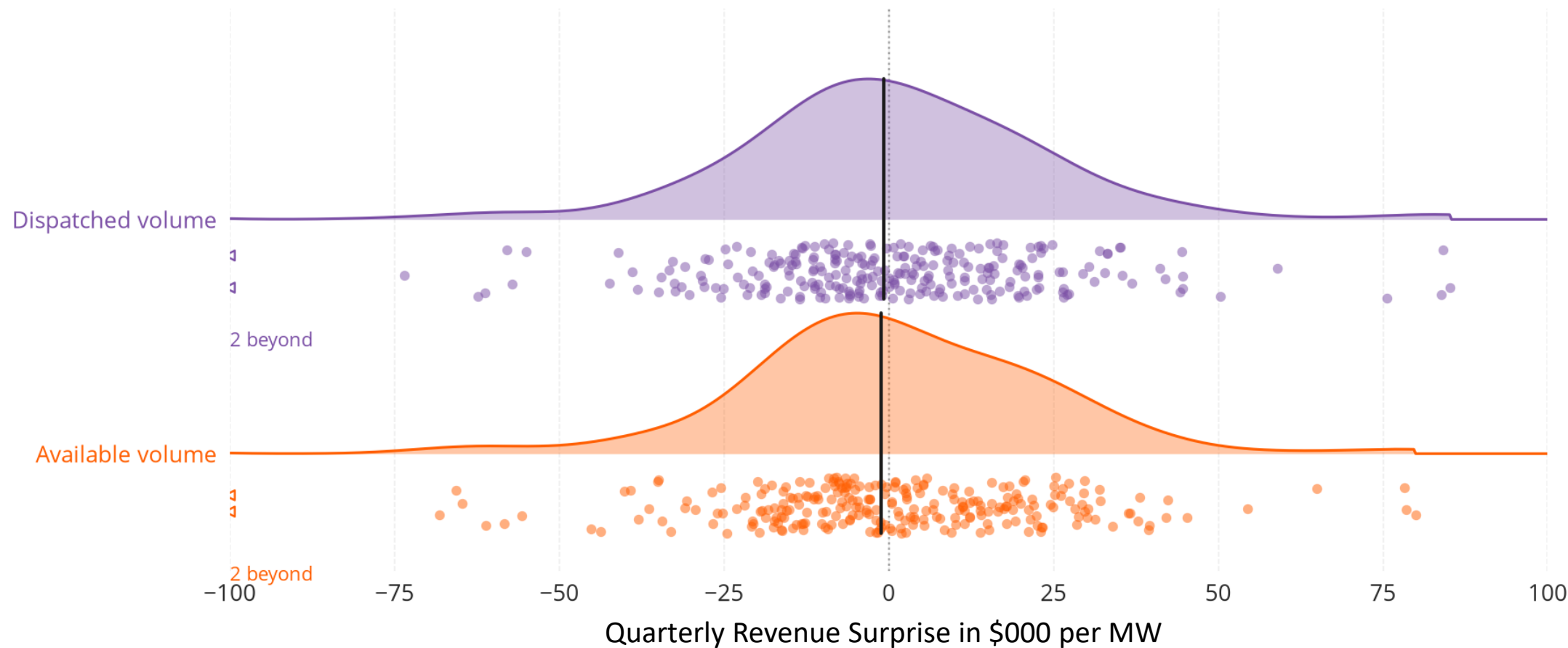
- 3 Regions
- 44 plants active (11 NSW, 16 SA, 17 VIC)
- 24 quarters in the analysis period (FY2021–FY2026)

Metric - Quarterly Revenue Surprise

- Plant and Regional Reference PPA strikes are set at ex-post fair value. This isolates the “Revenue Surprise” to the project’s budget caused by basis risk. The analysis shows that in most quarters historically proponents could have expected to deviate from budget by less than $\pm$ \$25k per MW.
- Revenue Surprise is scaled by plant size and expressed in \$000 per MW per quarter
- Site revenues are loss-adjusted at each plant’s own loss factor
- Plants are hedged at 1-to-1 with RRPPA based off nameplate

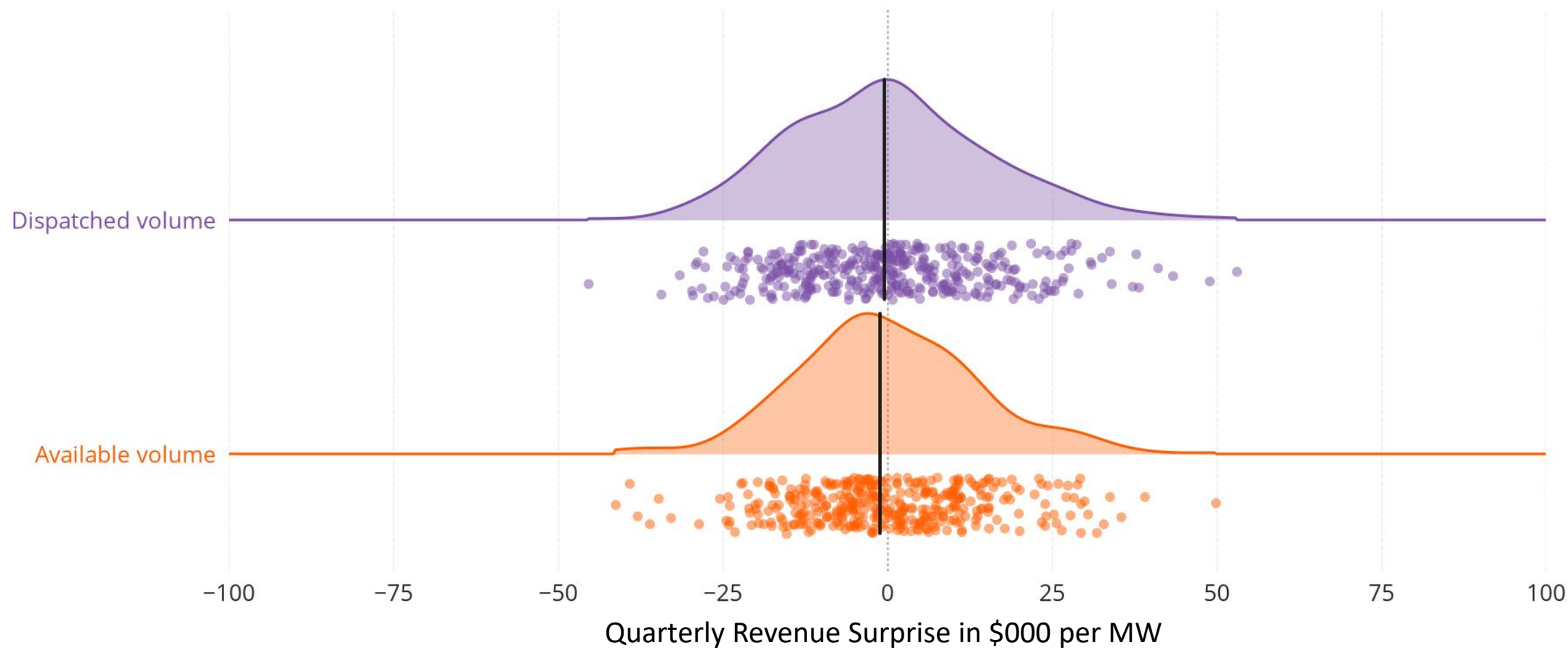
Reference Power Output - Dispatch vs Availability - NSW

Dispatch volume is **4.8%** lower than available volume (1.8% network curtailed, 3.0% economic curtailed)



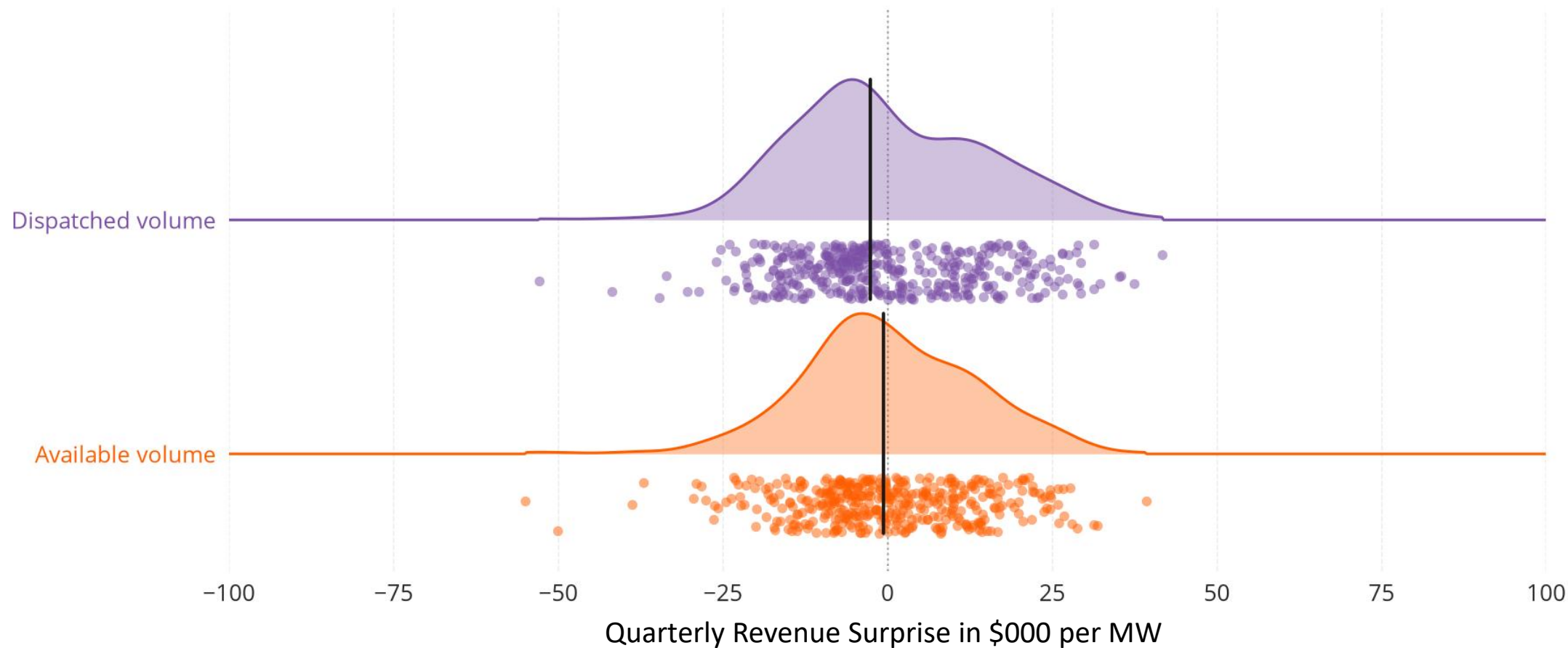
Reference Power Output - Dispatch vs Availability - SA

Dispatch volume is **18.3%** lower than available volume (8.7% network curtailed, 9.6% economic curtailed)



Reference Power Output - Dispatch vs Availability - VIC

Dispatch volume is **16.8%** lower than available volume (10.1% network curtailed, 6.7% economic curtailed)



RAG Key (relative scoring)

How is the Reference Power Output calculated?		High risk	Medium risk	Low risk	Immaterial point of comparison
Criteria	Option 1: Ex-post Actual Generation Production (MW)	Option 2: Forecast Generator Availability (UIGF) (MW)	Option 3: Ex-post Synthetic Generation Production (MW)		
Basis Risk	Dispatch values include curtailment and are aligned to actual market behaviour.	No curtailment, higher basis risk between project and reference.	Approximation of curtailment, likely remain exposed to idiosyncratic curtailment risks.		
Investability	Based on AEMO market data.	Potential concerns with data reliability, accuracy etc.	- Potential concerns with data reliability, accuracy etc. - Could drive investment towards high wind speed regions (and not towards curtailment etc.)		
Transparency and verification	Fully available data source.	Based on forecasts of wind/solar resource and project level data	Requires third-party weather data and proprietary power curves.		
Standardisation / fungibility	All options could be used to create a standardised/fungible product.				
Gaming / manipulation	Based on ex-post data, minimal gaming risk, however is subject to the Seller's operational decisions (for project and/or broader portfolio).	Possible moral hazard risks from pre-dispatch data.			
Value / relevance			Synthetic value that may not reflect actual dispatch and hedge coverage in curtailment scenarios.		
Data governance / availability		UIGF protocols/standards could change over contract term.	- Required third-party weather monitoring which may change standards over the contract term. - Power curves are unlikely to reflect curtailment over 20 year term.		

Key Decisions 2-5: Reference Fleet Definition



Key Decision 2: Reference Fleet boundary

RAG Key (relative scoring)

Is the **Reference Fleet** defined at the regional or sub-regional level?

High risk

Medium risk

Low risk

Immaterial point of comparison

Criteria	Option 1: The Reference Fleet is defined geographically by each NEM Region.	Option 2: The Reference Fleet is defined geographically by using sub-regions of each NEM Region.
Basis Risk	Risk of greater average variance across the Reference Fleet.	Basis risk may be reduced at commencement of the contract, however, will likely be more sensitive to changes to the Reference Fleet (smaller sample size).
Investability		
Transparency and verification		- More difficult to verify across sub-regions. - Challenges in determining boundary.
Standardisation / fungibility		Less standardised product.
Gaming / manipulation	Risk that average of broader range of profiles results in greater variance across the Reference Fleet	- Index could be impacted more from individual projects (smaller sample size). - Potential for perverse development incentives (e.g. change connection point to be in another sub-region). - Significant complexity in how ESEMA would tender a sub-regional product.
Value / relevance		Less valuable for buyers, risk of low liquidity for a particular sub-region.
Data governance / availability		More data points to be maintained.

Key Decision 3: Reference Fleet selection

Does the **Reference Fleet** contain all projects or a sample?

Project Capacity > 30MW +

Option 1: All operational projects

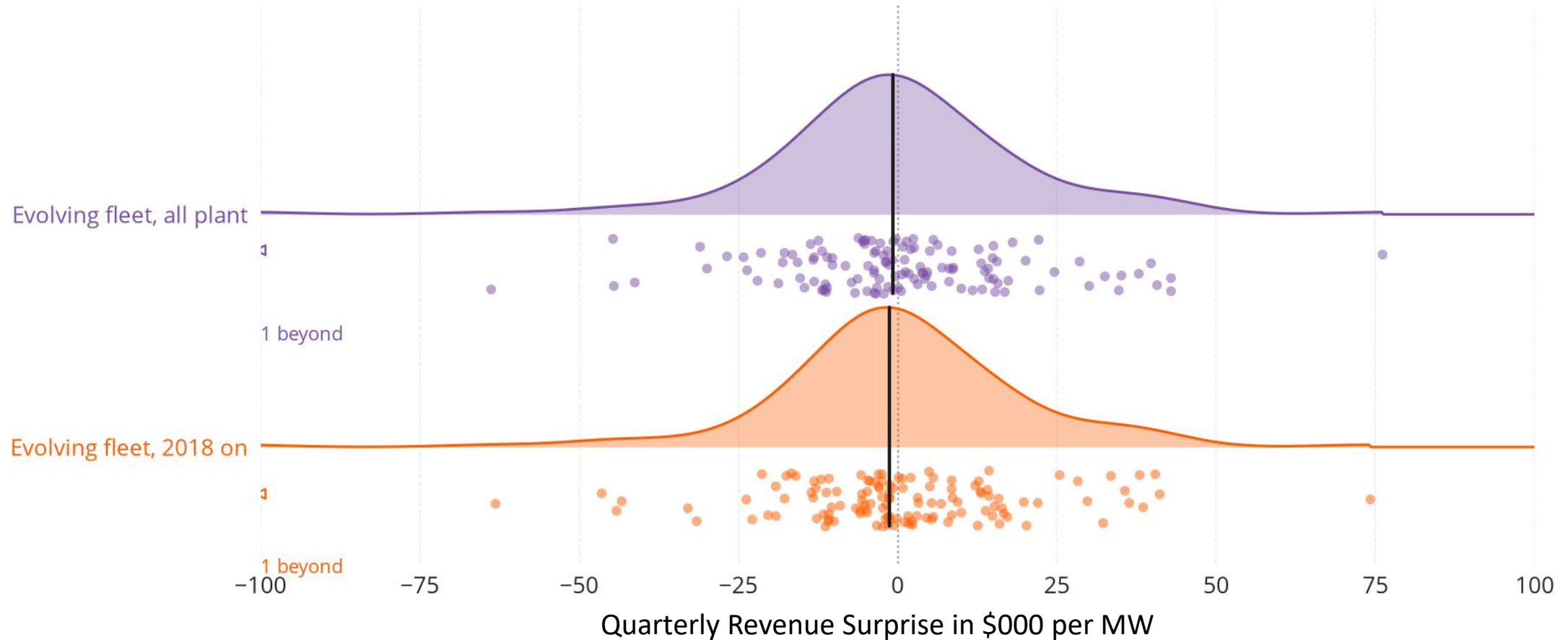
Option 2: All operational projects with ESEMA's

Option 3: All operational projects that reached COD from [2018] onwards

Key Decision 3: Supporting Analysis

Older Unit Treatment - All Units vs 2018-on Only - NSW

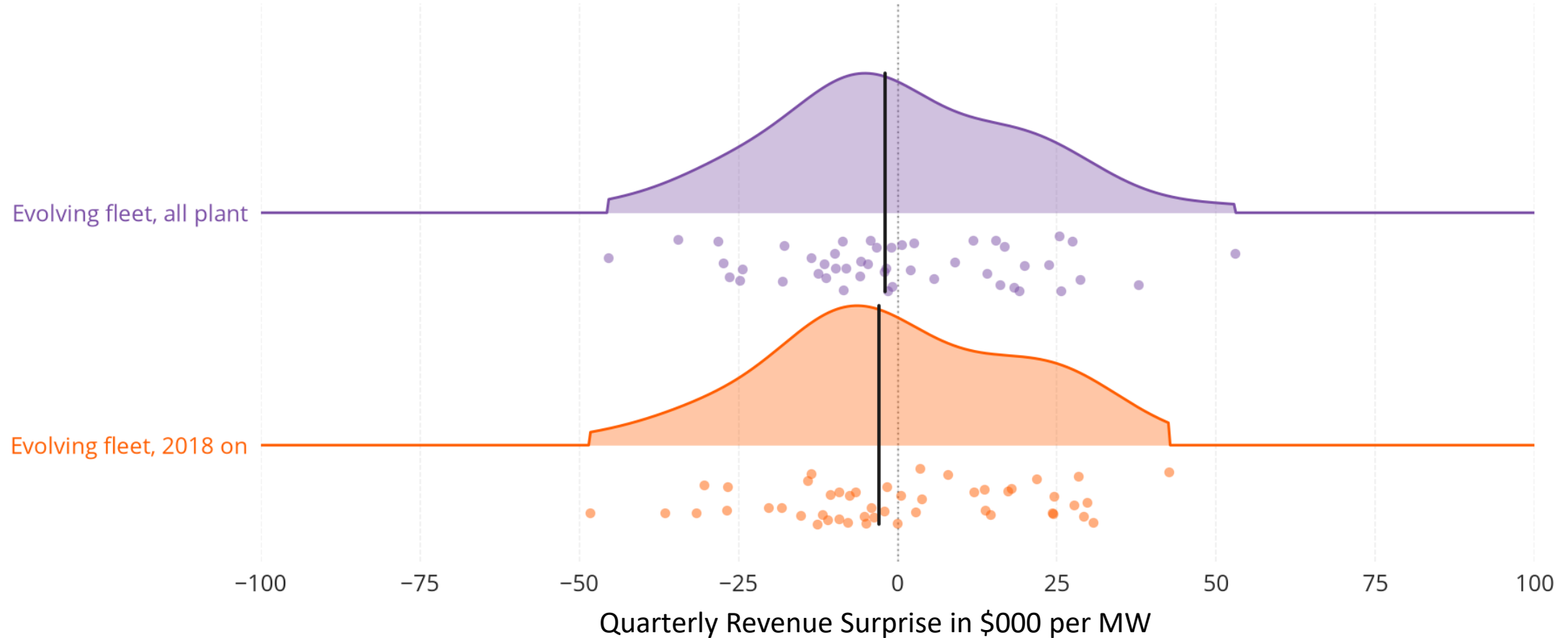
2018-on reference fleet evolves from 8 → 11 units (shortened analysis period: 4 years only)



Key Decision 3: Supporting Analysis

Older Unit Treatment - All Units vs 2018-on Only - SA

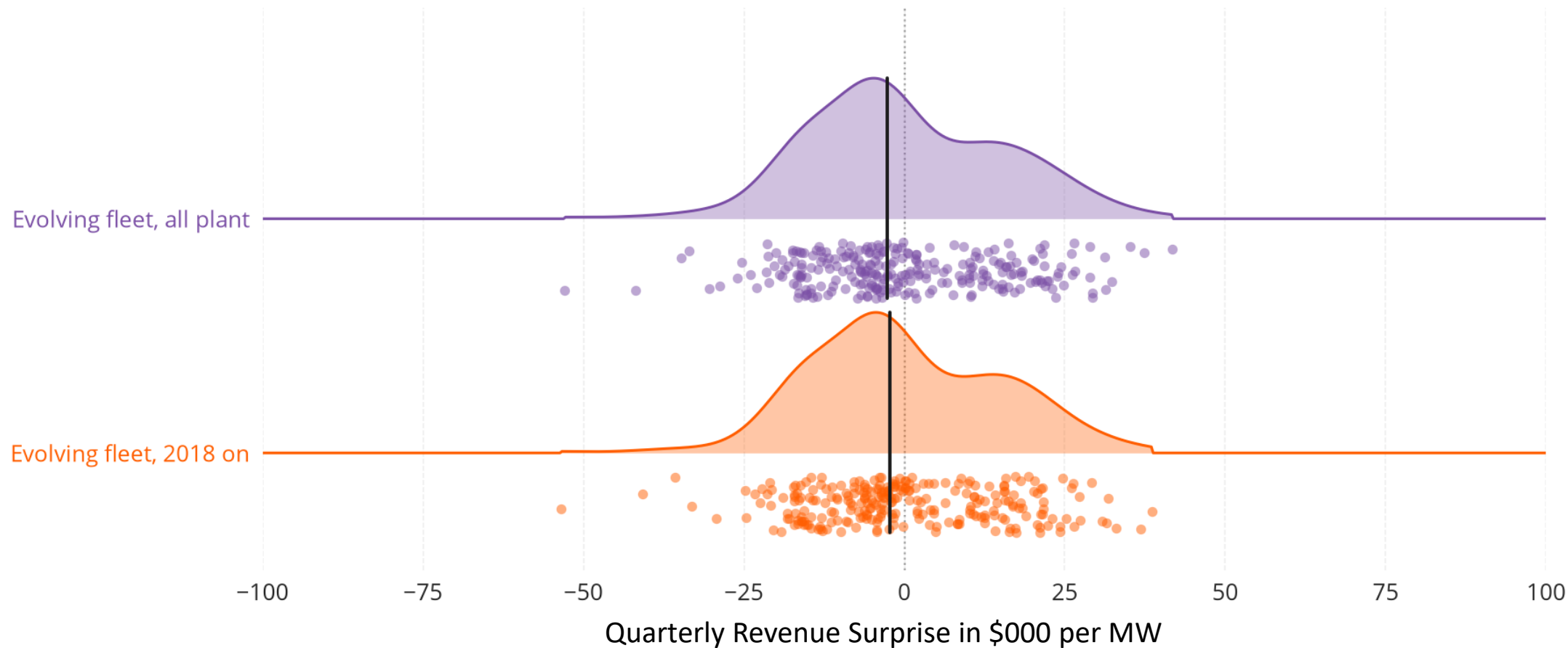
2018-on reference fleet evolves from 3 → 6 units (shortened analysis period: 4 years only)



Key Decision 3: Supporting Analysis

Older Unit Treatment - All Units vs 2018-on Only - VIC

2018-on reference fleet evolves from 11 → 22 units



Key Decision 3: Options Assessment

RAG Key (relative scoring)

Does the **Reference Fleet** contain all projects or a sample?

High risk

Medium risk

Low risk

Immaterial point of comparison

Criteria	Project Capacity > 30MW +		
	Option 1: All operational ¹ projects	Option 2: All operational ¹ projects with ESEMs	Option 3: All operational ¹ projects that reached COD from [2018] onwards
Basis Risk	Greatest pool of projects (and hence representation of different wind locations etc.)	Reference Fleet could be small and sensitive to change as more ESEM contracts are in operation.	Smaller pool of projects than Option 1 and greater likelihood of higher benchmark index.
Investability			Reduced change from retiring projects.
Transparency and verification	Transparency/verification not a material point of comparison between options.		
Standardisation / fungibility		Reference Fleet may be too small.	
Gaming / manipulation		Possible perverse outcomes depending on operation of ESEM versus non ESEM assets.	
Value / relevance	Index could be 'dragged down' by older projects with less efficient turbines.	Small pool of projects, may not reflect behaviour of actual fleet.	Index reflects resource capture from efficient turbines.
Data governance / availability	Data governance/availability not a material point of comparison between options.		

¹Further work is required to define '**operational**'. Considering commissioning, outages etc.

Key Decision 4: Reference Fleet Weighting

Are all projects within the **Reference Fleet** weighted the same?

Option 1: All projects within the Reference Fleet are weighted according to their nameplate capacity

Option 2a: Projects within the Reference Fleet are capped at [100]MW of total Fleet

Option 2b: Projects within the Reference Fleet are capped at [10] % of total Fleet

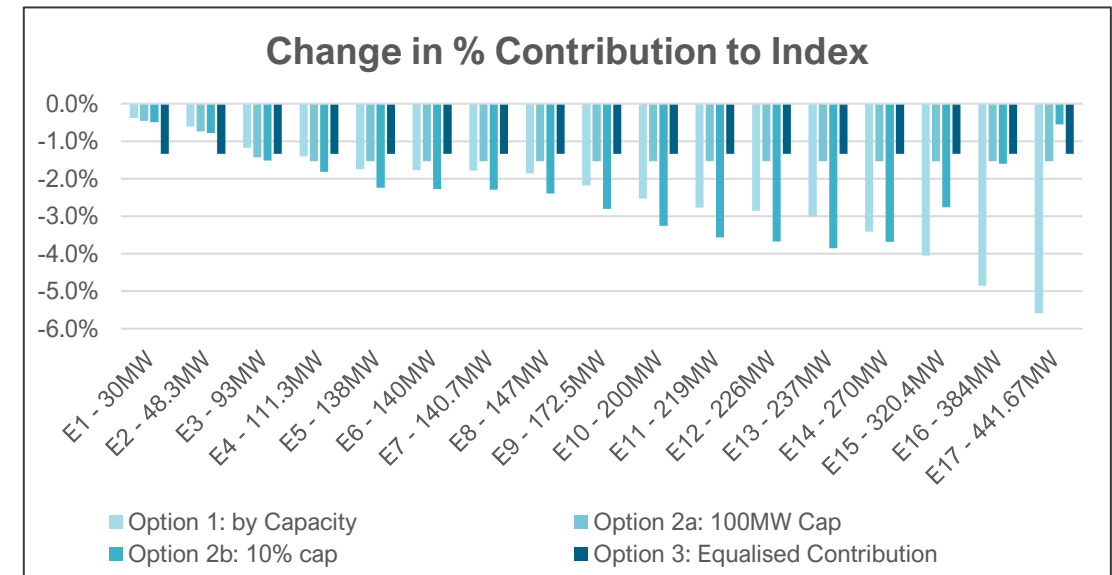
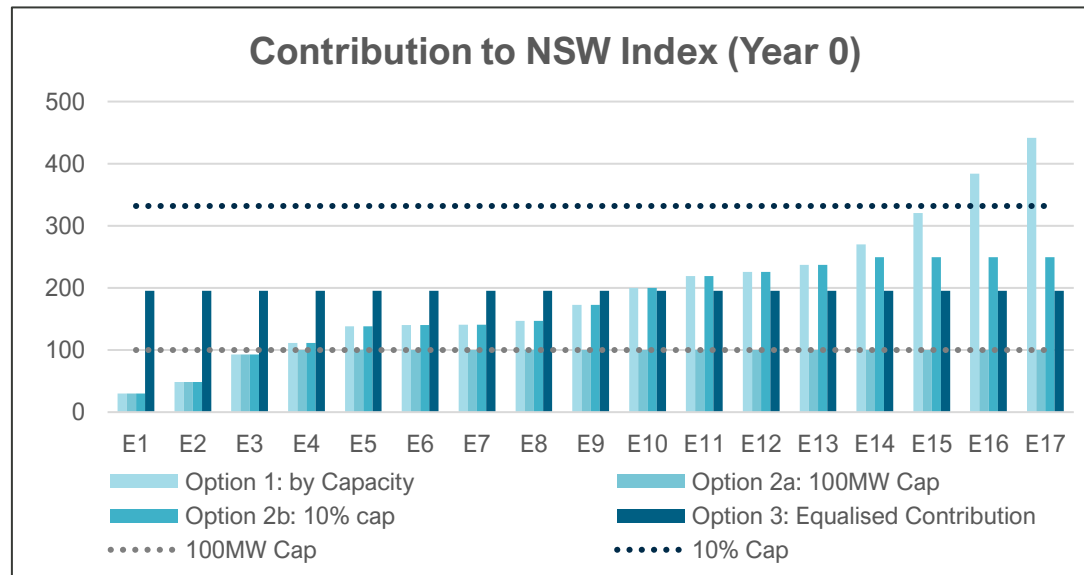
Option 3: All projects within the Reference Fleet are weighted equally (e.g. CF contribution)

Key Decision 4: Illustration

Are all projects within the **Reference Fleet** weighted the same?

We have illustrated the below four options for weighting projects within the Reference Fleet by deriving a theoretical scenario using the current NSW wind fleet (Year 0) of 3GW across 17 projects and assessing the change in contribution in Year 1 adding **2.4GW of new wind** across five new theoretical projects. The change in contribution of each project to the index is shown (below, right):

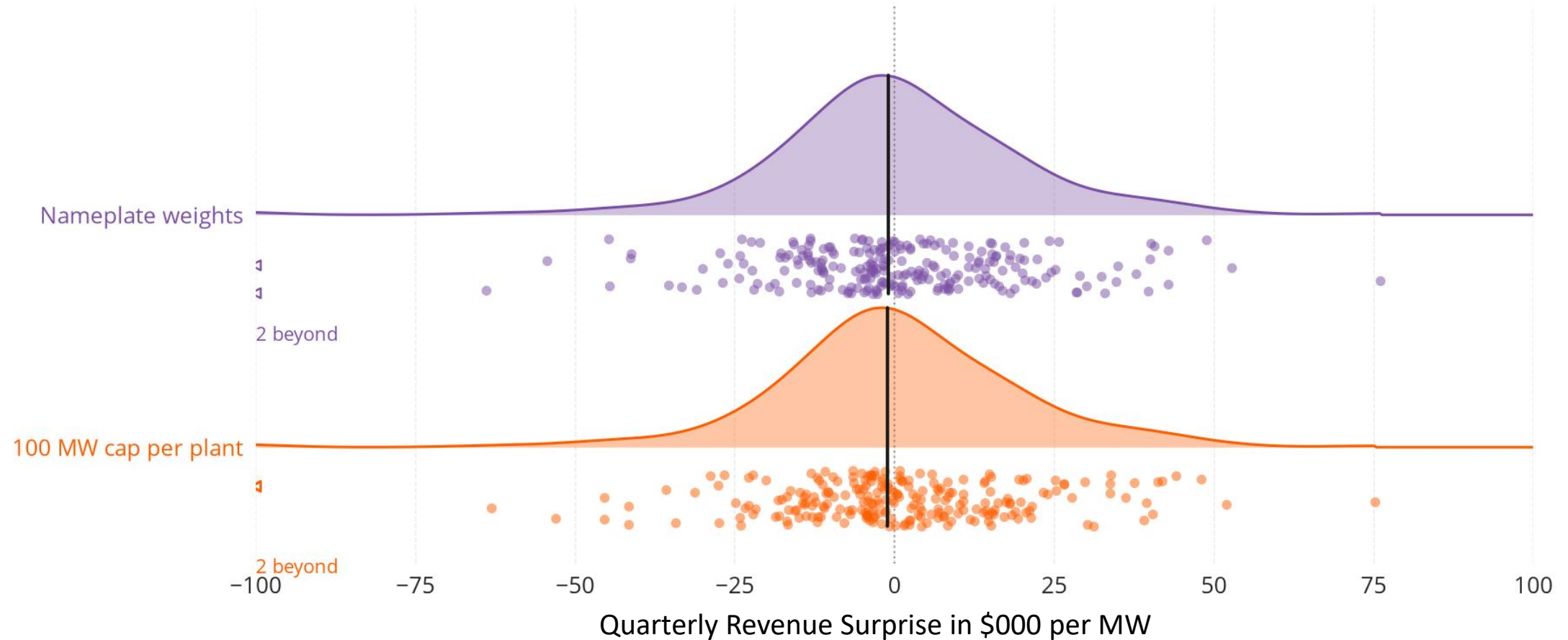
- **Option 1** results in a proportionally higher change to the existing large projects within the fleet.
- **Option 2a** (capping at 100MW) results on the lowest impact of the new projects (due to their assumed large size).
- **Option 2b** (capping at 10%) limits the impact less than Option 2a because of the total increase to Reference Fleet Capacity between years (and hence the cap increases).
- **Option 3** distributes the change across the fleet which disproportionately impacts smaller projects.



Key Decision 4: Supporting Analysis

Unit Size Cap - Uncapped vs 100 MW Cap - NSW

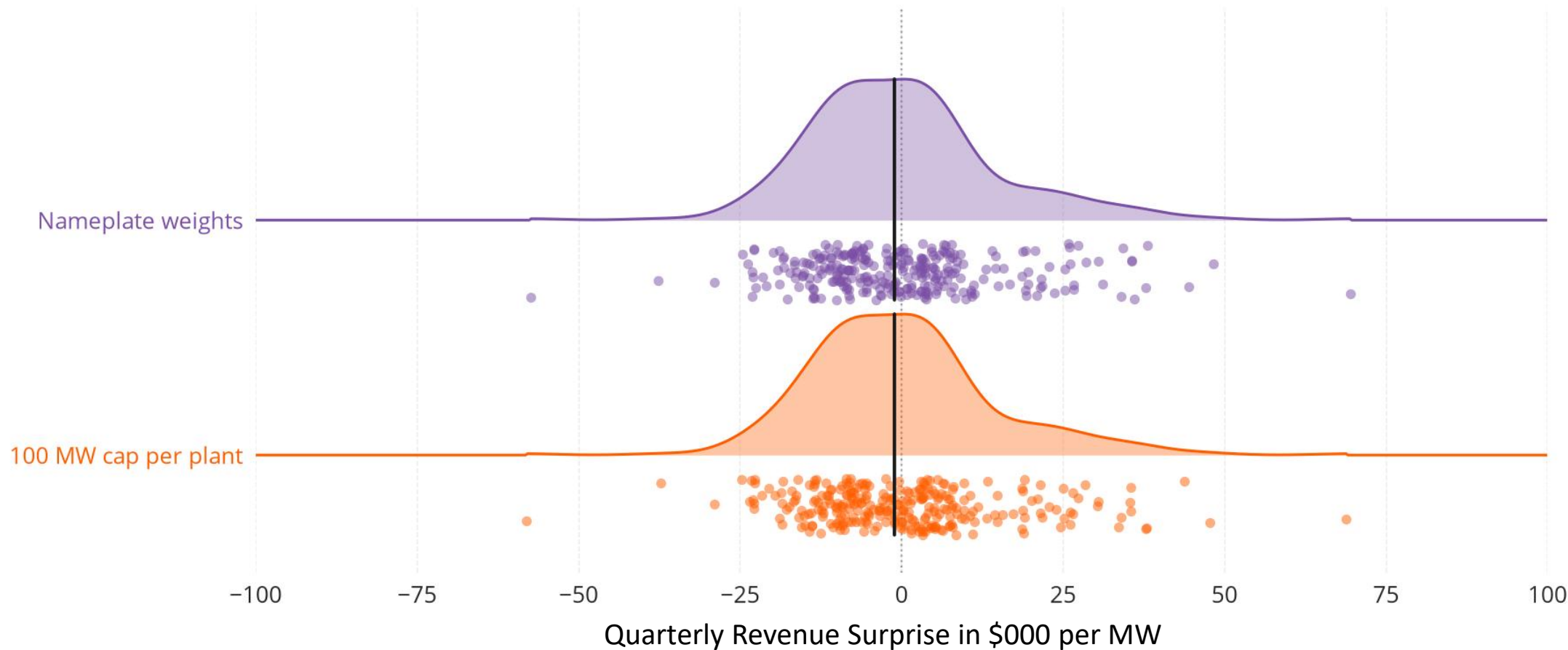
Most NSW units (**13 of 18**) are over 100 MW



Key Decision 4: Supporting Analysis

Unit Size Cap - Uncapped vs 100 MW Cap - SA

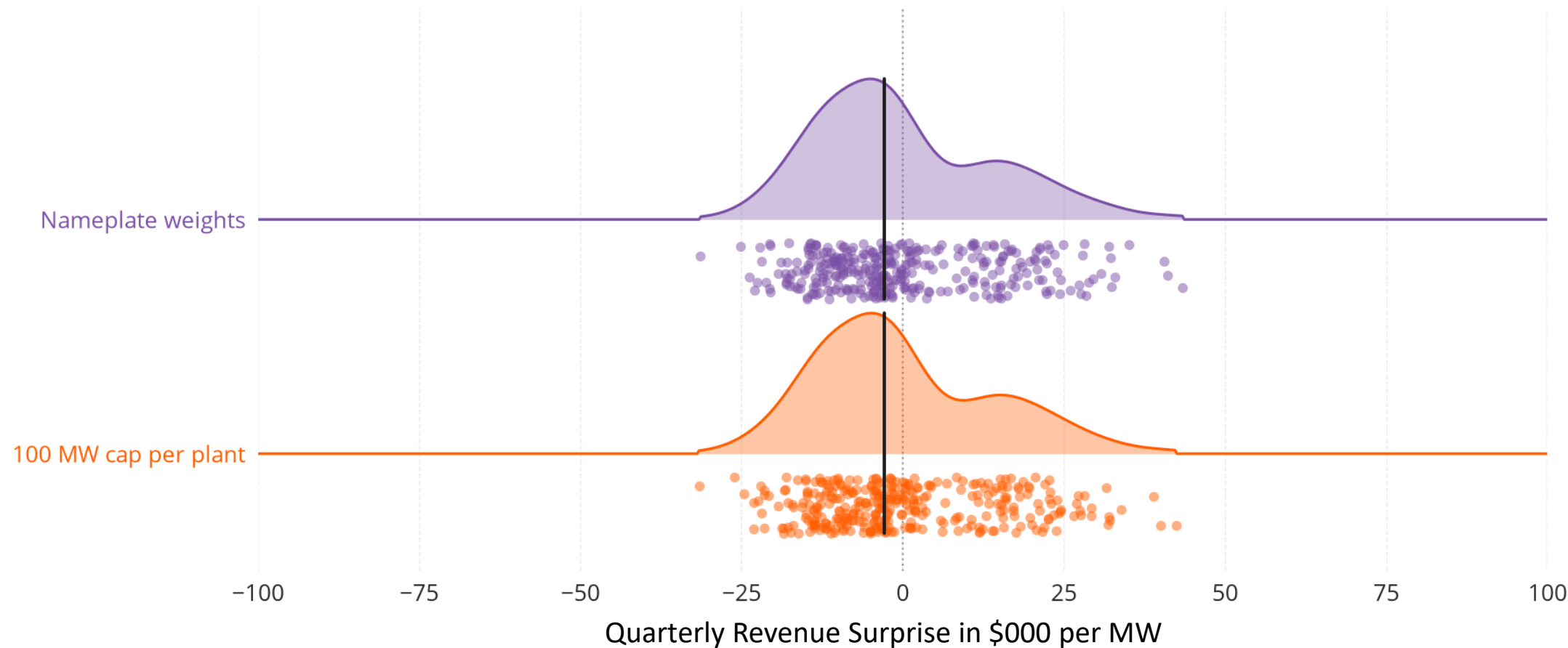
Most SA units (**13 of 20**) are over 100 MW



Key Decision 4: Supporting Analysis

Unit Size Cap - Uncapped vs 100 MW Cap - VIC

Most VIC units (**20 of 28**) are over 100 MW



Key Decision 4: Reference Fleet Weighting

Are all projects within the Reference Fleet weighted the same?				RAG Key (relative scoring)			
				High risk	Medium risk	Low risk	Immaterial point of comparison
Criteria	Option 1: All projects within the Reference Fleet are weighted according to their nameplate capacity	Option 2a: Projects within the Reference Fleet are capped at [100]MW of total Fleet	Option 2b: Projects within the Reference Fleet are capped at [10] % of total Fleet	Option 3: All projects within the Reference Fleet are weighted equally (CF contribution or similar)			
Basis Risk	All projects impact the reference equally, irrespective of their size.	If project sizes get larger, results may approach Option 3 (larger distortion).	Scales the cap with the fleet, avoiding risk that a chosen MW number does drifts from an optimal number chosen initially.	Risk of index sensitivity to large projects significantly reduced – impact of changes shared equally amongst all assets.			
Investability							
Transparency and verification	Transparency/verification not a material point of comparison between options.						
Standardisation / fungibility	All options could be used to create a standardised/fungible product.						
Gaming / manipulation		Risk of sensitivity to large projects reduced.	Risk of sensitivity to large projects significantly reduced.	Risk of sensitivity to large projects significantly reduced.			
Value / relevance	Closest reflection of Actual Fleet.	Significant adjustment from Actual Fleet.	Adjustment from actual fleet, but cap scales with evolution of fleet	Reduced relationship between Reference Fleet and Actual Fleet			
Data governance / availability	Data governance/availability not a material point of comparison between options.						

Key Decision 5: Managing Change to the Reference Fleet

Is the **Reference Fleet** frozen or does it evolve over the term of the contract?

Option 1: Reference Fleet is frozen in 'vintages'

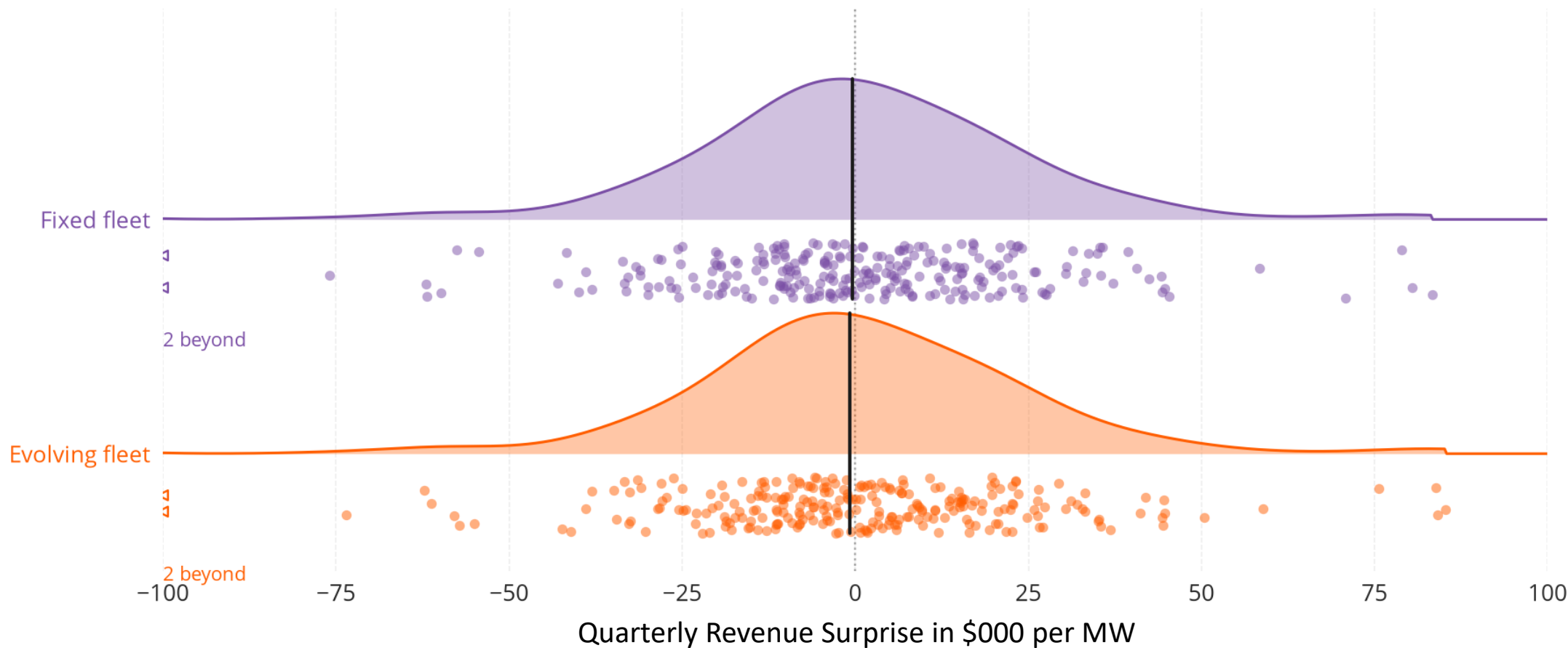
Option 2: Reference Fleet is updated annually for all agreements

Option 3: Reference Fleet is updated every [2/3] years from first ESEM contract commencement and applies to all agreements

Key Decision 5: Supporting Analysis

Fixed vs Evolving Fleet - NSW

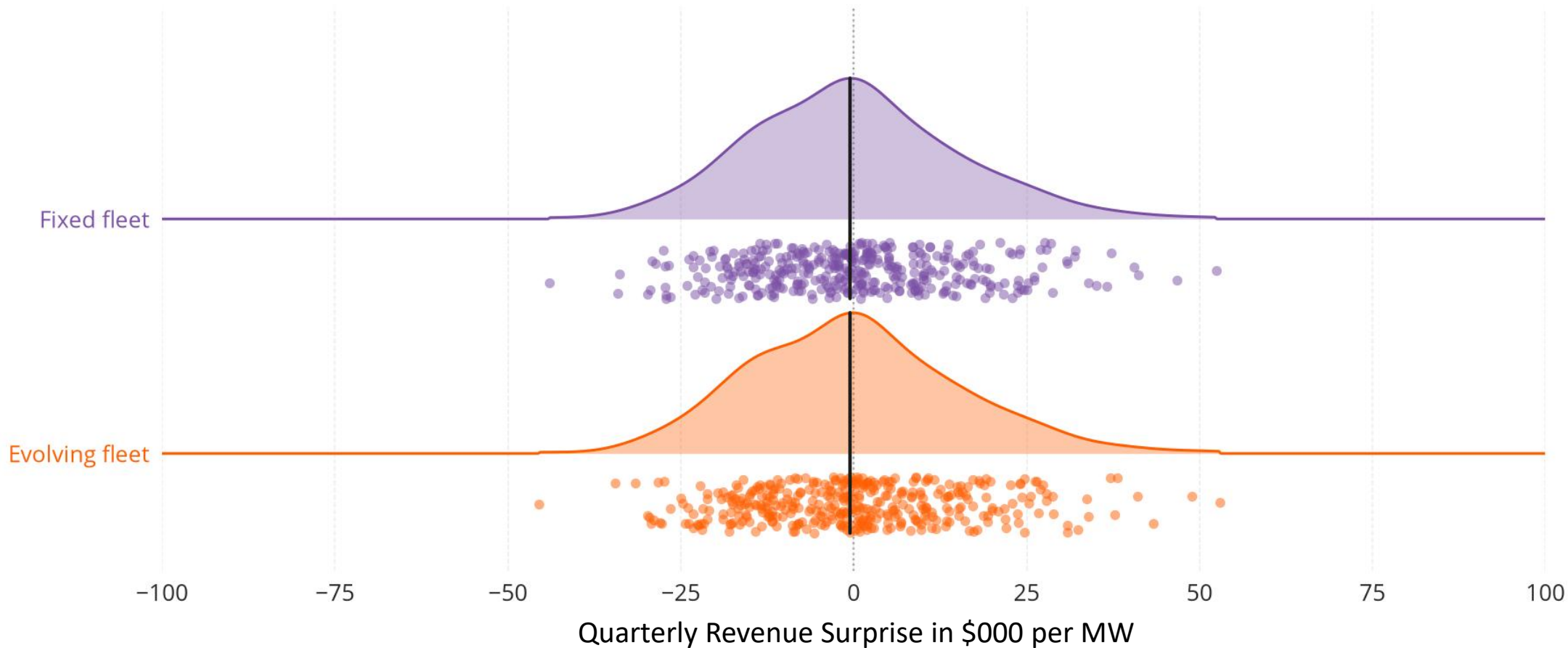
Reference fleet evolves from 11 → 18 units



Key Decision 5: Supporting Analysis

Fixed vs Evolving Fleet - SA

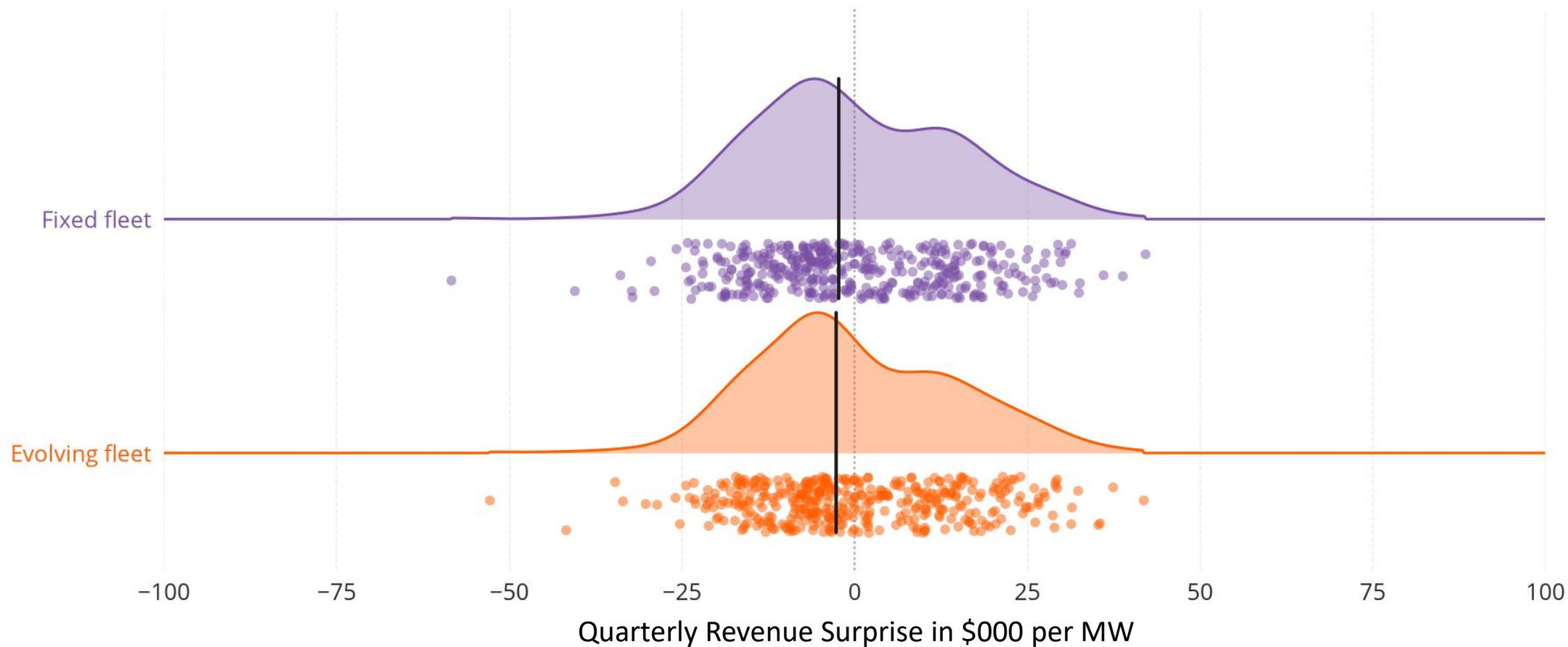
Reference fleet evolves from 16 → 20 units



Key Decision 5: Supporting Analysis

Fixed vs Evolving Fleet - VIC

Reference fleet evolves from 17 → 28 units



Key Decision 5: Managing Change to the Reference Fleet

Is the **Reference Fleet** frozen or does it evolve over the term of the contract?

RAG Key (relative scoring)

High risk

Medium risk

Low risk

Immaterial point of comparison

Criteria	Option 1: Reference Fleet is frozen in 'vintages'	Option 2: Reference Fleet is updated annually for all agreements	Option 3: Reference Fleet is updated every [2/3] years from first ESEM contract commencement and applies to all agreements
Basis Risk	Risk of basis risk depending on vintage. Known risk throughout contract.	Basis risk may change annually.	Basis risk may change every update.
Investability	Drift risk	- May present annual index volatility risk. - Seller can assess position for a period and adjust strategy as required.	- Some continuity over the 2-3 year period. - Seller can assess position for a period and adjust strategy as required.
Transparency and verification	Transparency/verification not a material point of comparison between options.		
Standardisation / fungibility	Different vintages will likely vary in value.	Product remains standardised as the same Reference Fleet applies to all agreements.	Product remains standardised as the same Reference Fleet applies to all agreements.
Gaming / manipulation	Sellers may seek to time entry based on Reference Fleet vintages		Sellers may seek to time entry based on Reference Fleet vintages
Value / relevance	Reference drifts from composition of the actual fleet over time.	Best reflects actual generation in fleet in a Calculation Period.	Reference will drift within a 2-3 year period.
Data governance / availability	Creates the need to track/store vintages.		

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4



Term-Sheet Open Items



Reference PPA – Key Open Items

Open Item	High-Level Options	Agreed Action for Consultation Product Sheets
Reference Production Index	(covered separately)	• XX
Settlement Amount when Floating Price < \$0	- No action - Where FP < \$0, NQ = 0MWh. - Where FP < \$0, FP = \$0.	• XX
Settlement Amount when Floating Price >> Strike Price	- No action - Where FP > \$[XX], NQ = 0MWh. - Where FP > \$[XX], FP = \$[XX].	• XX
Treatment of Green Certificates (REGOs/LGCs)	- Green certificates remain attached to the product. - Green certificates are retained by the Seller.	• XX

Dynamic Time of Day Block Spread Swap: Key Open Items

Open Item	High-Level Options	Agreed Action for Consultation Product Sheets
Daily Shaping Period	Covered separately	• XX
Basis for determining charge / discharge periods	Covered separately	• XX

Firming

Open Item	High-Level Options	Agreed Action for Consultation Product Sheets
(Nil)		• XX

Common Open Items

Open Item	High-Level Options	Agreed Action for Consultation Product Sheets
Calculation Period	weekly, fortnightly, monthly or quarterly	XX
Force Majeure	(addressed separately)	XX

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	- Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

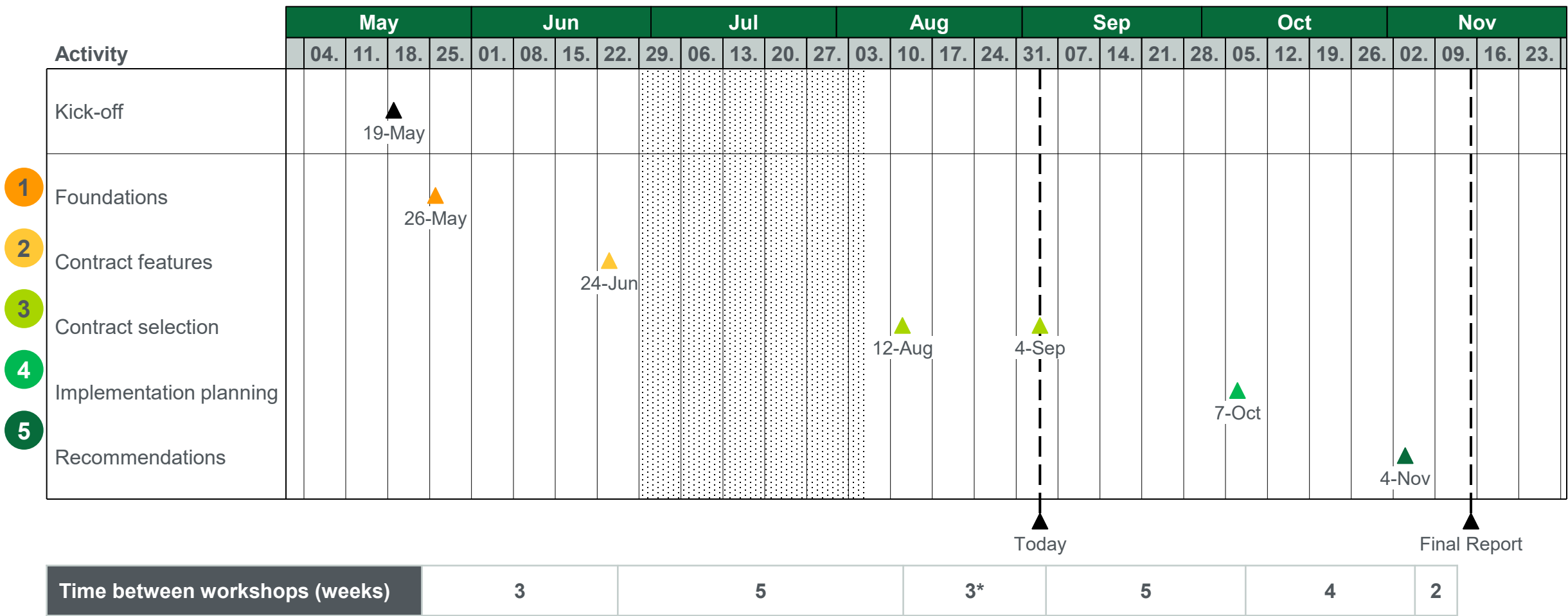
ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	- Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

ESEM Contract Co-design: Workshop 3B Agenda

Start time	Duration	Agenda item	Description
8:45-9:00am	15 mins	Arrival and set up	Arrival and set-up at L.E.K. Sydney office
9:00-9:30am	30 mins	Introduction and recap of industry engagement and feedback	- Re-cap of objectives, norms and protocols and takeaways from Workshop 3 - Review of the stakeholder feedback register, WG members to share feedback
9:30-10:00am	30 mins	Shaping – AEMO discussion on day-ahead forecasts and dispatch	AEMO to join the session to discuss day-ahead forecasts and possible implication of contract designs on dispatch behaviour
10:00-10:50am	50 mins	Shaping – block spread swap design choices	ASL presentation and discussion framed around four key design choices
10:50-11:00	10 mins	Shaping – contract evaluation	Polling on preferred contract performance against evaluation criteria
11:00-11:10am	10 mins	Morning break	
11:10am-12:30pm	80 mins	Bulk energy index design	- Context on index choice as a baseline reference, to be used as an initial position for modelling and analysis - ASL presentation on design choices for reference index with options presented, for discussion and feedback - Polling on preferred options over the course of the presentation
12:30-12:50pm	20 mins	Solar bulk energy contracts design	Discussion on how the bulk energy contracts would apply for solar projects
12:50-1:00pm	10 mins	Bulk energy – contract evaluation	Polling on preferred contract performance against evaluation criteria
1:00-1:40pm	40 mins	Lunch	
1:40-2:10pm	30 mins	Term sheets	Walk through of open items to agree an approach on open items for all three contract types
2:10-2:40pm	30 mins	Force majeure considerations	- Initial introduction and alignment on force majeure risk allocation for financial contracts - Working group feedback to gauge initial positions and alignment on risk allocation
2:40-3:00pm	20 mins	Afternoon break	
3:00-3:40pm	40 mins	Stakeholder consultation planning	- Development of stakeholder consultation questions to follow Workshop 3B - Breakout group session then plenary discussion to shape consultation questions
3:40-4:00pm	20 mins	Analysis required to finalise positions	Update on modelling work to be undertaken
4:00-4:30pm	30 mins	Wrap-up and next steps	- WG to be sent draft Webinar 2 Q&A responses, draft consultation paper and draft minutes for review next week - Outline of draft structure for Final Report - Summary of Actions and items to be completed before WS4

Timeline



Notes: * Only if additional workshop is scheduled

ESEM Contract Co-design Workshop 3B

Friday 4 September 2026, 8:45am – 5:00pm
L.E.K. Consulting
Level 26, 88 Phillip Street, Sydney 2000

For any queries please contact:

- Logistics: Ryan Wilson, ryan.wilson@dcceew.gov.au
- Workshops: Lucy Carter, l.carter@lek.com
Jeff Forrest, j.forrest@lek.com