

Waroona Renewable Energy Project update

Frontier Energy Limited (ASX: FHE; OTCQB: FRHYF) (Frontier or the Company) advises the Australian Energy Market Operator (AEMO) has published its final Capacity Credit allocations.

Whilst Frontier's Waroona Renewable Energy Project (**Project**) was assigned 87.2 MW of Certified Reserve Capacity in August 2024, in the final allocation process, AEMO assigned no Reserve Capacity Credits (**RCCs**) to Waroona.

This was due to a significant reserve capacity surplus and the ranking system applied under the Wholesale Electricity Market (**WEM**) Rules, most notably excluding five-year fixed price facilities. The Company had selected a five-year strategy due to its debt financing requirement in light of AEMO's forecast of ~1GW reserve capacity deficit in 2026/2027¹ and stating an urgent need for substantial new investment in generating capacity.

The RCC outcome was due to a significant capacity surplus in the 2026/27 year, driven by standalone batteries, the majority of which received NonCo-optimised Essential System Services (**NCESS**) payments of up to \$591,000 per MW (Table 1).

As a result, Frontier's debt mandate with Infradebt Pty Ltd (Infradebt Mandate) has been mutually terminated as debt sizing was subject to the final allocation and price of RCCs.

However, Frontier has already identified alternative funding solutions, including bonds, equipment financing and equipment supplier equity opportunities (for fixed equipment). These options have the potential to provide greater flexibility with the Project development strategy (compared to traditional debt) and could limit development delay, expected to be less than a year.

Central to this will be Frontier's delivery of an updated Definitive Feasibility Study (DFS), where it has already identified significant capital cost savings which it is now assessing.

Frontier CEO, Adam Kiley commented: "Whilst the outcome of AEMO's allocations is not ideal, energy prices remain at record highs, and are forecast to continue into the future, the underlying fundamentals for our Waroona Renewable Energy Project remain excellent.

Independent energy forecaster Aurora Energy Research's updated energy price forecast shows significant price increases of 11-15% compared to the forecasts in our DFS, demonstrated in Figure 3 and 4.

The Company will now pursue multiple funding solutions that were not previously fully examined due to our RCC expectations. These include project bonds, equipment financing, and equipment supplier equity opportunities for fixed equipment. Frontier will provide a more detailed overview as detailed engagement with these groups commences.

In addition, the Company has applied for the Federal Government's \$67 billion Capacity Investment Scheme which has opened in WA. Round one is focused on hybrid facilities and standalone batteries. Given the lack of new renewable projects as advanced as our

¹ 2023 Electricity Statement of Opportunities (aemo.com.au).



Waroona Project that have not received NCESS, which excludes them from participating, the Company is hopeful of a successful outcome.

Finally, an updated DFS is underway. Capital costs relating to fixed equipment have fallen significantly since the release of the original DFS in February. The updated DFS is expected to be released later this quarter. The Company will also continue work on critical path work programs, in order to ensure any delay in the Project timetable is minimised."

Original Debt Financing Strategy based on AEMO's forecast Reserve Capacity Deficit and five-year fixed Reserve Capacity Price

What is Reserve Capacity?

The Reserve Capacity Mechanism (**RCM**) in the Wholesale Electricity Market (**WEM**) is designed to ensure that there is adequate generation capacity available to meet forecast peak electricity demand. The RCM is unique to Western Australia and is not available in other Australian states.

Under the RCM, electricity generation and electricity storage facilities are certified and allocated capacity credits based on the size of a facility's generation capacity. The Benchmark Reserve Capacity Price (**BRCP**) has increased over recent years, with the latest BRCP increasing to \$230,000 per MW for the 2026/27 year². When the market is forecast to be in deficit, an additional 30% premium is applied to this price.

Reserve Capacity Deficit forecast by AEMO

In its 2023 ESOO Report³, AEMO highlighted that the WEM was in a position of increasing capacity deficits and emphasised the urgency of advancing generation, storage, demand side management and other measures to enhance reliability and to support the transition to renewable energy. The 2023 ESOO Report forecast a capacity deficit of more than 1,000MW in 2026/27, growing thereafter as demand increases and coal power stations retire.

² https://www.erawa.com.au/cproot/23833/2/2024-benchmark-reserve-capacity-price-for-the-202627-capacity-year.PDF.

³ 2023 Electricity Statement of Opportunities (aemo.com.au).



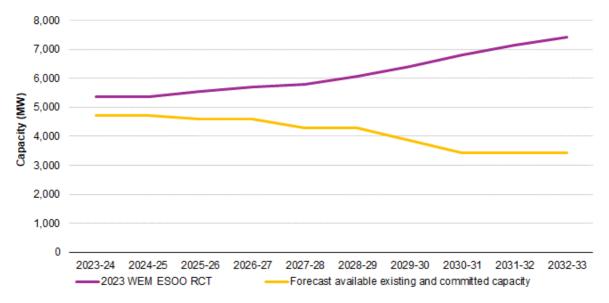


Figure 1: 2023 WEM ESOO Reserve Capacity Target and forecast capacity

In its 2024 ESOO Report⁴ for the WEM published in June 2024, AEMO restated its forecast of a growing capacity deficit and forecast a significant shortfall of power generation in WA from 2027 onwards, again highlighting a need for new electricity generation and storage to be brought online. Specifically, the 2024 ESOO Report stated that at least 391MW of new capacity is required in the 2027-28 capacity year, while forecasting a tight market with surplus capacity of only 0.6% for the 2026-27 capacity year⁵.

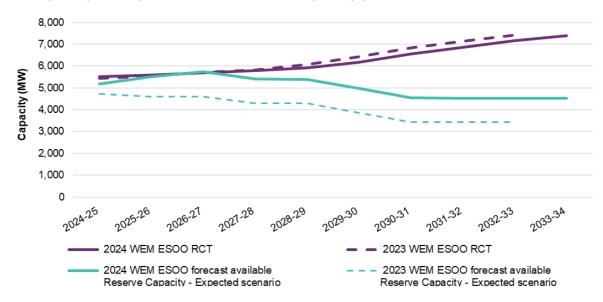


Figure 2: 2024 WEM ESOO Forecast supply / demand balance, Expected Demand scenario

⁴ 2024-wem-electricity-statement-of-opportunities.pdf (aemo.com.au).

⁵ See ASX announcement dated 25 June 2024.



Forecast energy deficit with five-year fixed RCP underpinned debt financing strategy

Given the forecast capacity deficit was more than 20% when Frontier's Waroona DFS was completed in February 2024⁶, two RCP scenarios were assumed. The equity base case assumed an RCP of \$299,000 per MW (when there is a deficit, as forecast at the time of the DFS, a 30% premium will be applied to the BRCP of \$230,000 per MW as per the WEM Rules) and the stressed case (the "bank financing case") where the BRCP of \$230,000 per MW was used.

The WEM Rules enable a new generation facility, such as the Project, to request in its RCC application that the RCP is fixed for a five-year period (indexed by CPI). Such an RCP profile would deliver revenue certainty and thereby support debt financing.

Under the WEM Rules⁷ however, if there are applications for 103% or more of AEMO's target reserve capacity, new projects that have applied for a five-year fixed RCP are excluded from receiving Network Access Quantity (**NAQ**) and receive no RCCs as a result.

The Company subsequently received multiple credit endorsed terms sheets which validated this strategy, and ultimately entered into the Infradebt Mandate to provide up to \$215 million in debt financing. The final size of the debt facility under the Infradebt Mandate was dependent on the outcome with respect to the allocation and price of RCCs⁸.

Waroona Project awarded Certified Reserve Capacity

In August 2024, AEMO assigned certified reserve capacity (**CRC**) to the Project, confirming that the Project had satisfied the required criteria set out in the WEM Rules for the certification of Reserve Capacity.⁹ The Company has provided Reserve Capacity Security, and AEMO has published the assignment of 87.2MW CRC to the Waroona Project.

However, there are several required steps between the assignment of CRC and the assignment of Reserve Capacity Credits under the WEM Rules that may result in the facility being assigned a lower RCC quantity than its CRC quantity. These required steps include the bilateral trade declaration process and AEMO's determination of the Network Access Quantity (**NAQ**).

The NAQ model is run after CRC assignments and completion of the trade declaration process. It considers the amount of available network capacity, taking network constraints into account, and allocates NAQ to facilities up to their respective assigned CRC amounts. In the NAQ allocation process, if the Reserve Capacity Requirement is met with an excess larger than 3%, then Fixed Price Facilities are not added and receive zero NAQ.

⁶ See ASX Announcement 28 February 2024.

⁷ https://www.wa.gov.au/government/document-collections/wholesale-electricity-market-rules.

⁸ See ASX announcement 24 July 2024.

⁹ See ASX announcement dated 13 August 2024.



NCESS closed the capacity gap

Under the WEM Rules, AEMO can procure NCESS outside existing WEM mechanisms, such as the RCM, if it considers there is a significant threat to system security or reliability.

With an expected deficit, as forecast in the 2023 ESOO Report, AEMO utilised the NCESS process to close the near-term deficits, with several stand-alone batteries and one hybrid battery / solar project being contracted for NCESS – see Table 1. Neoen was a major recipient of NCESS payments for ~500MW battery storage, receiving up to \$591,000/MW¹⁰, more than double the BRCP of \$230,000/MW. As highlighted above, in the 2024 ESOO Report in June 2024, AEMO confirmed a balanced market, principally due to new battery storage capacity outside of the RCM.

Battery Name	Owner	Has this Project been granted NCESS	26/27 CRC ²	
COLLIE_ESR4, COLLIE_ESR5	Synergy	No	500	
COLLIE_BESS2	Neoen	Yes	300	
KWINANA_ESR2	Synergy	Yes	225	
COLLIE_ESR1	Neoen	Yes	192	
MERREDIN_ESR1	Merredin Trust	No – New Dev.	95	
ALINTA_WGP_ESR1 ³	Alinta	Yes	49	
KWINANA_ESR1 ³	Synergy	Yes	44	
Total Battery – no generation			1,404	
Renewable + battery hybrid				
Cunderdin	Naturgy	Yes	47	
Total – Hybrid			47	

Table 1. Batteries that received CRC and / or NCESS

This increased incentive for battery storage via NCESS – a total CRC assignment of 6,228MW, approximately 500MW above AEMO's 2026/27 Reserve Capacity target of 5,696MW¹¹, came less than three months after its 2024 ESOO Report.

This surplus, coupled with the WEM Rules regarding five-year fixed pricing of RCCs and the NAQ process, ultimately resulted in the Project being assigned zero RCCs for the 2026/27 cycle.

Infradebt Mandate terminated by mutual consent

As the Project has not been allocated RCCs, and debt sizing pursuant to the senior debt mandate with Infradebt is subject to the final allocation and price of RCCs for the 2026/27

¹⁰ https://aemo.com.au/consultations/tenders/expressions-of-interest-and-tender-for-ncess-reliability-services-2025-27-wa.

¹¹ https://aemo.com.au/-/media/files/electricity/wem/reserve_capacity_mechanism/certification/2024/certified-reserve-capacity-assigned-for-the-2026-27-capacity-year.pdf?la=en.



cycle. The Company and Infradebt have therefore mutually agreed to terminate the Infradebt Mandate.

Further details regarding the Company's funding strategy will be released in the near term.

Transition to Renewable Electricity Generation in WA

Like the rest of the world, Australia and WA is currently undertaking an energy transition, with a target of 82% electricity generation from renewables by 2030. In the last 12 months, Australia was at 38% whilst WA was at 37% renewable electricity generation¹².

This transition will be driven by both an increase in renewable energy generation but also the closure of high carbon emission generators, namely coal fired power stations. Over the past 12 months, coal provided around 30% of the energy generation in WA. However, this has been as high as 37% for a single month, depending on demand and availability of other generation.

The WA Government has announced the planned closure of State-owned coal generation assets starting from 2025, with total closure by 2029. These assets have a generation capacity of ~932MW¹³.

To ensure there is sufficient energy supply, new renewable energy projects are clearly also required. Below is a list of industrial renewable projects >10MW that have received RCCs since 2023/24 until the 2026/27 cycle. The total generating capacity of these projects is less than 200MW, and they have RCCs of less than 75MW.

Renewable Power Project	Type of facility	Generating Capacity MW	23/24 RCC	24/25 RCC	25/26 RCC	26/27 RCC
Cunderdin	solar / battery	100MW solar / 55MW 4-hr battery	0.0	49	48	47
Flat Rocks	Wind	76	0.0	20	23	25
Total		176	0.0	69	71	72

Table 2: Renewable generation projects having first received RCC in 22/23 or later¹⁴

The Company notes this excludes the potential for additional roof top household solar that is forecast to continue to grow beyond its current 18% of energy generation in WA. However, there needs to be significantly greater emphasis on renewable energy generation to assist the State in achieving its renewable energy targets. The Company notes the Capacity Investment Scheme (**CIS**), which was recently launched in WA, aims to improve this in the future. The Company applied for round one under the CIS. However, battery only projects again are able to apply for this round.

¹² https://explore.openelectricity.org.au/energy, accessed 26 Sep 2024.

¹³ Source: 2024-wem-electricity-statement-of-opportunities.pdf (aemo.com.au); Muja C Unit 6 193MW, to retire 2025; Collie

³¹⁷MW and Muja D Units 7 and 8 211MW each, to retire 2029.

¹⁴ https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/data-wem/market-data-wa.



Strong electricity price outlook illustrates the need for additional renewable energy capacity

Notwithstanding the Reserve Capacity outcome, energy prices on the WEM remain strong and are forecast to continue to increase. Aurora, a global leader in energy market analysis, was engaged to provide independent electricity price forecasts for the Company's DFS¹⁵, has recently updated its WEM price forecasts.

Aurora's updated electricity price forecasts show a ~11-15% increase compared to the February 2024 forecasts, with the average price until 2040 being \$103/MW for excess solar whilst it was \$161/MW for peak energy sales (battery) (real 2024\$).

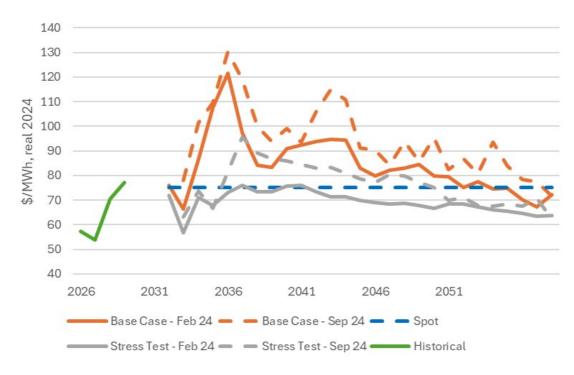


Figure 3: Forecast Solar electricity price

¹⁵ See ASX announcement 28 February 2024.





Figure 4: Forecast Battery electricity price

An updated DFS that includes these higher forecast energy prices, final RCC and RCP information and a revised assessment of capital costs is expected to be complete in Q4 CY2024.

Authorised for release by Frontier Energy's Board of Directors.

To learn more about the Company, please visit <u>www.frontierhe.com</u>, or contact:

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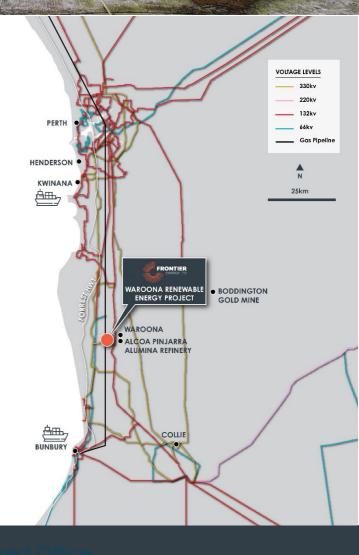
About Frontier Energy

Frontier Energy Ltd (ASX: FHE; OTCQB: FRHYF) is developing the Waroona Renewable Energy Project located 120km south of Perth in Western Australia.

Waroona has the potential to become one of Western Australia's largest standalone renewable energy projects, as the Company controls 868ha of adjoining freehold land whilst also having approvals in place for a connection onto the WA electricity network (SWIS) with a terminal adjacent to the Project.

The Company released a positive DFS on a Stage One development that consists of a 120MW solar farm and 80MW/360MWh battery.

Frontier is fully committed to making the Project one of WA's major renewable energy hubs, incorporating multiple value-adding initiatives including batteries and green hydrogen, with full renewable energy potential of more than 1GW based on connection capacity.



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Mr Adam Kiley Chief Executive Officer

Mr Grant Davey Executive Director

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For a comprehensive view of information that has been lodged on the ASX online lodgement system and the Company website, please visit



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