

#### **ASX RELEASE**

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# Redflow to supply 20 MWh battery system in California

Redflow's most significant project will be one of the largest flow battery systems to be deployed in the U.S.

Redflow Limited (ASX: RFX), a global leader in clean energy storage, is pleased to announce that its safe, scalable, and sustainable flow batteries have been approved for use in a large-scale solar and storage project to be funded by the California Energy Commission (CEC). The project will provide power for the Paskenta Band of Nomlaki Indians, a U.S. federally recognised sovereign Native American nation located in Northern California.

#### **Project details**

The Paskenta Racheria Microgrid Project is a 20 MWh long-duration energy storage plus 5 MW solar installation located near Corning, California (Project).

On successful commissioning, the approved 20 MWh system will be one of the largest zinc-based battery projects in the world and will represent Redflow's largest single sale and deployment of batteries globally to date.

Under the Project, Redflow will supply, supervise installation and assist with the commissioning and maintenance of 2,000 ZBM3 batteries in its 200 kWh modular energy pods. Shipping of pods is anticipated in late 2023 and the first half of 2024.

Redflow expects to receive in total approximately US\$12 million (excluding taxes and shipping) for the 20 MWh system, which will be paid progressively on commencement, delivery of batteries and completion milestones. Most of the price is due to be paid on or before completion of battery delivery.

Practical completion and commissioning of the system is expected in Q1 FY25. Based on its current bill of materials, manufacturing scale up and cost down program, Redflow expects to generate a positive return at the Project level.

An estimated 45-55 GW of long-duration energy storage is required in California by 2045 to support grid reliability and the State's clean energy transition targets.<sup>1</sup>

The Project is being funded by the CEC's US\$140 million long-duration energy storage grant program. With this funding approval, Redflow will join a small number of proven non-lithium storage providers for whom the CEC is financing reference projects to assist commercialisation and large-scale validation.

The Project follows the 2 MWh system in California that Redflow successfully installed for Anaergia in 2022 and has now been operational for over 12 months.

<sup>&</sup>lt;sup>1</sup> California Energy Storage Alliance, <u>Long Duration Energy Storage for California's Clean, Reliable Grid</u>, 2020

## Commenting on this transformative Project for Redflow, Chief Executive Officer and Managing Director Tim Harris said:

"This 20 MWh project is one of several large-scale opportunities in our pipeline and represents the start of the next phase of our growth strategy, validating our focus on large-scale systems in the U.S. and Australia.

"The market for long-duration energy storage solutions is rapidly accelerating, and this Project will firmly establish Redflow's presence in California, which is leading the development and support of non-lithium technologies to achieve its net-zero goals.

"This Project serves as a great example of U.S.-Australian collaboration in renewable energy and supports the aims of the recent <u>Climate, Critical Minerals and Clean Energy Transformation Compact</u>, which puts clean energy as the third pillar of the alliance.

"For this Project, Redflow's battery system is designed to charge from solar and discharge throughout the remainder of the day, reducing grid demand and boosting the energy security and sovereignty of the Paskenta Racheria. We're proud to be working with our partners in California to deliver our proven zinc-bromine flow battery technology and meet California's need for longer-duration and scalable, fire-safe energy storage solutions.

"The batteries will be manufactured in Redflow's ISO9001 accredited factory in Thailand."

CEC-funded long-duration energy storage projects have often been targeted at benefiting underserved communities while helping the State address grid stability and resiliency in extreme weather conditions. This solar and storage microgrid will enable the Paskenta Tribal community to power operations of the Paskenta Rancheria using a sustainable, resilient renewable energy solution.

The Project is part of the Tribe's efforts to achieve greater "energy sovereignty" through control over their own energy resources, reducing fossil fuel consumption, and asserting responsible land stewardship. Faraday Microgrids, a California developer and contractor that has deployed a number of CEC grant-funded microgrid projects, is the grant recipient and project lead, and will purchase the battery system from Redflow.

#### Faraday Microgrids CEO David Bliss said:

"The Faraday team is delighted to be working with Redflow on this important project. The resiliency, operational performance, and safety of Redflow's zinc-bromine flow battery technology will support the sustainability, reliability, and energy self-sufficiency goals of both the State of California and the Paskenta Band of Nomlaki Indians. Redflow's strength of team, innovative approach to flow technology, and a strong track record of successful deployments is a welcome addition to our microgrid portfolio."

## Director of the Energy Research and Development Division at the California Energy Commission Jonah Steinbuck said:

"This project is an important step in California's clean energy transition. It reflects the CEC's goal to commercialise proven long-duration energy storage solutions and support the energy sovereignty of tribal nations such as the Paskenta Band of Nomlaki Indians. With emerging energy storage technologies such as those developed and deployed by Redflow and Faraday, we will be better positioned to expand and diversify California's energy storage portfolio, reduce reliance on fossil fuels, and enhance the reliability and resilience of our grid."

#### **Project status**

Faraday Microgrids has signed a definitive supply agreement with Redflow to purchase the required batteries and technical support for the Project on terms and conditions commonly found in capital equipment supply agreements of comparable size, nature and type.

Battery supply under the agreement will commence when Faraday Microgrids formalises definitive legal project agreements for the CEC funding and the use of Federal Investment Tax Credits and power

offtake with the Paskenta Band of Nomlaki Indians.

Faraday Microgrids has advised that it expects these project agreements will be formalised and a notice to commence issued to Redflow around the end of July 2023.

This announcement has been approved by the Chairman of the Board of Redflow Limited.

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### **About Redflow**

Redflow, a publicly listed Australian company (ASX: RFX) with offices in Australia and the US, designs and manufactures long-duration zinc-bromine flow batteries for stationary commercial, industrial, and utility applications. Redflow batteries are modular, scalable, fire-safe, and capable of 100% depth of discharge. They can also operate in a wide range of environments without supplemental heating or cooling and offer an extended life with minimal degradation over time. The company's smart, self-protecting storage technology offers unique advantages, including a hibernation feature, secure remote management, a simple recycling path, and sustained energy delivery throughout its operating life. Redflow's energy storage solutions have been in use for more than a decade at more than 250 sites in over 9 countries.

For further information, please visit: <a href="www.redflow.com">www.redflow.com</a>