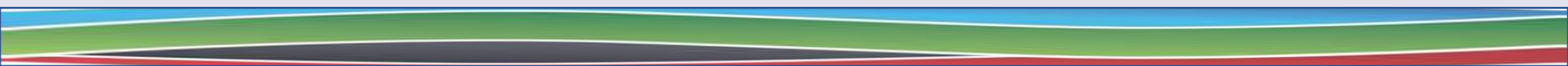
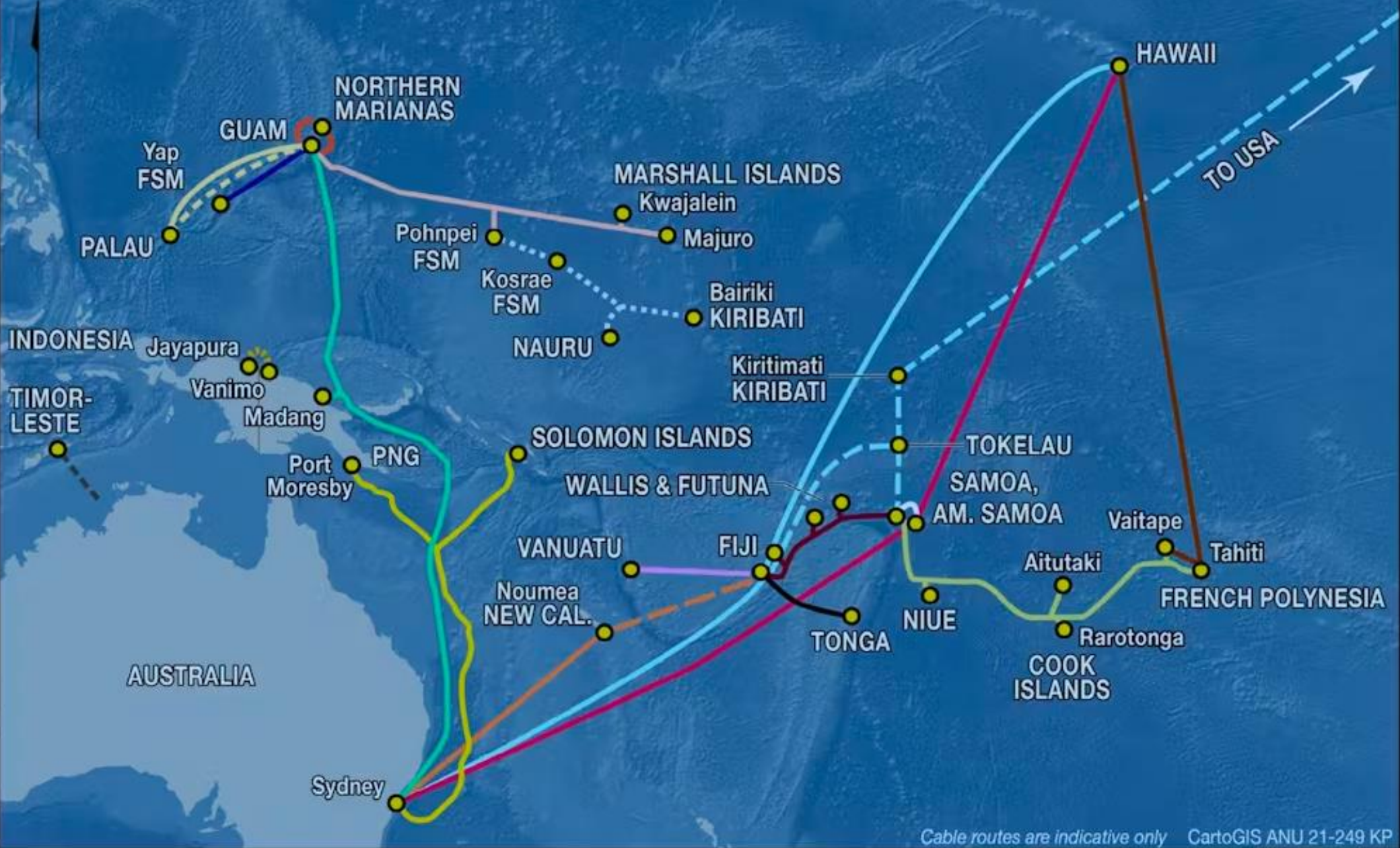


# About Us

Elemental Group is an employee-owned, international energy company headquartered in New Plymouth, Aotearoa New Zealand.

We understand the need for energy equity & sustainability to be front and centre of all our decision making. The scale of the challenge is enormous, and we love it.









Starlink 550km



## Pre-Transition

yesterday's grid



- Human-based
- Forecast dependent
- Reactive



- Few large plants
- High inertia



- Centralised
- National
- Energy only market



- Large power lines



- One-way



- Passive
- Only pays

## Operation

## Generation

## Grid

## Transmission

## Distribution

## Consumer

## Post-Transition

next generation NEM

- Machine-based
- Real-time/distributed
- Edge-of-grid/AI



- Many smaller plants
- Low/zero inertia



- Decentralised
- Regional control
- Two-sided market



- More smaller power lines
- Varied topologies
- Integrated storage

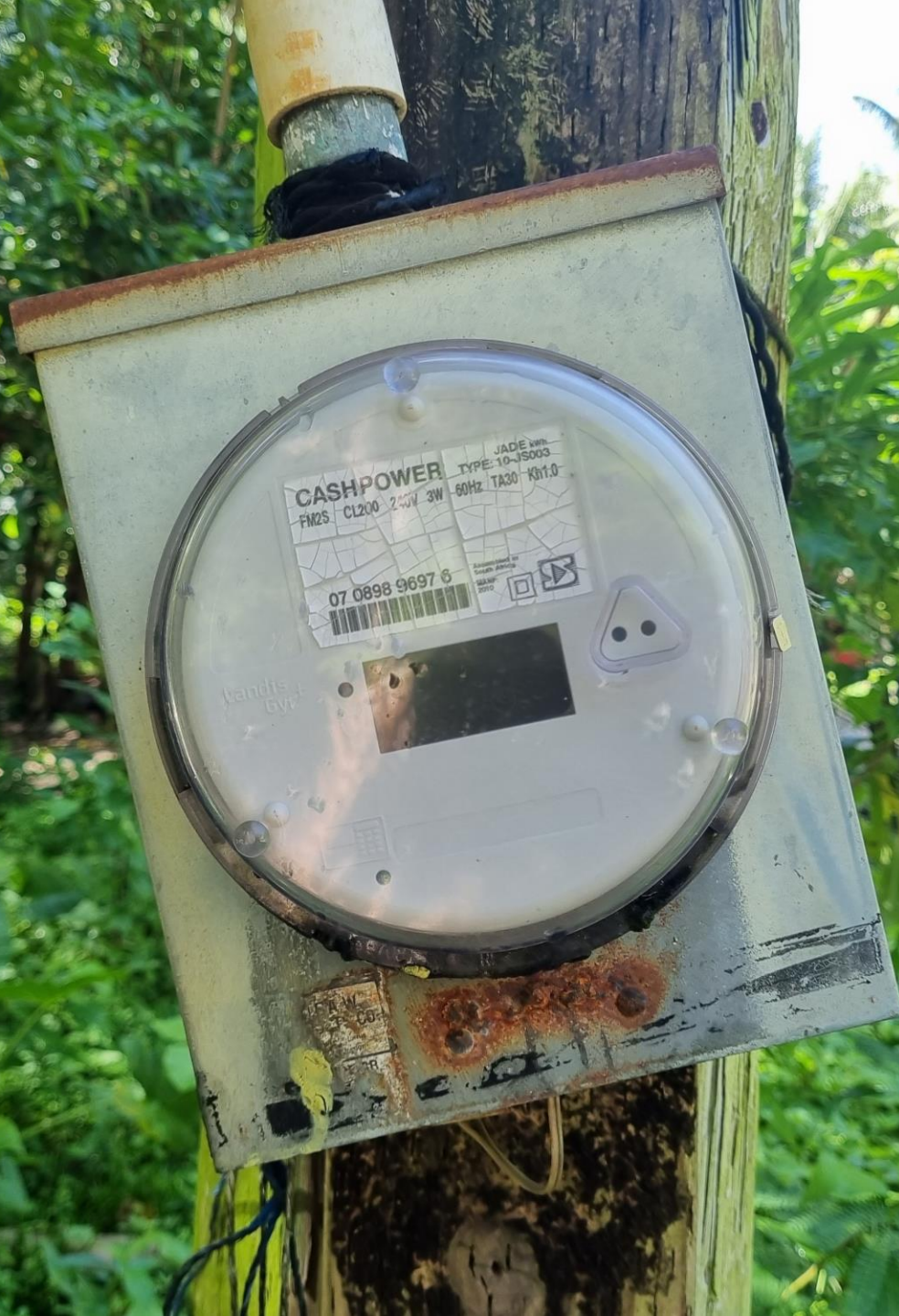


- Two-way



- Active
- Pays and earns
- Participates in the market



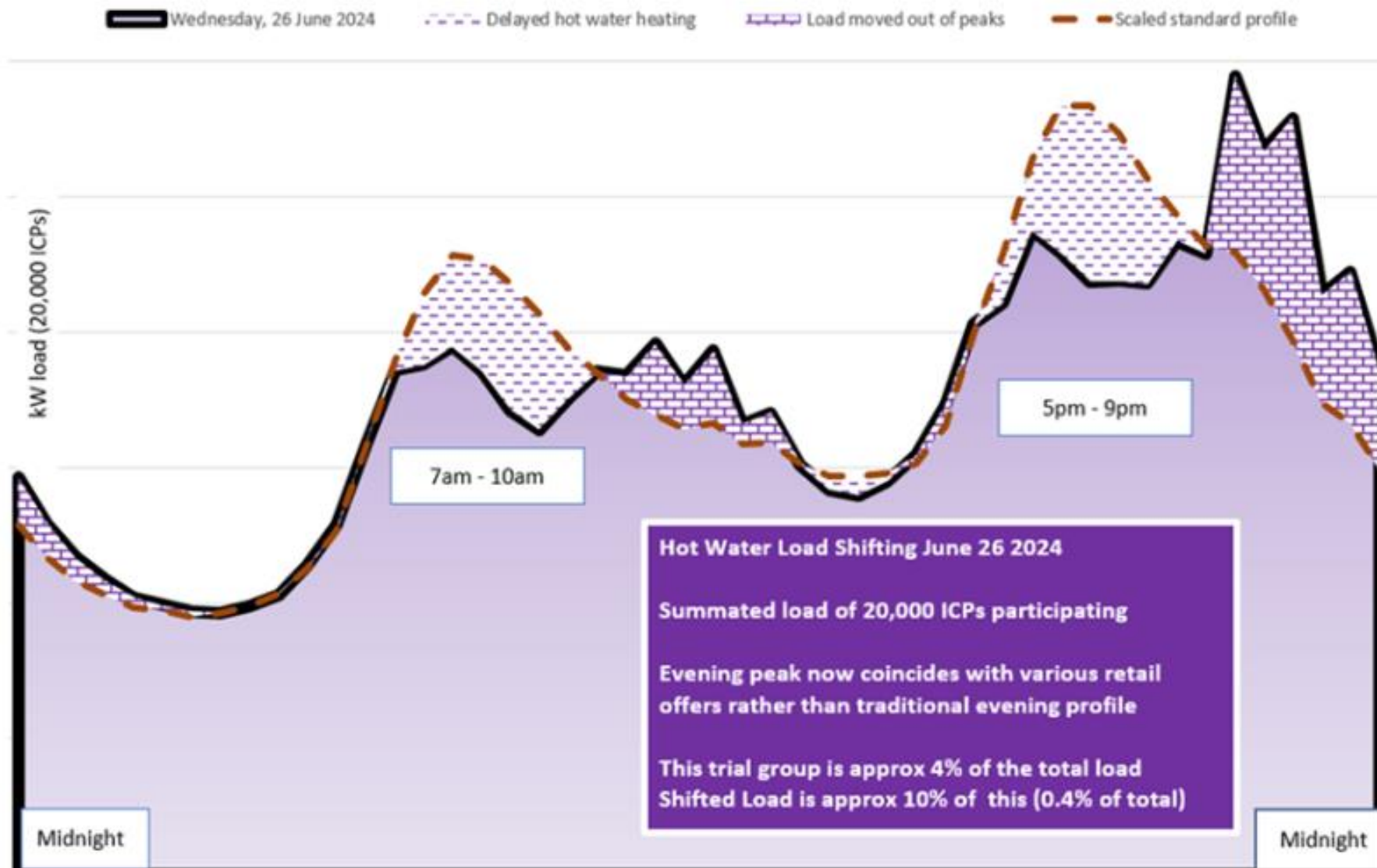


CASHPOWER TYPE: 10-J5003  
FM2S CL200 240V 3W 60Hz TA30 kWh.0  
07 0898 9697 6  
JADE METER  
TYPE: 10-J5003  
TA30 kWh.0  
07 0898 9697 6  
JADE METER  
TYPE: 10-J5003  
TA30 kWh.0  
07 0898 9697 6

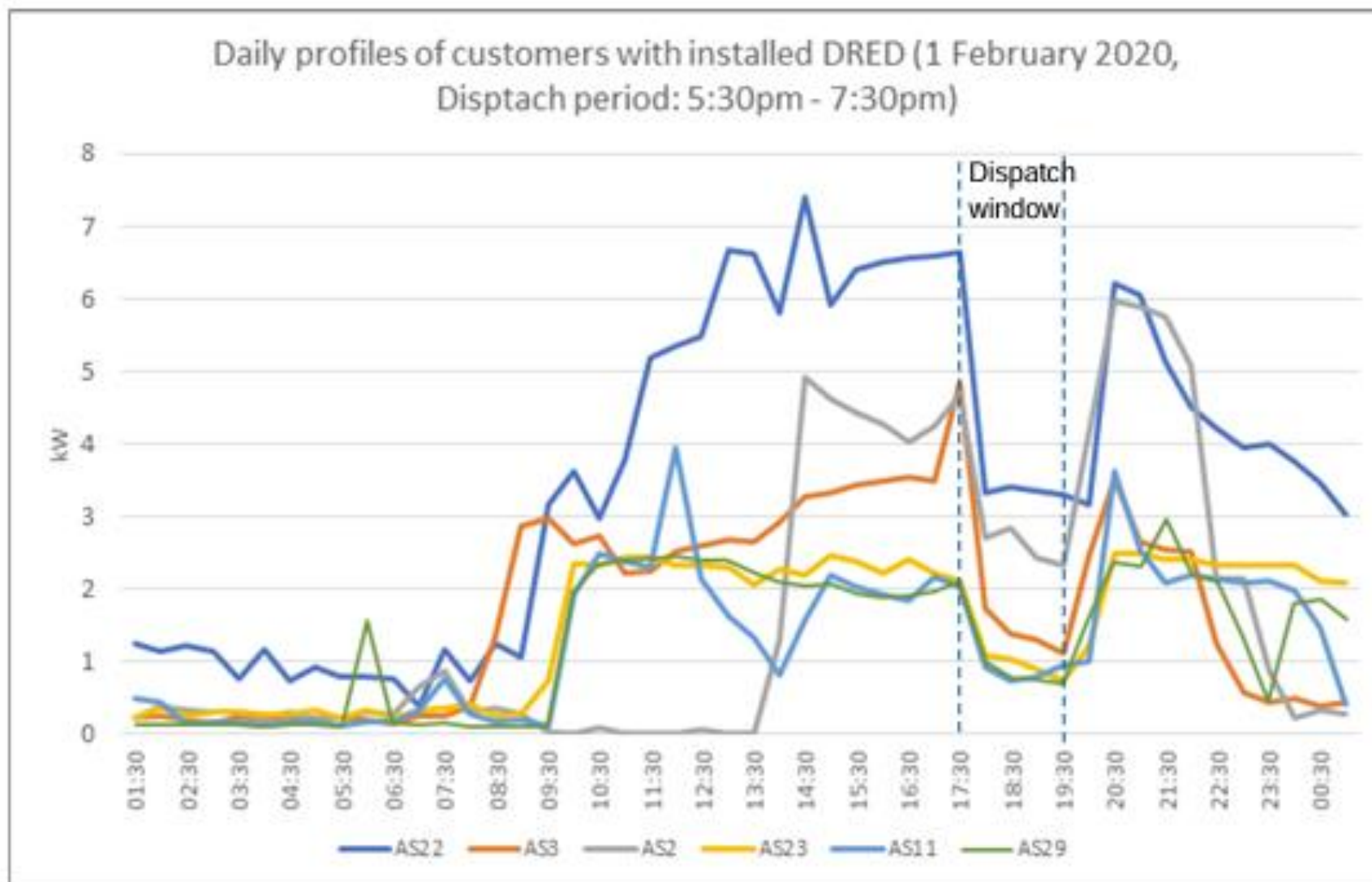
Pandis  
Cv



# NZ demand response trial 2024



# Ausgrid aircon demand response trial 2020



<https://cdn.ausgrid.com.au/-/media/Documents/Demand-Mgmt/DMA-research/Demand-Response-Airconditioning-Programs-Report-2022.pdf?rev=3fe6c8bd14aa42798806b8f52014a1ae&hash=9BC8338663B2586D35C4D996772CB58B>, accessed September 2024

[Uncheck all](#)

## ▼ Summaries

☒ Generation Power / kW

## ▼ Meters

▷ FSMD:00001: FSM PV Generation Meter  
274 kWpeak

## ▼ Inverters

▷ INV:00135: Inverter 1

▷ INV:00136: Inverter 2

▷ INV:00137: Inverter 3

▷ INV:00138: Inverter 4

▷ INV:00139: Inverter 5

▷ INV:00140: Inverter 6

▷ INV:00141: Inverter 7

▷ INV:00142: Inverter 8

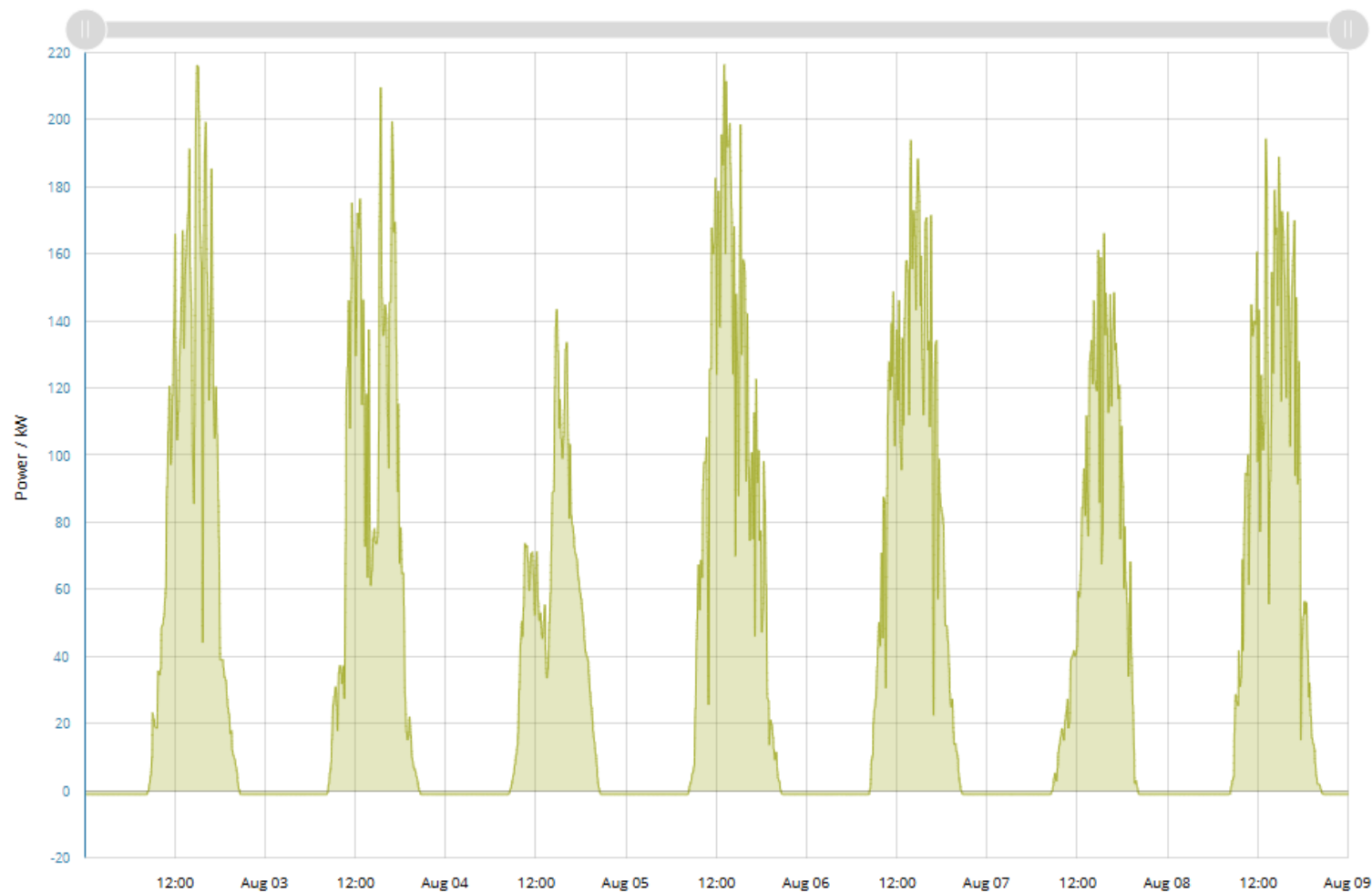
▷ INV:00143: Inverter 9

▷ INV:00144: Inverter 10

## ▼ Weather Station

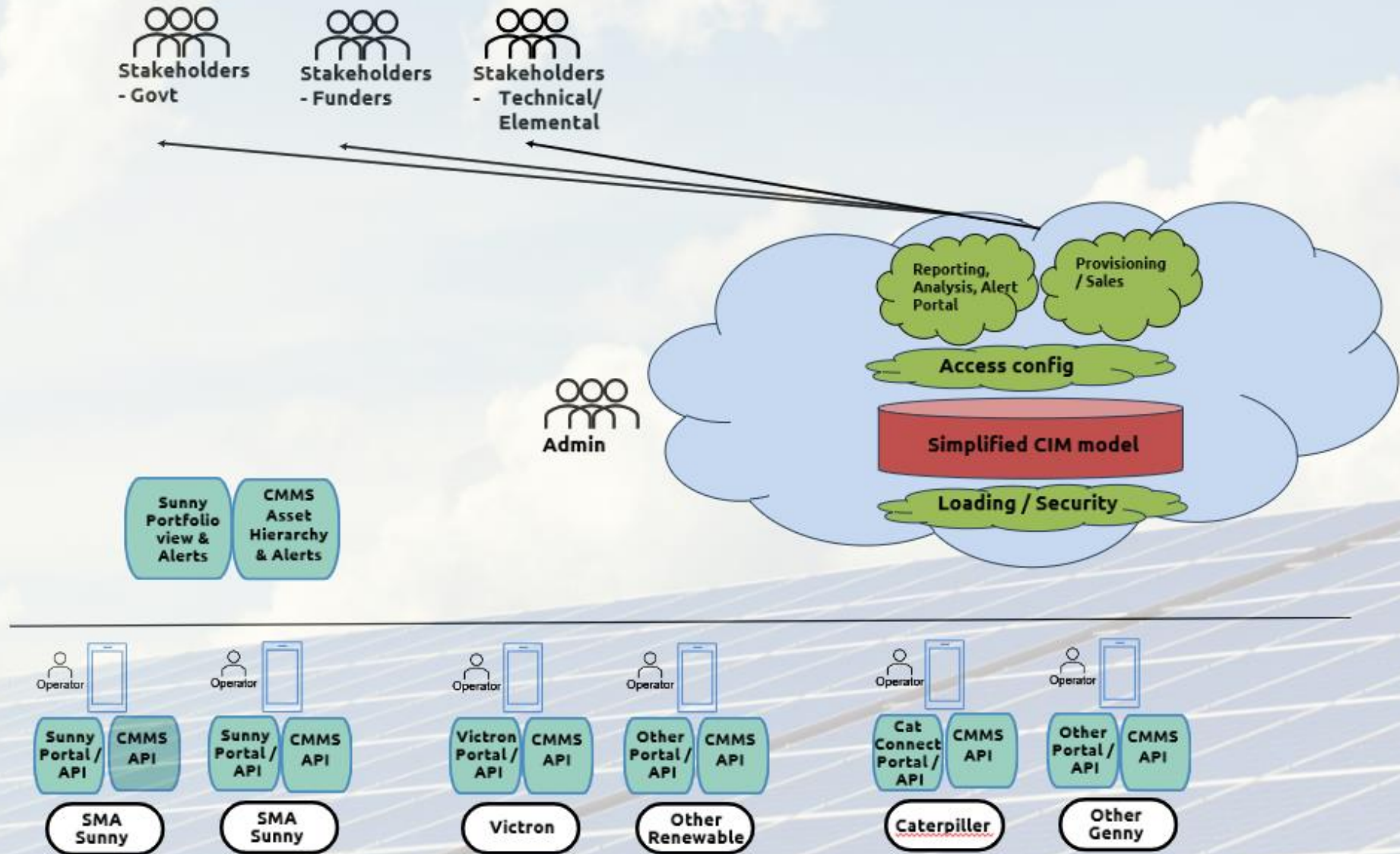
▷ FSMD:00002: POA Ref Cell and  
Anemometer▷ FSMD:00003: Ambient Temperature  
Probe

■ Generation Power / kW





# HOSTED ANALYSIS



# Utility Support Features



Distributed energy  
aggregation



Smart Energy  
Management



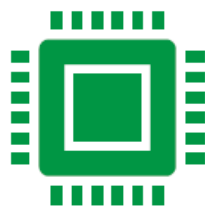
Volt-VAR  
Support



Demand  
Response



Vehicle-2-Grid  
Integration



Virtual  
Power Plant



Black Start and  
UPS



Deep Data/AI-  
driven Insights

