

Electricity Contract Co-Design – Product Overview Sheets

Introduction

Context

The ESEM

The final report of the National Electricity Market (**NEM**) Wholesale Market Settings Review (**the NEM Review**), delivered in December 2025, recommended that Energy Ministers should establish an Electricity Services Entry Mechanism (**ESEM**) within the National Electricity Law (**NEL**) and National Electricity Rules (**NER**) to facilitate investment in the NEM and solve for the ‘tenor gap’ between customer contracting and new entry investment windows. Specifically, the NEM Review Final Report recommended that:

- The ESEM should be used to procure bulk energy, shaping and firming services.
- The ESEM should allow new electricity service providers to compete for standardised, fungible contracts. These contracts would offer stable income streams tied to the delivery of defined electricity services, helping providers finance new projects.
- Contracts should not be issued for the years a project is able to secure them in-market. Rather, contracts should be issued for the later years of a project’s life, allowing electricity service providers to sell their output to retailers or commercial and industrial (**C&I**) users for the period of time that the market can manage risks effectively.
- The standardised, fungible contracts should be sold back into the market at the point in time that allows retailers and C&I users to manage energy market risk, supporting retail competition.

Contract Co-Design Process

The NEM Review Final Report also recommended convening an industry-led co-design process to define a small set of core derivative contracts that could underpin trading activities and the proposed ESEM and Market Making Obligation (**MMO**) for bulk energy delivery, shaping and firming services.

The co-design process is underway with a Working Group (**WG**) of 11 industry specialists with diverse perspectives, representing a range of market participants. The WG was appointed by a Convening Group (**CG**) comprised of representatives from the Commonwealth Department of Climate Change, Energy, the Environment and Water NEM Review Implementation Taskforce (**NEMRIT**), the Australian Energy Regulator (**AER**) and AusEnergy Services Limited (**ASL**) (collectively the CG).

Current Status

The WG members were appointed in May 2026 and are aiming to deliver a final report and proposed contract term sheets by the end of October 2026:

- In **Workshop 1**, the WG defined the contract evaluation criteria and the long-list of contract structures for consideration.
- In **Workshop 2**, the WG short-listed contracts and identified key areas for further consideration.
- In **Workshop 3**, the WG considered analysis undertaken and selected preferred contract structures for each of the services.

Next Steps

The WG will continue to progress the design of the preferred contract structures and prepare to deliver its Final Report. The WG intend to invite public feedback on the identified structures in September/October 2026.

Document Overview

The purpose of this document is to provide a high-level summary of the commercial concepts underpinning the preferred contract structures preferred by the WG for each electricity service for industry's consideration prior to more formal consultation to occur in the coming months.

Important Notice

Disclaimer

This document does not constitute legal or business advice and should not be relied on as a substitute for obtaining detailed advice about the National Electricity Law, the National Electricity Rules, or any other applicable laws, regulations, procedures or policies.

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This document includes draft, high-level commercial terms prepared by ASL to represent the agreed positions of the Working Group for transparency and consultation purposes. These terms may be subsequently updated or amended.

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Bulk Energy: Regional Reference PPA

ASL has collated the below product terms as an early working draft of the Working Group's contract positions. All terms and contract positions are subject to change and further refinement. The Working Group will seek further public feedback on the contract structures in September/October 2026.

Overview

The Bulk Energy Service Agreement provides:

- the **buyer** exposure to the index performance of a reference fleet of renewable projects ('Reference Production Index');
- the **seller** with long-term, contracted revenue at a Fixed Price for volumes calculated using the Reference Production Index.

Concept

The Bulk Energy Service Agreement aims to facilitate the entry of technologies that are capable of generating zero emissions electricity, including wind and solar. The agreement is based on a swap structure. It works by fixing the price received by the Seller per MWh of output, where the volume is derived based on the Reference Production Index. Compared to a run of plant PPA, the Reference Production Index improves fungibility and also reduces the volume risk that buyers are exposed to from individual projects, while retaining incentives for the sellers to outperform the reference fleet.

Core commercial terms

Key Term	Description
Overview	
Seller	XX <i>Note: The Seller is intended to be the owner of the project used to physically defend the agreement, however, the swap may be later offered back to the market by the ESEM Administrator.</i>
Buyer	XX <i>Note: the Buyer is intended to be the ESEM Administrator at first instance, however, the swap may be offered back to the market by the ESEM Administrator.</i>
First Calculation Period Start Date	XX/XX/XX <i>Note: the First Calculation Period is a fixed date and is intended to be a period of XX years, following COD. It is anticipated that the Seller obtains contracts from the OTC market as required, during the period between COD and the First Calculation Period.</i>
Contract Term	The term of the ' Bulk Energy Service Agreement ' is XX years, commencing from the First Calculation Period Start Date. Notes: - Tender design parameters will confirm whether the Seller must offer for a fixed number of years or whether this is a bid parameter. - The Contract is <u>not</u> designed as a series of options. If the Seller wishes to 'opt-out' for a series of Calculation Periods, it can 'buy back' its position from the ESEM Administrator or secondary markets.
NEM Region	[SA/NSW/VIC/QLD/TAS]
Fixed Price (\$/MWh)	\$XX/MWh Notes: The Fixed Price (\$/MWh) is the agreed amount that the Seller will receive for the Notional Quantity.

	Tender design parameters will confirm whether the Fixed Price will be entered as a fixed value or a schedule of prices e.g. a single price per year during the agreement.
Floating Price (\$/MWh)	The Spot Price (in \$/MWh) set by AEMO for a Trading Interval at the Regional Reference Node.
Contract Capacity (MW)	XX MW of [wind/solar] capacity within the NEM Region. Note: Tender design will confirm whether the Contract Capacity be entered as a fixed MW or an annual schedule of Contract Capacity.
Settlement	
Calculation Period	The Calculation Period will be aligned to the AEMO NEM settlement calendar. Notes: - The WG are considering the most appropriate duration of Calculation Periods. Options include weekly, fortnightly, monthly or quarterly. - The contract start date would be pro-rated where it commences within the relevant Calculation Period.
Reference Production Index	$Reference\ Production\ Index = \frac{Reference\ Power\ Output}{Reference\ Power\ Capacity}$, where: - 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. The Reference Production Index will be a number between 0 and 1 will be published by XX on XX at XX. Note: The WG is considering approaches to calculating the Reference Production Index in further detail in the upcoming workshops including (amongst other things): - The base index resource used to determine the Reference Power Output (e.g. wind speed data, actual MWh exported, AEMO's UIGF, a synthetic generation output) and hence whether the index will include or exclude losses and curtailment. - The composition of the Reference Fleet and whether the Reference Fleet is static or adjusts for new generation over the life of the agreement. - Data accuracy and governance considerations of various approaches.
Notional Quantity (MWh)	The quantity of electricity (MWh) that applies for a Trading Interval. $Notional\ Quantity = Contract\ Capacity \times \frac{1}{12} \times Reference\ Production\ Index$
Settlement Amount (\$)	$Settlement\ Amount = \sum_1^n Notional\ Quantity \times (Floating\ Price - Fixed\ Price)$, where - n is the number of Trading Intervals in the Calculation Period. Notes: - Where the Settlement Amount is negative (reflecting a low-price scenario), the Buyer must pay the absolute value of the Settlement Amount to the Seller. - Where the Settlement Amount is positive (reflecting a high-price scenario), the Seller must pay the value of the Settlement Amount to the Buyer. - The WG is considering its position on the treatment of Trading Intervals where: - The Floating Price is < \$0/MWh (e.g. price floor, volume knock-out) - The Floating Price is above an agreed amount (e.g. \$300/\$600).
Treatment of green certificates	Notes: The WG is considering its position on whether green certificates (REGO's/LGC's) should be included as part of the Bulk Energy Service Agreement or able to be offered by Sellers under separate forward contracts.

Other terms

Key Term	Description
Physical Performance Obligations	No physical performance obligations will apply. <i>Note: As this is a financial instrument, physical performance obligations do not apply. See comments below on Force Majeure.</i>
Contract Term Preconditions	No contractual preconditions to the start of the Contract Term. <i>Note: Whilst pre-conditions are not intended to be within the scope of the agreement, it is envisaged that there may be the need for a separate Project Development Agreement between the ESEMA and Seller prior to Commercial Operations Date, subject to further consideration by the NEM Review Implementation Taskforce.</i>
Force Majeure	<i>Note: The WG and the NEM Review Implementation Review Taskforce are considering how the ESEM can most efficiently manage Force Majeure risk (for limited events) for Sellers.</i> <i>The agreement is not envisaged to include specific carve outs for physical Force Majeure events, aligning with the contract attributes outlined in the WG's Terms of Reference.</i> <i>The Seller will be responsible for managing all other risks associated with the project underlying the agreement.</i>
Security	<i>Note: It is envisaged that the Buyer will enter into a template Master Agreement (e.g. ISDA Master Agreement) with each Seller on identical terms. This Master Agreement is anticipated to set out key terms including security, termination, change in law events, market suspension and payment terms that will be consistent for all ESEM Agreements and, where relevant, drawing on the Australian Electricity Addendum published in the AFMA Guide to Australian OTC Transactions as is frequently used in Australia for OTC agreements agreed under an ISDA Master Agreement</i>
Termination	
Change in law	
Market suspension	
Payment Terms	

Risk allocation and incentives summary

The below table provides a summary of how the agreement shares risks between the buyer and seller.

Risk	Buyer	Seller
Price risk	The Buyer is exposed to the difference between the Fixed Price and the Floating Price.	The Seller receives the Fixed Price based on the Notional Quantity derived from the of the Reference Production Index.
Volume risk	The Buyer receives a hedge from the Reference Production Index of the fleet, but is still exposed to systemic volume risk.	The Seller does not have a fixed volume obligation, but is exposed to matching the Notional Quantity derived from the of the Reference Production Index.
MLF/Constraint Risk	The Notional Quantity is based off the Reference Production Index and hence the buyer is not exposed to MLF/constraint risk for the Seller's project.	The Seller holds the risk of matching the Notional Quantity derived from the Reference Production Index, including MLF and constraint risks.
Shape	The Buyer holds the shape risk of the Reference Fleet.	The Seller is exposed to differences between the Reference Fleet and project shape.

Risk	Buyer	Seller
Long term contract value risk	The Buyer holds the risk of long-term value of the agreement.	The Seller receives a known Fixed Price for the period of the agreement.
Force Majeure	Note: The WG and the NEM Review Implementation Review Taskforce are considering how the ESEM can most efficiently manage Force Majeure risk (for limited events) for Sellers. The agreement is not envisaged to include specific carve outs for physical Force Majeure events, aligning with the required contract attributes outlined in the WG's Terms of Reference. The Seller will be responsible for managing all other risks associated with the project underlying the agreement.	
Negative prices	Note: The WG is considering its position on the treatment of Trading Intervals where the Floating Price is less than \$0/MWh.	
Market intervention / suspension	Note: It is envisaged that the Master Agreement will contain provisions to appropriately manage scenarios for Trading Intervals where the underlying index(es) are unavailable (as is typical for ISDA/AFMA standard electricity provisions for PPAs in the NEM).	
Regulator/market rule change risk	Note: It is envisaged that the Master Agreement will contain provisions to appropriately manage regulatory / market rule changes over the duration of the agreement (as is typical for ISDA/AFMA standard electricity provisions for PPAs in the NEM).	

Settlement Examples

The below tables provide illustrative examples of settlement calculations for a single Trading Interval. In Examples 2 and 4, the Reference Production Index is reduced, demonstrating the impact of variable reference output on settlement. In Examples 3 and 4 the Floating Spot price is increased, demonstrating the impact of high spot prices on settlement.

Plant type	Wind / solar farm	Plant Capacity (B)	120MW
Calculation Period	5 minutes (e.g. 1 trading interval)	Contract Capacity (C)	120MW (e.g. 100% contracted)
Fixed Price (A)	\$100/MWh		

Example	Floating (spot) Price (\$/MWh) (D)	Reference Fleet	Spot Revenues		Agreement Settlement		Net Seller Position
		Reference Production Index (E)	Seller Generation Volume (MWh) (F)	Spot Revenue (\$) (G) = (D) x (F)	Notional Quantity (H) = (E) x (C) / 12	Settlement Amount (I) = (H) x ((D) - (A))	Net Seller Position (J) = (G) - (I)
1	\$20	0.75	5.0	\$100	7.5	-\$600	\$700
2	\$20	0.25	5.0	\$100	2.5	-\$200	\$300
3	\$200	0.75	5.0	\$1,000	7.5	\$750	\$250
4	\$200	0.25	5.0	\$1,000	2.5	\$250	\$750

Example	Floating (spot) Price (\$/MWh) (D)	Reference Fleet	Spot Charges		Agreement Settlement		Net Buyer Position
		Reference Production Index (E)	Buyer Consumption (MWh) (F)	Spot Charges (\$) (G) = - (D)x(F)	Notional Quantity (H) = (E) x(C)/12	Settlement Amount (I) = (H) x ((D)-(A))	Net Buyer Position (J) = (G) + (I)
1	\$20	0.75	5.0	-\$100	7.5	-\$600	-\$700
2	\$20	0.25	5.0	-\$100	2.5	-\$200	-\$300
3	\$200	0.75	5.0	-\$1,000	7.5	\$750	-\$250
4	\$200	0.25	5.0	-\$1,000	2.5	\$250	-\$750

Dynamic Time of Day Block Spread Swap

ASL has collated the below product terms as an early working draft of the Working Group's contract positions. All terms and contract positions are subject to change and further refinement. The Working Group will seek further public feedback on the contract structures in September/October 2026.

Overview

The Shaping Service Agreement swap provides:

- **A buyer** with reduced exposure to daily wholesale price volatility in exchange for a fixed premium. The buyer receives a hedge against the high/low in wholesale market.
- **A seller** with long-term, stable cash-flows from premiums.

Concept

The Shaping Service Agreement aims to facilitate the entry of technologies that are capable of matching the intraday profiles of supply and demand. This could involve technologies that can provide a range of durations (e.g. 2,4,6,8 hrs). The dynamic, time of day block spread swap uses an ex-ante, dynamic approach to defining the forecast optimal periods for discharge and charge ahead of time, with the actual block spread for a day calculated ex-post (based on the ex-ante nomination blocks). This approach promotes existing market signals and a method of nominating blocks that is flexible and retains market signals. Sellers retain the incentive to dispatch and outperform the daily spread in real time, based on their own risk appetite and debt financing terms.

Core commercial terms

Key Term	Description
Overview	
Seller	XX <i>Note: The Seller is intended to be the owner of the project used to physically defend the agreement, however, the position may be later offered back to the market by the ESEM Administrator.</i>
Buyer	XX <i>Note: the Buyer is intended to be the ESEM Administrator at first instance, however, the swap may be offered back to the market by the ESEM Administrator.</i>
First Calculation Period Start Date	XX/XX/XX <i>Note: the First Calculation Period is a fixed date and is intended to be a period of XX years, following COD. During the period between COD and the First Calculation Period, it is anticipated that the Seller obtains contracts from the OTC market as required.</i>
Contract Term	The term of the 'Shaping Service Agreement' is XX years, commencing from the First Calculation Period Start Date. Notes: • Tender design parameters will confirm whether the Seller must offer for a fixed number of years or whether this is a bid parameter. • The Contract is <u>not</u> designed as a series of options. If the Seller wishes to 'opt-out' for a series of Calculation Periods, it can 'buy back' its position from the ESEM Administrator or secondary markets.
NEM Region	[SA/NSW/VIC/QLD/TAS]

Key Term	Description
Shaping Duration	XX hours <i>Note: The duration of the charge/discharge periods. e.g. 2 hrs means both Charge and Discharge Periods are 2 hrs.</i>
Fixed Spread (\$/MWh)	\$XX/MWh <i>Notes:</i> - The Fixed Spread represents the agreed difference (\$/MWh) between the average Floating Price in the nominated Charge Period(s) and Discharge Period(s). - Tender design parameters will confirm whether the Fixed Spread will be entered as a fixed value or a schedule of prices e.g. a single price per year during the agreement.
Contract Capacity (MW)	XX MW <i>Note: Tender design will confirm whether the Contract Capacity be entered as a fixed MW or an annual schedule of Contract Capacity.</i>
Settlement	
Calculation Period	The Calculation Period will be aligned to the AEMO NEM settlement calendar. <i>Notes:</i> - The WG are considering the most appropriate duration of Calculation Periods. Options include weekly, fortnightly, monthly or quarterly. - As an example, a weekly Calculation Period would be 7 Daily Shaping Periods. Other options could be fortnightly, monthly or quarterly.
Daily Shaping Period	A Daily Shaping Period commences on XX:XX and finishes on XX:XX . <i>Note: The WG is considering approaches to defining the Daily Shaping Period (e.g. 12:00-11:59, 16:00 – 15:59, 04:00 – 03:59) as part of the detailed design of the proposed dynamic approach to defining the charge/discharge blocks.</i>
Charge Period(s)	The defined period(s) for a Daily Shaping Period as published by XX on XX at XX:XX on XX . <i>Note: The WG is considering the approach for how and when the Charge Period(s) will be dynamically set, including:</i> - The approach for defining the Charge Period(s) (e.g. pre-dispatch prices, residual demand (forecast operational demand minus forecast variable renewable energy)) - When the Charge Period(s) should be calculated and published, balancing providing the Seller with sufficient notice and the accuracy of the forecast. - Whether the Charge Period(s) should be contiguous or non-contiguous (e.g. a single 4hr block vs. 4 x 1 hr blocks). - How state of charge (SoC) should be considered including: - Whether the SoC should assumed to be 0% or 100% at the commencement of a Daily Shaping Period. - Minimum time allowances for charging before Discharge Period(s), including across successive Daily Shaping Periods. - A fallback mechanism in cases where the Charge Period(s) are not published.
Discharge Period(s)	The defined period(s) for a Daily Shaping Period as published by XX on XX at XX:XX on XX . <i>Note: The WG is considering the approach for how and when the Discharge Period(s) will be dynamically set, including:</i> - The approach for defining the Discharge Period(s) (e.g. pre-dispatch prices, residual demand) - When the Discharge Period(s) should be calculated and published, balancing providing the Seller with sufficient notice and the accuracy of the forecast. - Whether the Discharge Period(s) should be contiguous or non-contiguous (e.g. a single 4 hr block vs. 4 x 1 hr blocks).

Key Term	Description
	- How state of charge (SoC) should be considered including: - Whether the SoC should assumed to be 0% or 100% at the commencement of a Daily Shaping Period. - Minimum time allowances for charging before Discharge Period(s), including across successive Daily Shaping Periods. - A fallback mechanism in cases where the Discharge Period(s) are not published.
Floating Price (\$/MWh)	The Spot Price (in \$/MWh) set by AEMO for a Trading Interval at the Regional Reference Node.
Realised Spread (\$/MWh)	<i>Realised Spread = Discharge Price – Charge Price</i>, where: - Discharge Price (\$/MWh) is the average Floating Price during the defined Discharge Period(s) for a Daily Shaping Period; - Charge Price (\$/MWh) is the average Floating Price during the defined Charge Period(s) for a Daily Shaping Period.
Notional Quantity (MWh)	The quantity of electricity (MWh) that applies for a Daily Shaping Period. <i>Notional Quantity = Contract Capacity × Shaping Duration</i>
Settlement Amount (\$)	<i>Settlement Amount = Notional Quantity × $\sum_1^n$ (Realised Spread – Fixed Spread)</i>, where: - n is the number of Daily Shaping Periods in the Calculation Period. Notes: - Where the Settlement Amount is negative (reflecting a low realised spread scenario), the Buyer must pay the absolute Settlement Amount to the Seller; - Where the Settlement Amount is positive (reflecting a high realised spread scenario), the Seller must pay the Settlement Amount to the Buyer.

Other key terms

Key Term	Description
Physical Performance Obligations	No physical performance obligations will apply. Note: As this is a financial instrument, physical performance obligations do not apply. See below on Force Majeure.
Contract Term Preconditions	No contractual preconditions apply to the start of the Contract Term. Note: Whilst pre-conditions are not intended to be within the scope of the agreement, it is envisaged that there may be the need for a separate Project Development Agreement between the ESEMA and Seller prior to Commercial Operations Date, subject to further consideration by the NEM Review Implementation Taskforce.
Force Majeure	Note: The WG and the NEM Review Implementation Review Taskforce are considering how the ESEM can most efficiently manage Force Majeure risk (for limited events) for Sellers. The agreement is not envisaged to include specific carve outs for physical Force Majeure events, aligning with the contract attributes outlined in the WG's Terms of Reference. The Seller will be responsible for managing all other risks associated with the project underlying the agreement.
Security	Note: It is envisaged that the Buyer will enter into a template Master Agreement (e.g. ISDA Master Agreement) with each Seller on identical terms. This Master Agreement is anticipated to set out key terms including security, termination, change in law events, market suspension and payment terms that will be consistent for all ESEM Agreements and, where relevant, drawing on the Australian
Termination	
Change of law	

Key Term	Description
Market suspension	<i>Electricity Addendum published in the AFMA Guide to Australian OTC Transactions as is frequently used in Australia for OTC agreements agreed under an ISDA Master Agreement.</i>
Payment Terms	

Risk allocation and incentives

Risk	Buyer	Seller
Price risk	The Buyer is exposed to the difference between the Realised Spread and the Fixed Spread.	The Seller receives the Fixed Spread.
Volume risk	The Notional Quantity is fixed and hence the Buyer is not exposed to volume risk.	The Seller holds the risk of defending the agreed Notional Quantity, including curtailment, MLF, round trip efficiency and degradation risks.
Shape	The Buyer is exposed to the alignment between the nominated Charge Period(s) and Discharge Period(s) and the actual realised high/low periods for each Daily Shaping Period.	The Seller holds the risk of defending the Charge Period(s) and Discharge Period(s).
MLF/Constraint Risk	The Notional Quantity is fixed and hence the Buyer is not exposed to volume risk.	The Seller holds the risk of defending the agreed Notional Quantity, including MLF and constraint risks.
Long term contract value risk	The Buyer holds the risk of long-term value of the agreement.	The Seller receives a known Fixed Price for the period of the agreement.
Force Majeure	Note: As noted above, the WG and the NEM Review Implementation Review Taskforce are considering how the ESEM can most efficiently manage Force Majeure risk (for limited events) for the Seller. The Seller is responsible for managing other risks associated with the project underlying the agreement.	
Market intervention / suspension	Note: It is envisaged that the Master Agreement will contain provisions to appropriately manage scenarios for Trading Intervals where the underlying index(es) are unavailable (as is typical for ISDA/AFMA standard electricity provisions for PPAs in the NEM).	
Regulator/market rule change risk	Note: It is envisaged that the Master Agreement will contain provisions to appropriately manage regulatory / market rule changes over the duration of the agreement (as is typical for ISDA/AFMA standard electricity provisions for PPAs in the NEM).	

Settlement Examples

The below tables provide illustrative examples of settlement calculations for a Daily Shaping Period. In Examples 2 and 4, the Discharge Price is increased, demonstrating the impact of a large daily spread on settlement. In Examples 3 and 4 the Seller Daily Volume is less than Notional Quantity, demonstrating the impact of a Seller not defending its spread on settlement (noting revenues earned outside of the charge/discharge periods are not considered).

Plant type and location	BESS	Fixed Spread (C)	\$120/MWh
Calculation Period	1 Day (1 Daily Shaping Period)	Plant Capacity (D)	100MW
Shaping Duration (hours) (A)	4	Plant Storage (E)	4 hrs
Contract Capacity (B)	100MW (e.g. 100% contracted)		

Example	Spot Market			Spot Revenues		Agreement Settlement		Net Seller Position
	Charge Price (F)	Discharge Price (G)	Realised Spread (H) = (G) - (F)	Seller Daily Cycle Volume (MWh) (I)	Spot Revenue (\$) (J) = (I) x (H)	Notional Quantity (K) = (A) x (B)	Settlement Amount (L) = (K) x ((H) - (C))	Net Seller Position (M) = (J) - (L)
1	\$50	\$100	\$50	400	\$20,000	400	-\$28,000	\$48,000
2	\$50	\$200	\$150	400	\$60,000	400	\$12,000	\$48,000
3	\$50	\$100	\$50	100	\$5,000	400	-\$28,000	\$33,000
4	\$50	\$200	\$150	100	\$15,000	400	\$12,000	\$3,000

Example	Spot Market			Spot Charges		Agreement Settlement		Net Buyer Position
	Charge Price (F)	Discharge Price (G)	Realised Spread (H) = (G) - (F)	Buyer Daily Volume (MWh) (I)	Average Spot Charges (\$) (J) = - (I) x (H)	Notional Quantity (K) = (A) x (B)	Settlement Amount (L) = (K) x ((H) - (C))	Net Buyer Position (M) = (J) + (L)
1	\$50	\$100	\$50	400	-\$20,000	400	-\$28,000	-\$48,000
2	\$50	\$200	\$150	400	-\$60,000	400	\$12,000	-\$48,000
3	\$50	\$100	\$50	400	-\$20,000	400	-\$28,000	-\$48,000
4	\$50	\$200	\$150	400	-\$60,000	400	\$12,000	-\$48,000

Firming: \$600 Cap Contract

ASL has collated the below product terms as an early working draft of the Working Group's contract positions. All terms and contract positions are subject to change and further refinement. The Working Group will seek further public feedback on the contract structures in September/October 2026.

Overview

The Firming Service Agreement provides:

- A **buyer** with reduced exposure to volatility in exchange for a fixed premium.
- A **seller** with long-term, stable cash-flows from premiums, in return for capping wholesale costs for the buyer during volatile events.

Concept

The Firming Service Agreement aims to facilitate the entry of dispatchable technologies that are capable of being dispatched continuously for the time it takes to reach the cumulative price threshold. At the market price cap, this would require technologies that can be dispatched continuously at their contracted output for approximately 8 hours¹. To achieve this, the Firming Service Agreement converts uncertain but significant wholesale price exposure from volatile events into a consistent cash-flow, providing increased certainty for buyer and seller. Setting of the strike price facilitates the amount of wholesale exposure that buyer and seller remain exposed to.

Core commercial terms

Key Term	Description
Overview	
Seller	XX <i>Note: The Seller is intended to be the owner of the project used to physically defend the agreement, however, the position may be later offered back to the market by the ESEM Administrator.</i>
Buyer	XX <i>Note: the Buyer is intended to be the ESEM Administrator at first instance, however, the swap may be offered back to the market by the ESEM Administrator.</i>
First Calculation Period Start Date	XX/XX/XX <i>Note: the First Calculation Period is a fixed date and is intended to be a period of XX years, following COD. It is anticipated that the Seller obtains contracts from the OTC market as required, during the period between COD and the First Calculation Period.</i>
Contract Term	The term of the ' Firming Service Agreement ' is XX years, commencing from the First Calculation Period Start Date. Notes: • <i>Tender design parameters will confirm whether the Seller must offer for a fixed number of years or whether this is a bid parameter.</i>

¹ The NEM Review Final Report also contemplated a possible need for 'special tenders', particularly for technologies facing barriers beyond the tenor gap. These special tenders are not within the Terms of Reference of the Working Group.

Key Term	Description
	The Contract is not designed as a series of options. If the Seller wishes to 'opt-out' for a series of Calculation Periods, it can 'buy back' its position from the ESEM Administrator or secondary markets.
NEM Region	[SA/NSW/VIC/QLD/TAS]
Floating Price (\$/MWh)	The Spot Price (in \$/MWh) set by AEMO for a Trading Interval at the Regional Reference Node.
Strike Price (\$/MWh)	\$600/MWh Note: The Strike Price is the Floating Price (\$/MWh) above which Cap Repayments occur.
Contract Capacity (MW)	XX MW Note: Tender design will confirm whether the Contract Capacity be entered as a fixed MW or an annual schedule of Contract Capacity.
Contract Price (\$/MW)	\$XX/MW Notes: - The Contract Price (\$/MW) is the agreed amount that the Seller will receive for the Notional Quantity. - Tender design parameters will confirm whether the Contract Price will be entered as a fixed value or a schedule of prices e.g. a single price per year during the agreement.
Settlement	
Calculation Period	The Calculation Period will be aligned to the AEMO NEM settlement calendar. Notes: - The WG are considering the most appropriate duration of Calculation Periods. - Options include weekly, fortnightly, monthly or quarterly. - The hours are based on the Wholesale Electricity Pool Market base load period from 00:00 hours Monday to 24:00 hours Sunday, for the number of weeks in the Calculation Period. Other options could be fortnightly, monthly or quarterly.
Notional Quantity (MWh)	The quantity of electricity (MWh) that applies for the Calculation Period. $\text{Notional Quantity} = \text{Contract Capacity} \times \text{Calculation Period}$
Contract Premium (\$)	$\text{Contract Premium} = \text{Notional Quantity} \times \text{Contract Price}$ The Buyer must pay the Seller the Contract Premium for each Calculation Period.
Cap Repayment Amount (\$)	$\text{Cap Repayment Amount} = \text{Notional Quantity} \times \frac{(A - (\text{Strike Price} \times B))}{C}$ Price, where - A = the sum of all Floating Prices for the Region in the Calculation Period greater than the Strike Price (\$/MWh). - B = the total number of trading intervals in the Calculation Period where the Floating Price for the Region was greater than the Strike Price. - C = the total number of trading intervals for the Region in the Calculation Period The Seller must pay the Buyer the Cap Repayment Amount for each Calculation Period.

Other key terms

Key Term	Description
Physical Performance Obligations	No physical performance obligations will apply. See below on Force Majeure. <i>Note: As this is a financial instrument, physical performance obligations do not apply.</i>
Contract Term Preconditions	No contractual preconditions to the start of the Contract Term. <i>Note: Whilst pre-conditions are not intended to be within the scope of the agreement, it is envisaged that there may be the need for a separate Project Development Agreement between the ESEMA and Seller prior to Commercial Operations Date, subject to further consideration by the NEM Review Implementation Taskforce.</i>
Force Majeure	<i>Note: The WG and the NEM Review Implementation Review Taskforce are considering how the ESEM can most efficiently manage Force Majeure risk (for limited events) for the Seller given that the agreement will not have specific carve outs for physical Force Majeure.</i>
Security	<i>Note: It is envisaged that the Buyer will enter into a template Master Agreement (e.g. ISDA Master Agreement) with each Seller on identical terms. This Master Agreement is anticipated to set out key terms including security, termination, change in law events, market suspension and payment terms that will be consistent for all ESEM Agreements and, where relevant, drawing on the Australian Electricity Addendum published in the AFMA Guide to Australian OTC Transactions as is frequently used in Australia for OTC agreements agreed under an ISDA Master Agreement.</i>
Termination	
Change of law	
Market suspension	
Payment Terms	

Risk allocation

Risk	Buyer	Seller
Price risk	The Buyer pays a fixed Contract Premium and hence is not exposed to price risk (above the Strike Price) for the agreed volume.	The Seller receives a fixed Contract Premium, regardless of wholesale prices. The Seller is exposed to prices below the Strike Price.
Volume risk	The contract volume is fixed and hence the Buyer is not exposed to volume risk.	The Seller holds the risk of defending the agreed volume of the cap.
Shape	The Buyer is protected from all high price events above the strike price.	The Seller must be able to defend the cap for all high price events above the strike price.
MLF/Constraint Risk	The Notional Quantity is fixed and hence the Buyer is not exposed to volume risk.	The Seller holds the risk of defending the agreed Notional Quantity, including MLF and constraint risks.
Long term contract value risk	The Buyer holds the risk of long-term value of the agreement.	The Seller receives a known Contract Premium for the period of the agreement.
Fuel Supply	The contract volume is fixed and hence the buyer is not exposed to fuel supply risks.	The Seller holds the risk of obtaining to fuel supply to defend the cap.

Risk	Buyer	Seller
Force Majeure	Note: As noted above, the WG and the NEM Review Implementation Review Taskforce are considering how the ESEM can most efficiently manage Force Majeure risk (for limited events) for Sellers. The Seller is responsible for managing other risks associated with the project underlying the agreement.	
Market intervention / suspension	Note: It is envisaged that the Master Agreement will contain provisions to appropriately manage scenarios for Trading Intervals where the underlying index(es) are unavailable (as is typical for ISDA/AFMA standard electricity provisions for PPAs in the NEM).	
Regulator/market rule change risk	Note: It is envisaged that the Master Agreement will contain provisions to appropriately manage regulatory / market rule changes over the duration of the agreement (as is typical for ISDA/AFMA standard electricity provisions for PPAs in the NEM).	

Settlement Examples

The below tables provide illustrative examples of settlement calculations for a single Trading Interval, demonstrating how the product caps seller and buyer exposure to Floating Prices above the Strike price.

Plant type	Gas turbine	Plant Capacity (C)	120MW
Calculation Period (A)	5 minutes (e.g. 1 trading interval)	Contract Capacity (D)	120MW (e.g. 100% contracted)
Strike Price (B)	\$600/MWh	Contract Premium (E)	\$20/MWh

Floating (spot) Price (\$/MWh) (F)	Spot Revenues		Contract Settlement				Net Seller Position
	Seller Generation Volume (MWh) (G)	Spot Revenue (\$) (H) = (F)x(G)	Notional Quantity (MWh) (I) = (A) x (C)	Contract Premium (\$/MWh) (J) = (E)*(I)	Cap Repayment (K) = -(I) x MAX(0, (F)-(B))	Settlement Amount (L) = (J)+(K)	Net Seller Position (M) = (H) + (L)
\$300	10MWh	\$3,000	10MWh	\$200	\$0	\$200	\$3,200
\$500	10MWh	\$5,000	10MWh	\$200	\$0	\$200	\$5,200
\$600	10MWh	\$6,000	10MWh	\$200	\$0	\$200	\$6,200
\$1000	10MWh	\$10,000	10MWh	\$200	-\$4000	-\$3800	\$6,200

Floating (spot) Price (\$/MWh) (F)	Spot Charges		Contract Settlement				Net Buyer Position
	Buyer Consumption (MWh) (G)	Spot Charges (\$) (H) = -(F)x(G)	Notional Quantity (MWh) (I) = (A) x (C)	Contract Premium (\$/MWh) (J) = -(E)*(I)	Cap Repayment (K) = (I) x MAX(0, (F)-(B))	Settlement Amount (L) = (J)+(K)	Net Buyer Position (M) = (H) + (L)
\$300	10MWh	-\$3,000	10MWh	-\$200	\$0	-\$200	-\$3,200
\$500	10MWh	-\$5,000	10MWh	-\$200	\$0	-\$200	-\$5,200
\$600	10MWh	-\$6,000	10MWh	-\$200	\$0	-\$200	-\$6,200
\$1000	10MWh	-\$10,000	10MWh	-\$200	\$4000	\$3800	-\$6,200