DER Charge Profiles

Forecasting Reference Group 24th April 2019

Agenda

1. Purpose
2. Recap of draft DER uptake forecasts
3. Presentation of draft traces for batteries
4. Presentation of draft traces for electric vehicles

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Purpose

- AEMO is in the process of updating forecasts of NEM Distributed Energy Resources (DER)
- This involves review and updates to primary drivers of energy use, through a combination of internal research and consultancy work.
- The aim of this session is to:
  - Present draft DER uptake forecasts from both Energeia and CSIRO
  - Present draft battery charge/discharge profiles for both Energeia and CSIRO
  - Present draft EV charge profiles for CSIRO
- Gather feedback from FRG members

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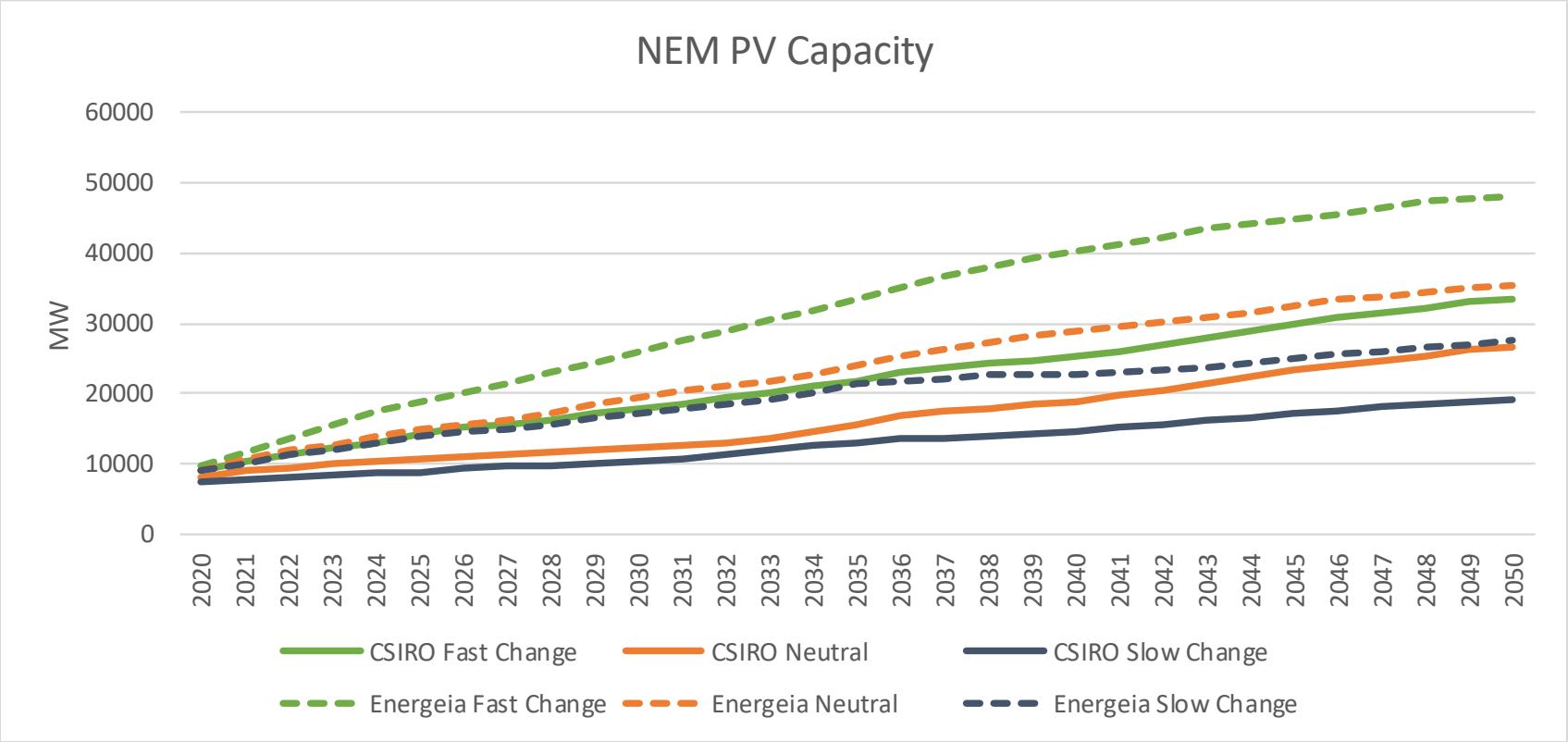
Uptake Comparison

Review of Draft Uptake Results

NEM PV Capacity



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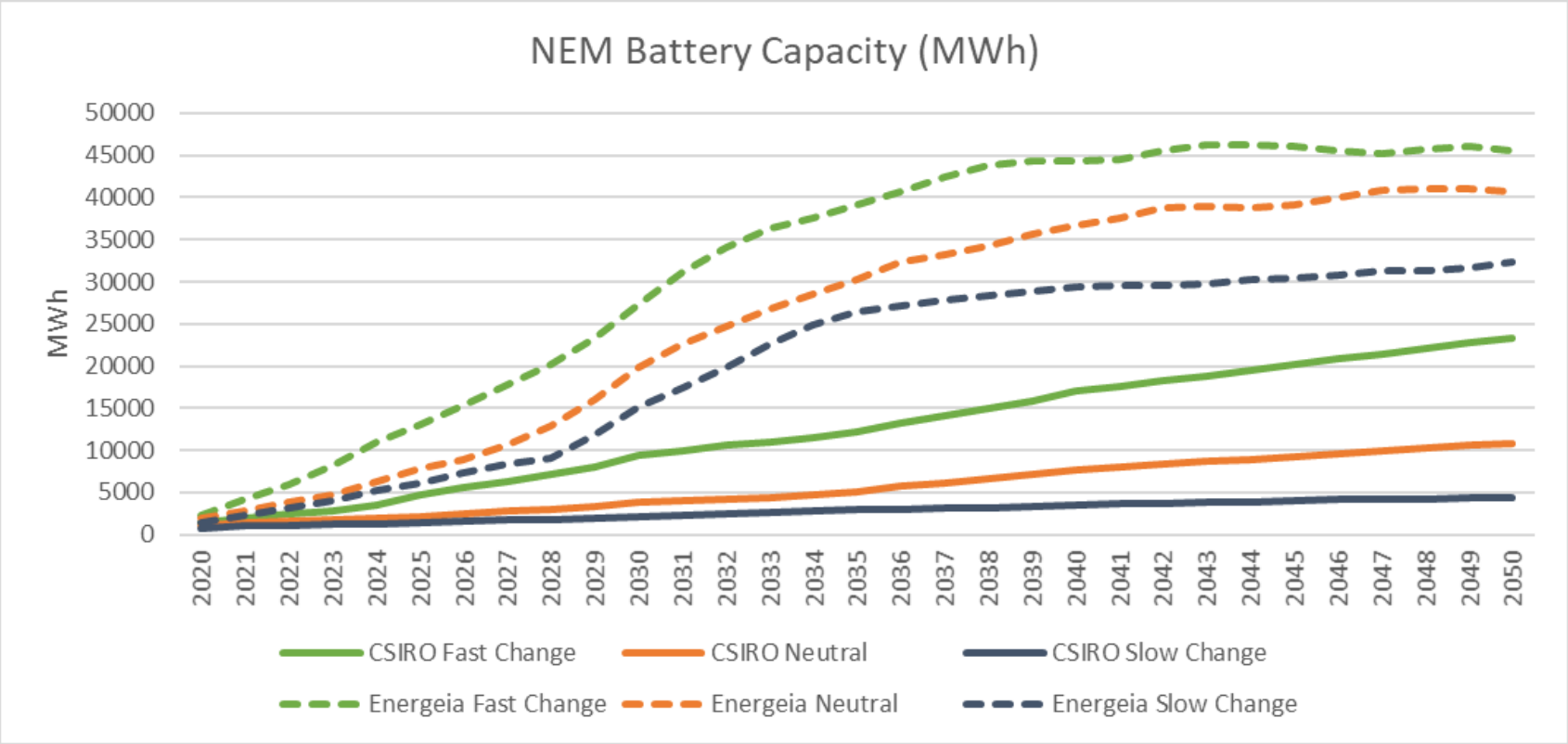
NEM Battery Capacity (MWh)



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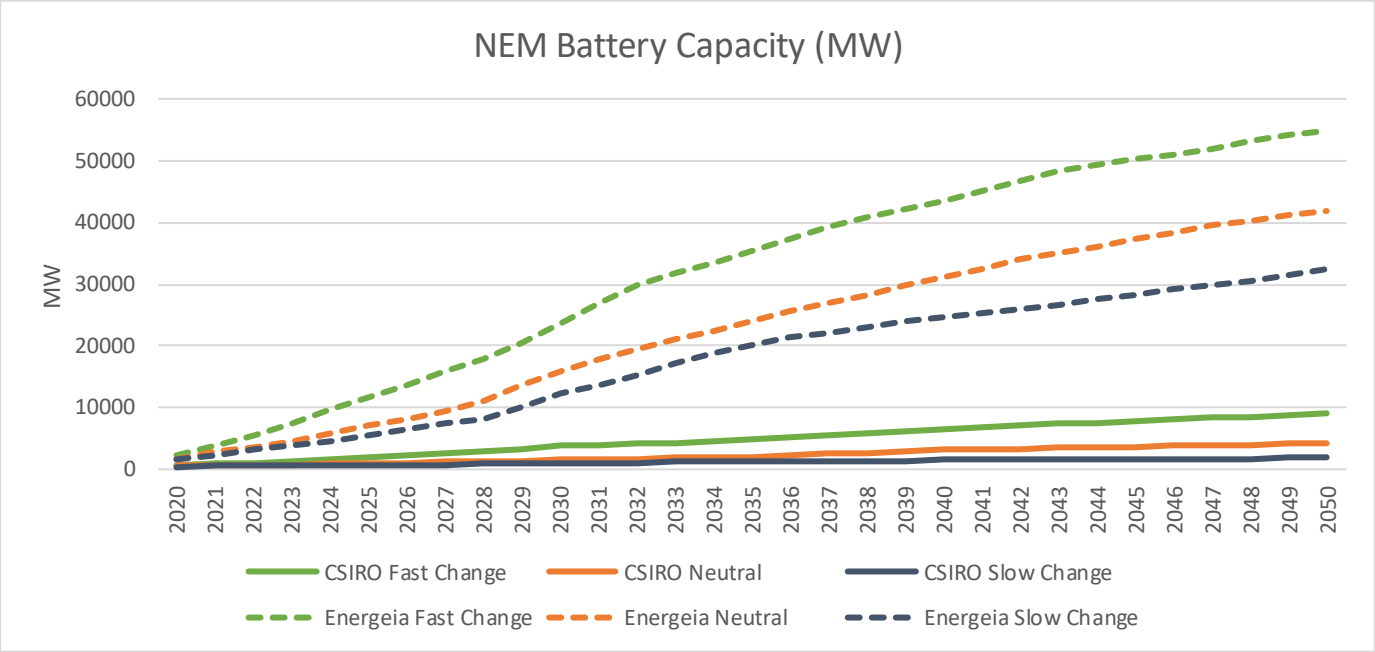
NEM Battery Capacity (MW)



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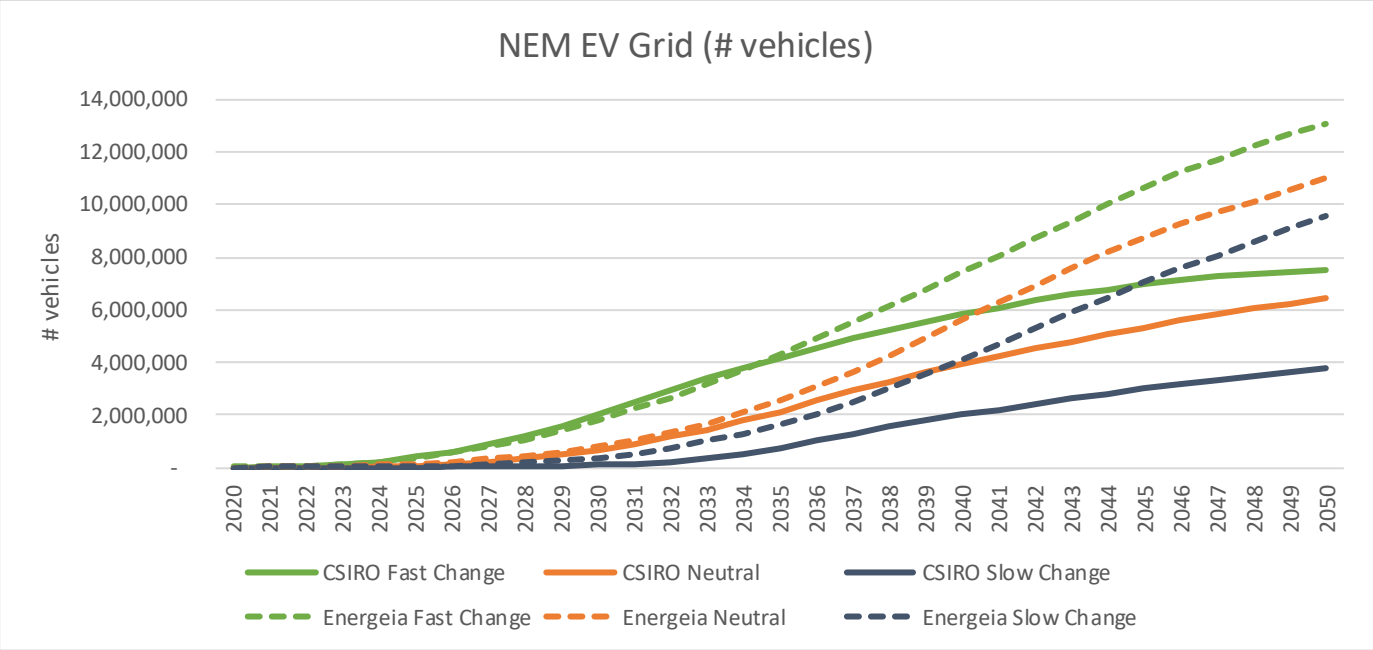
NEM EV Uptake (Number of Vehicles)



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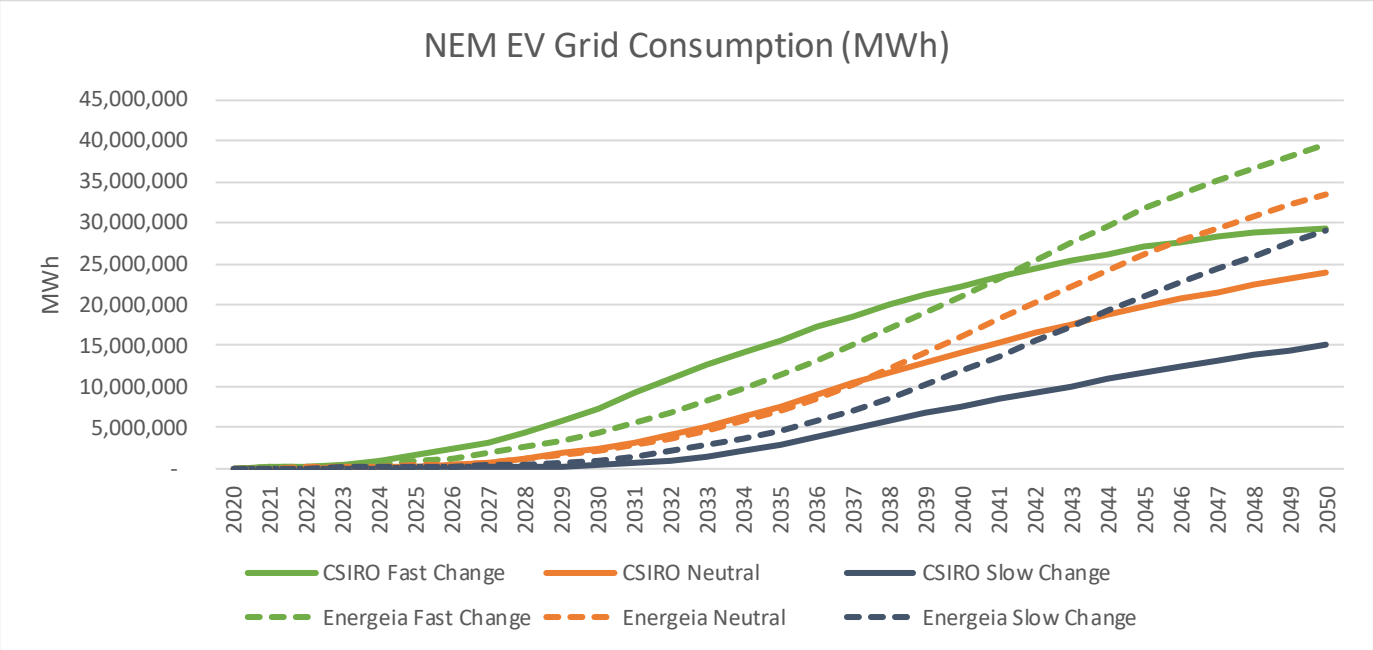
NEM EV Uptake (MWh)



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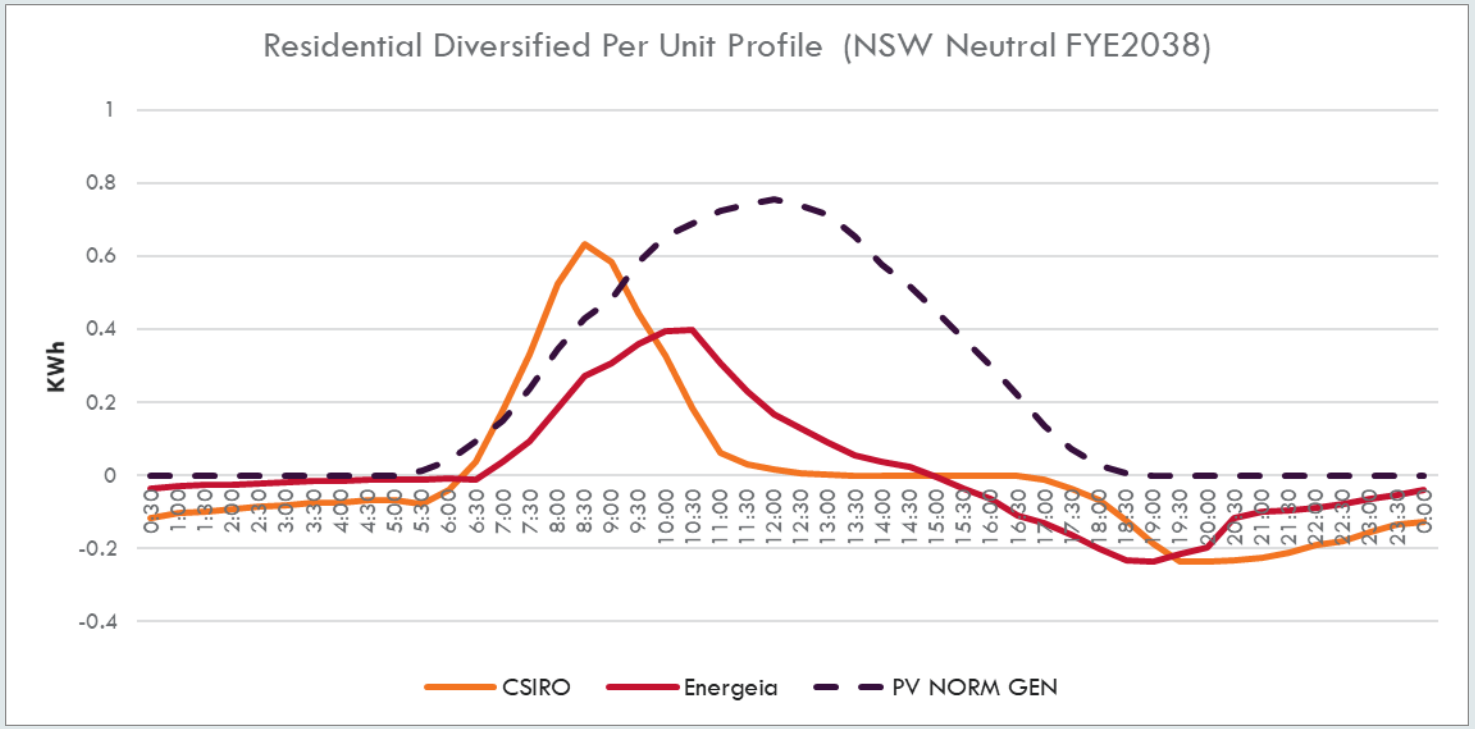
Battery Usage

Battery per unit charge profiles Comparison



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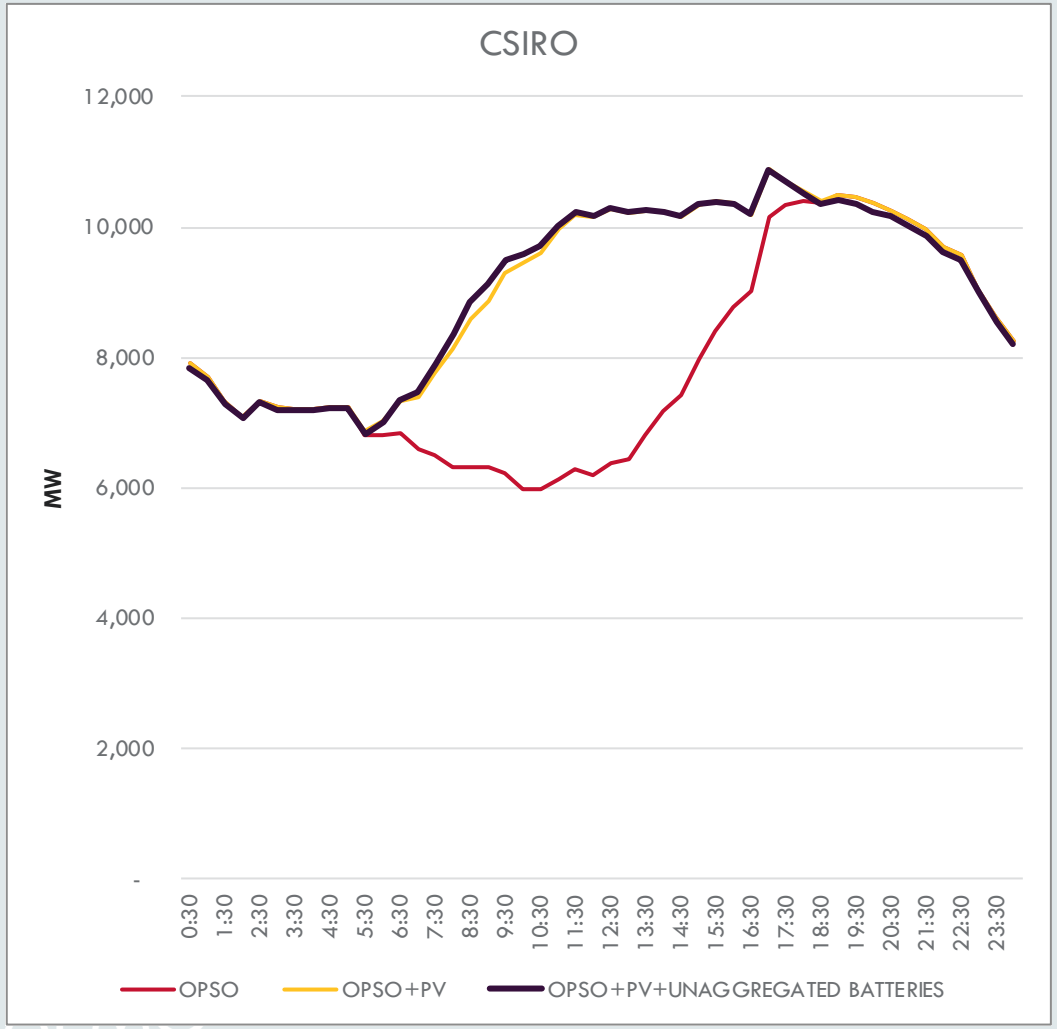
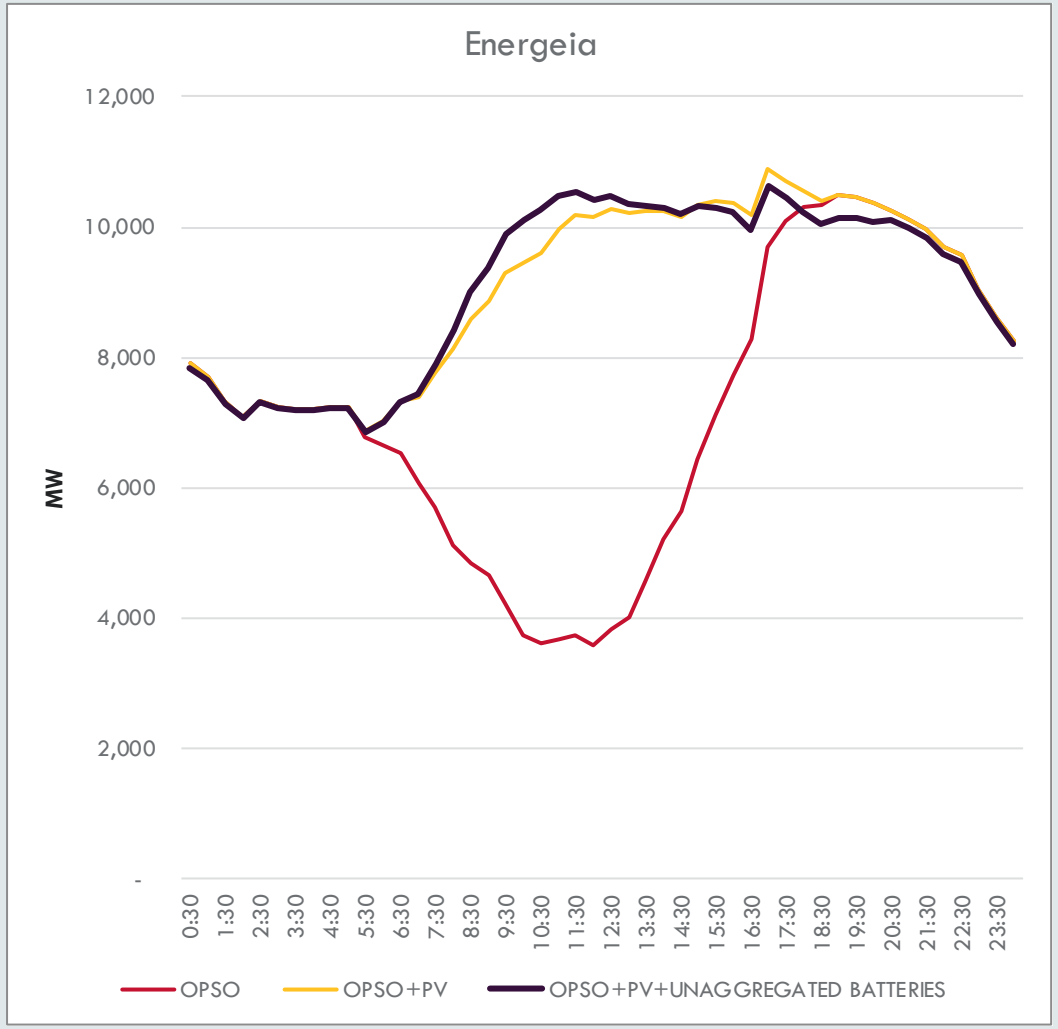
CSIRO and Energeia Neutral Scenario, NSW, November FYE2038





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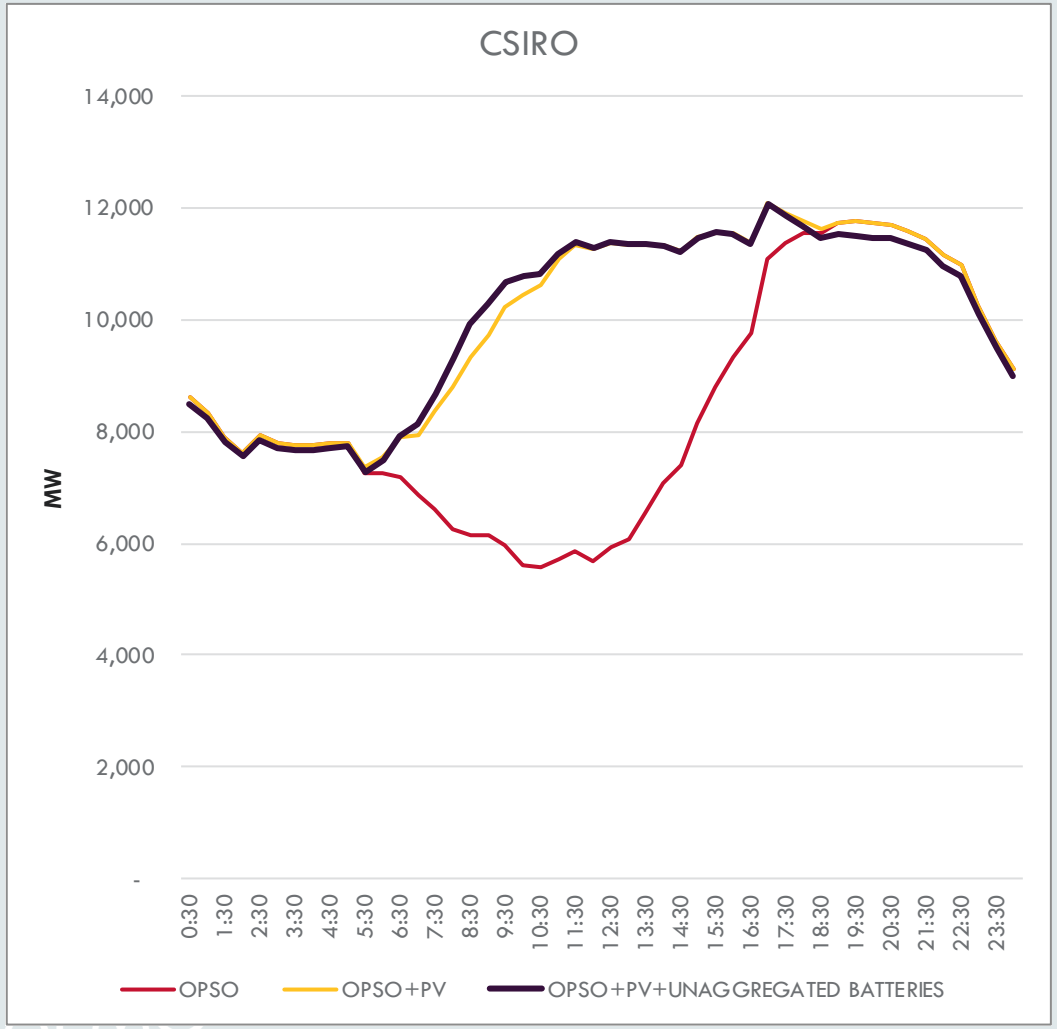
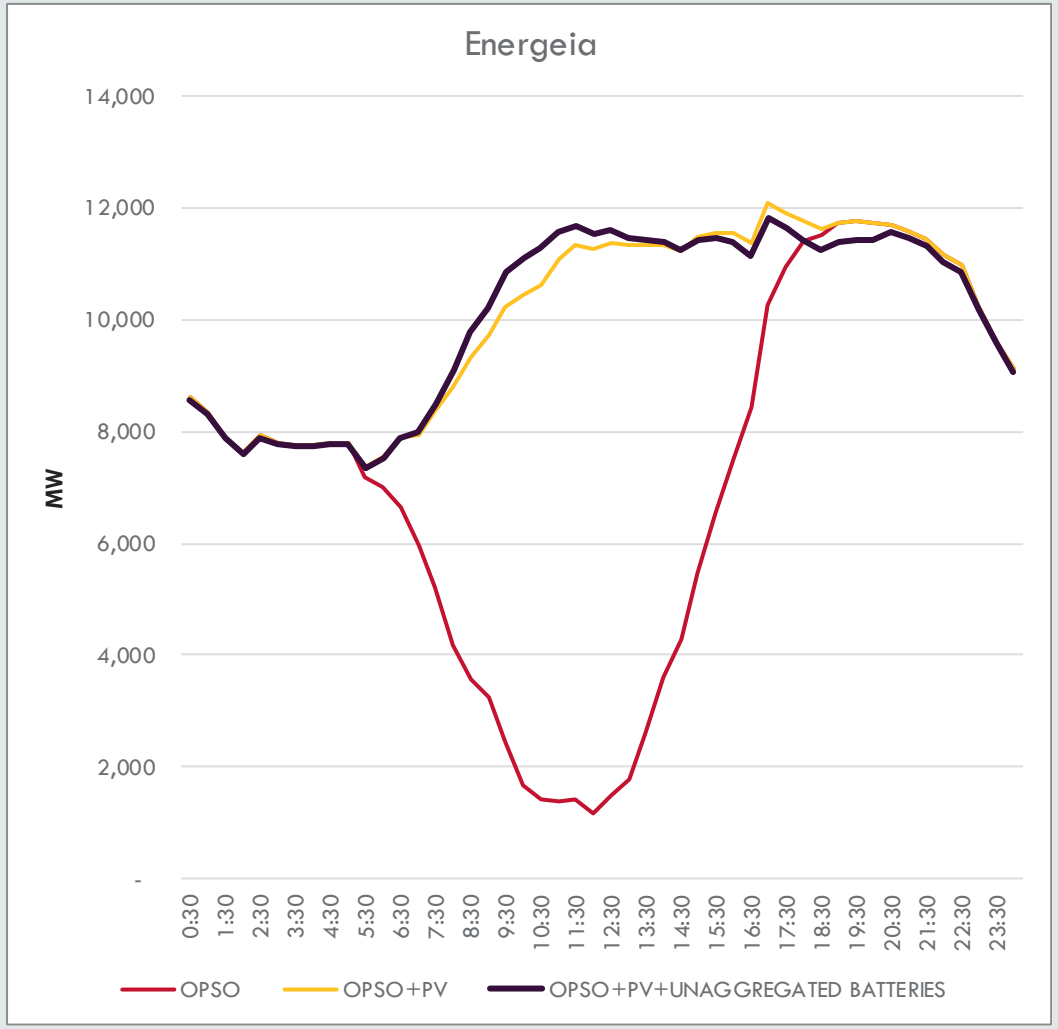
CSIRO and Energeia Fast Change Scenario, NSW, November FYE2038





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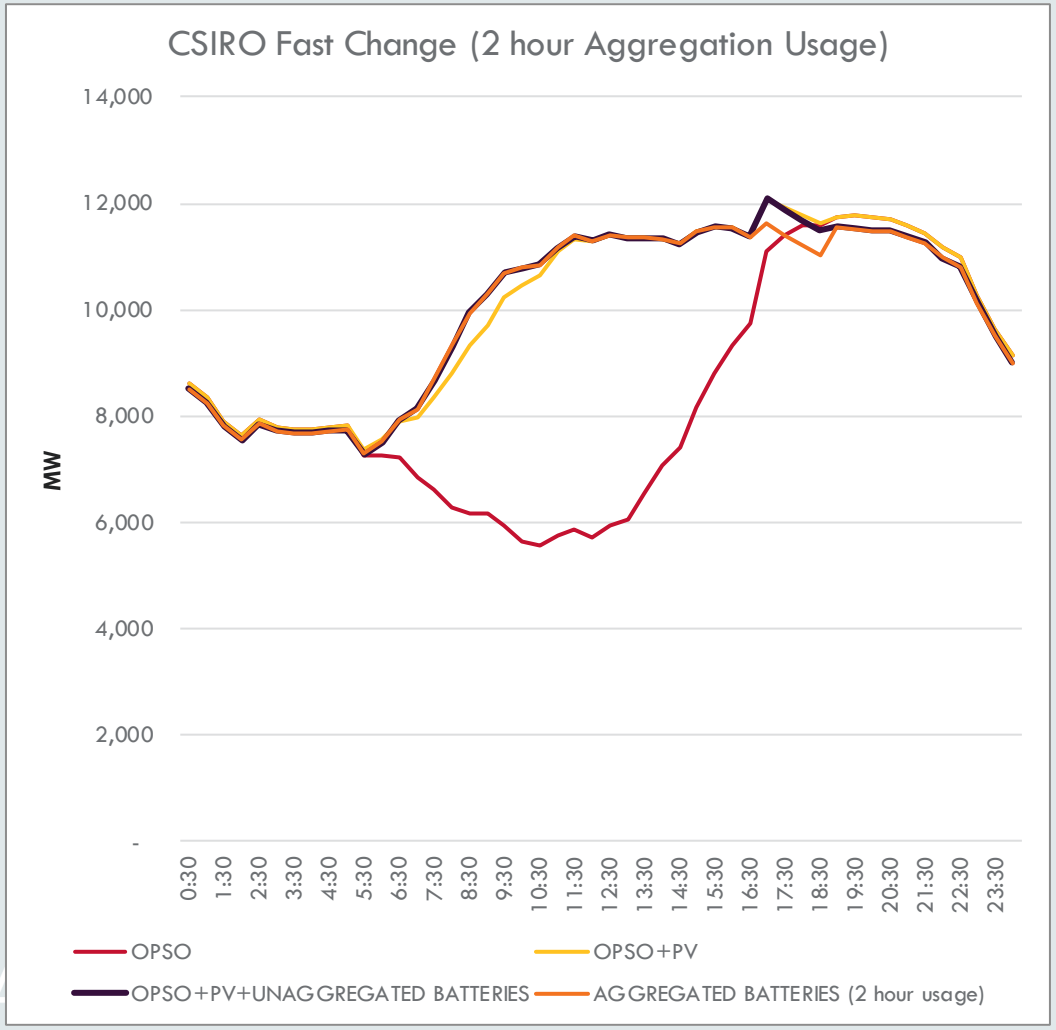
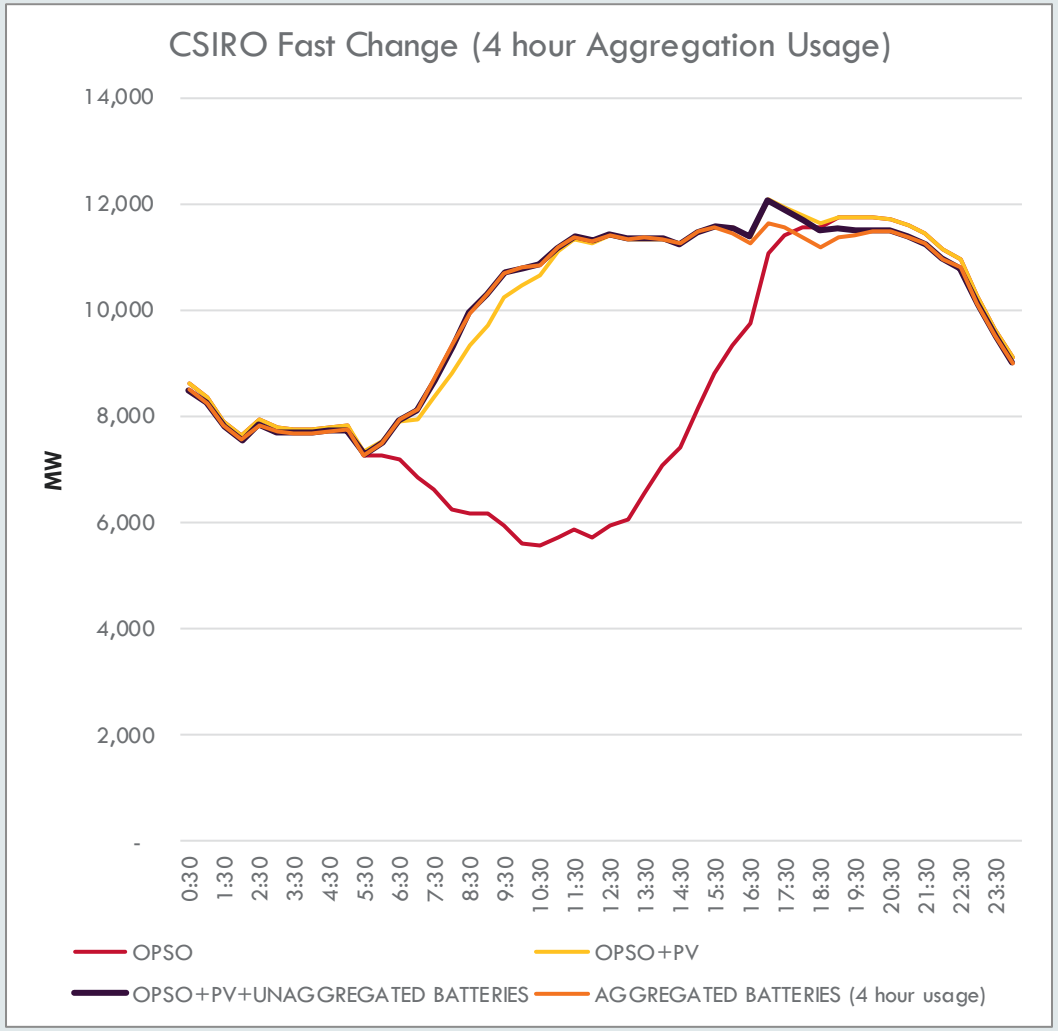
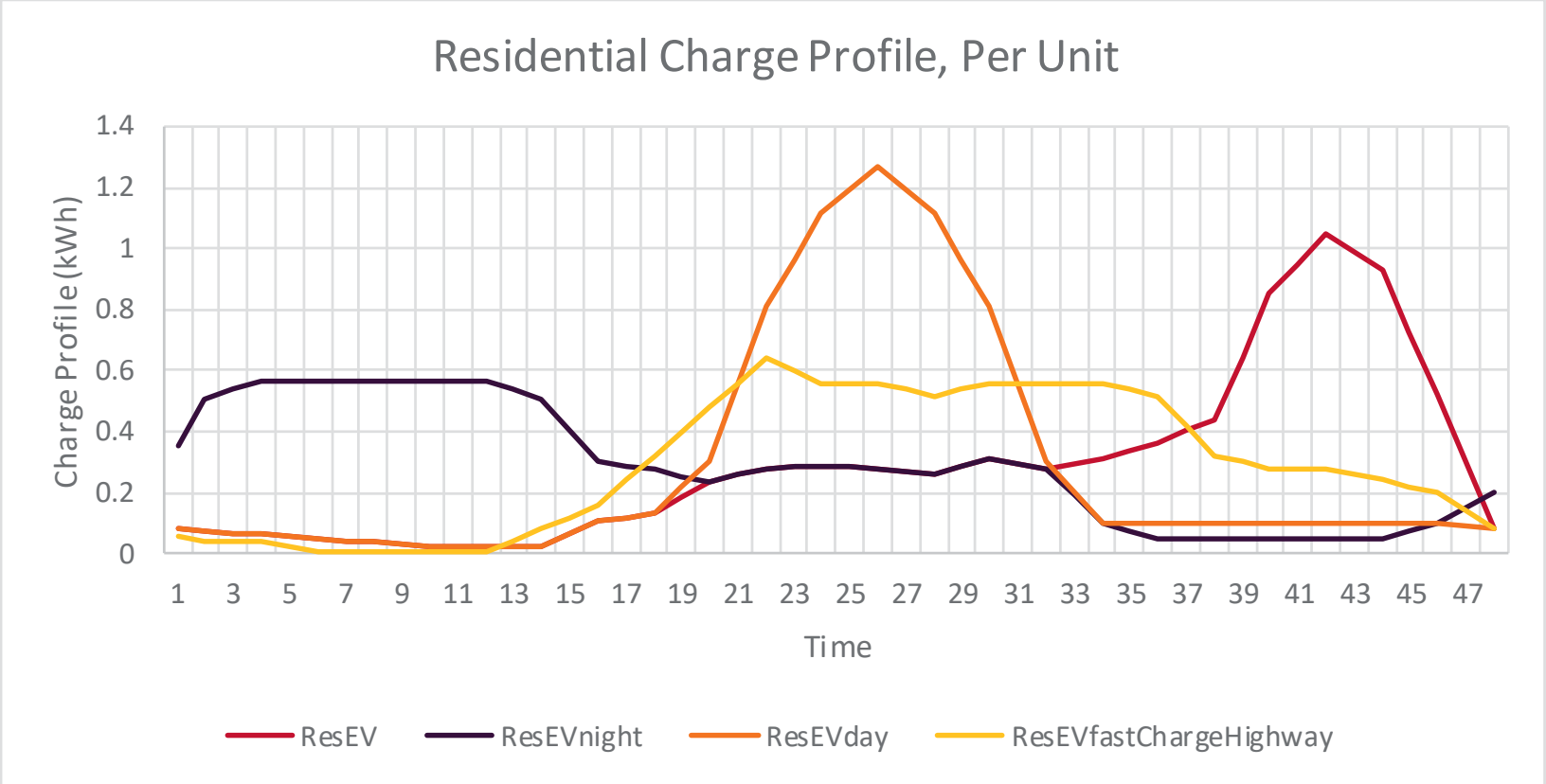
CSIRO Aggregated Battery Options





Electric Vehicles

CSIRO Per unit charge profiles RES



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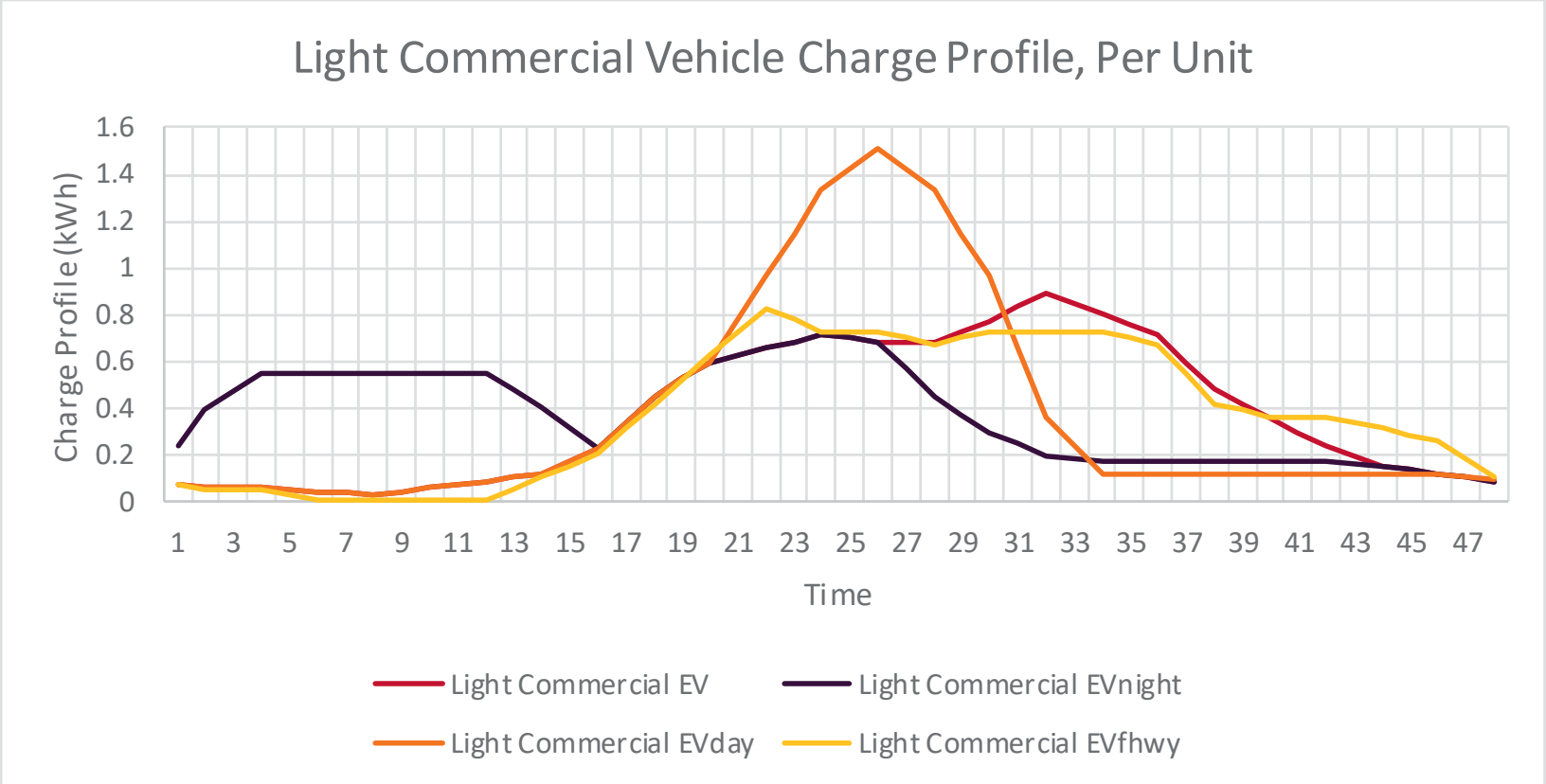
CSIRO Per unit charge profiles BUS



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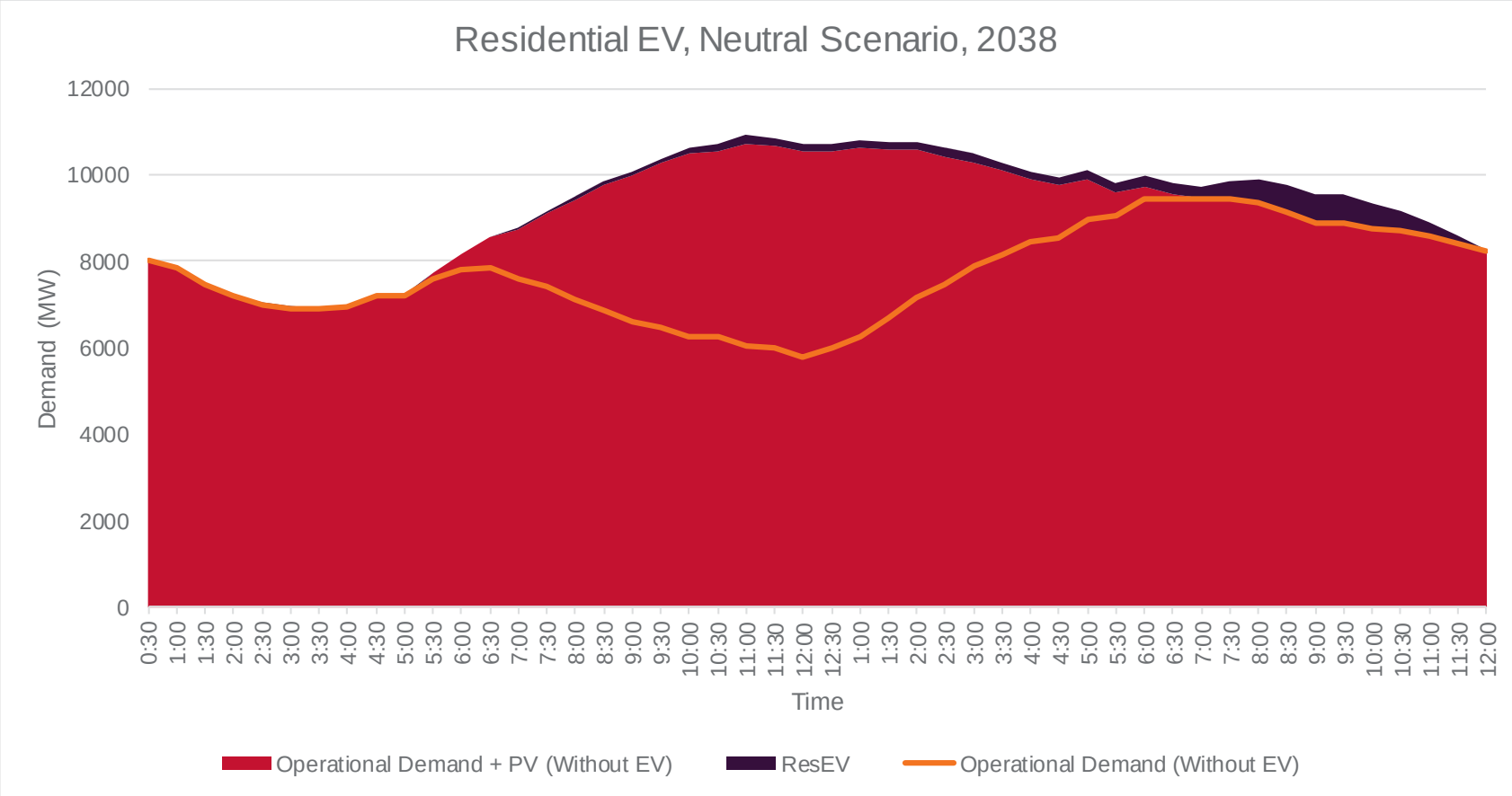
CSIRO Neutral NSW 2038 Residential



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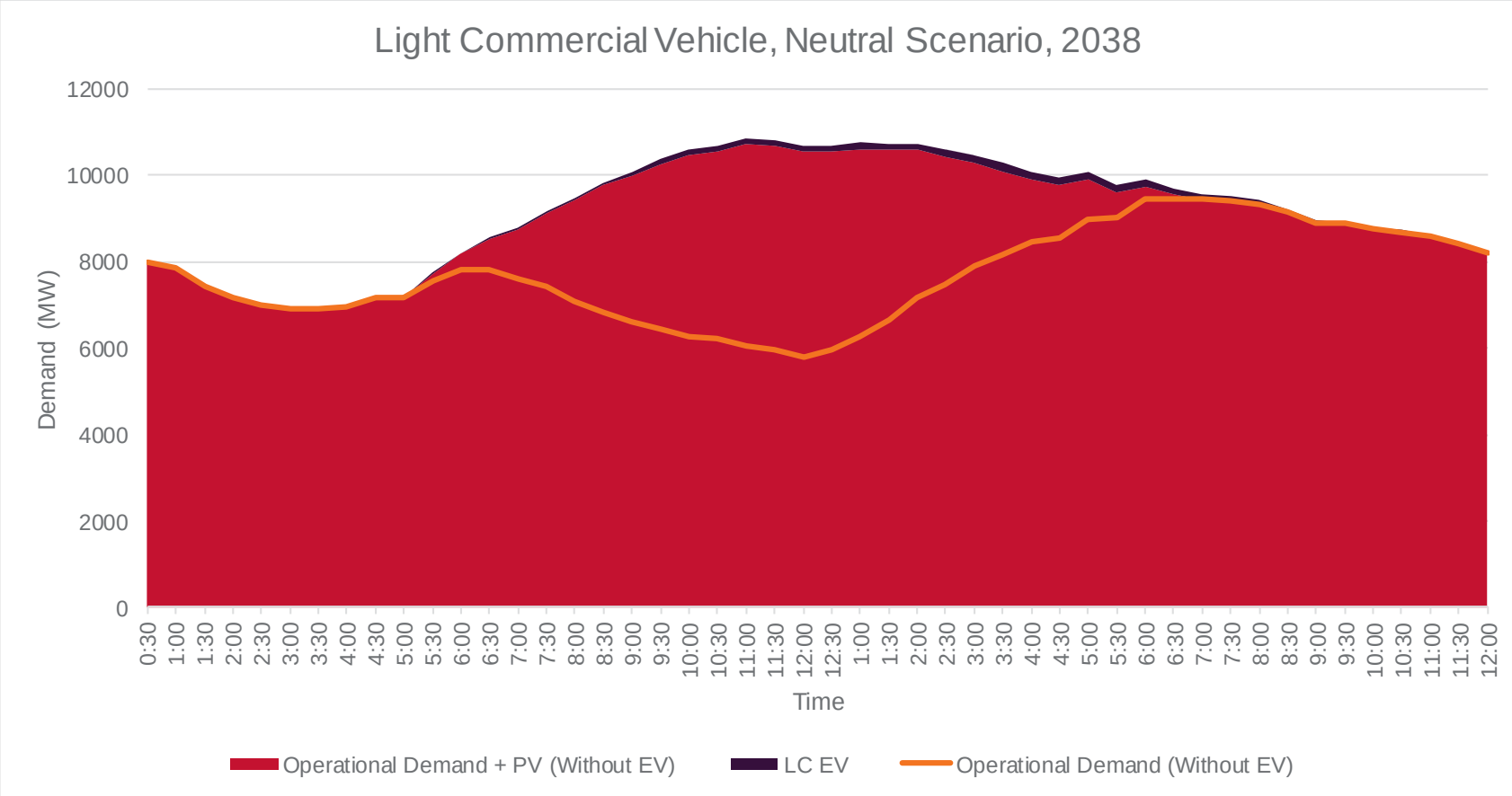
CSIRO Neutral NSW 2038 Commercial



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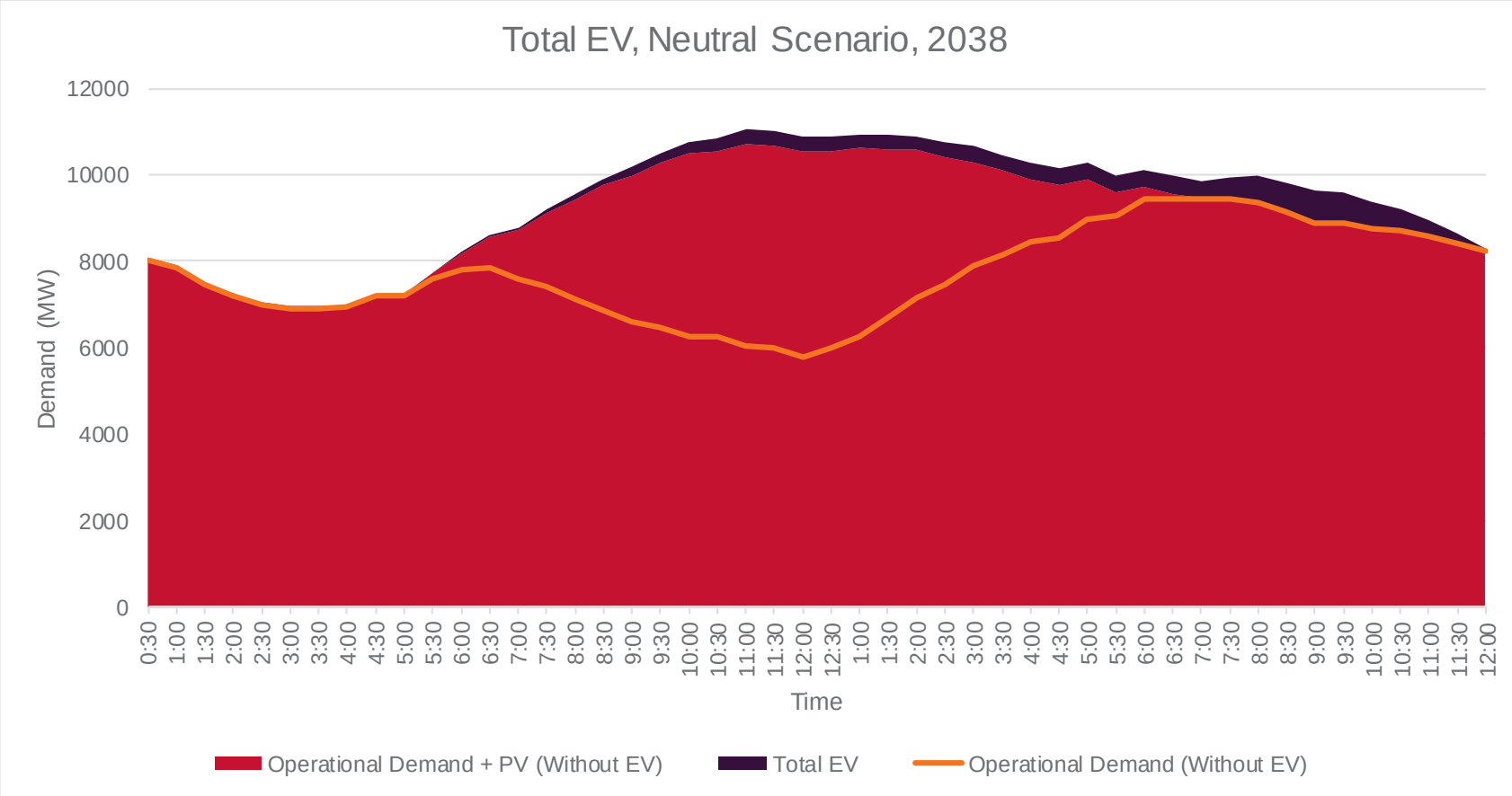
CSIRO Neutral NSW 2038 Combined



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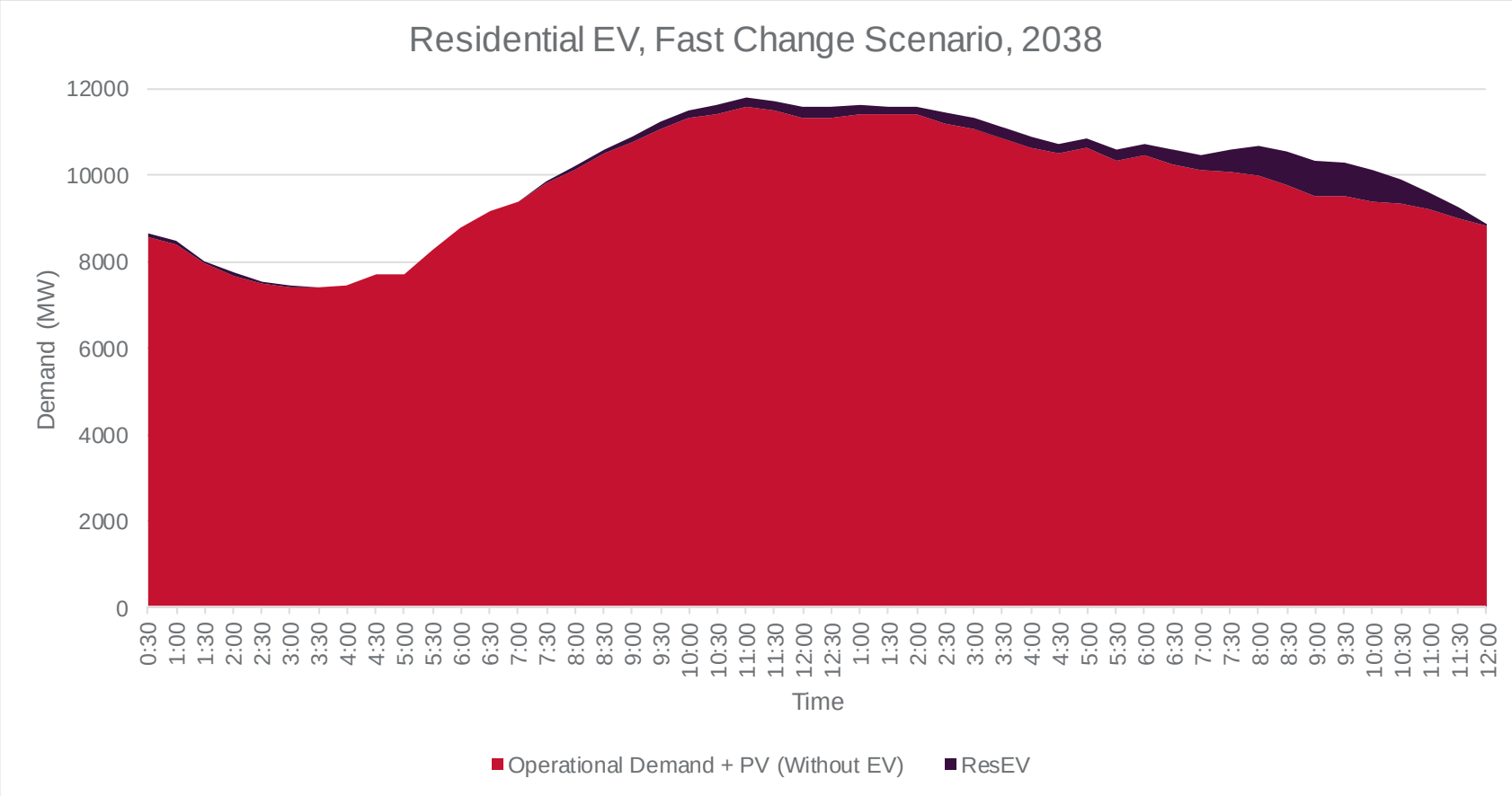
CSIRO Fast Change NSW 2038 Residential



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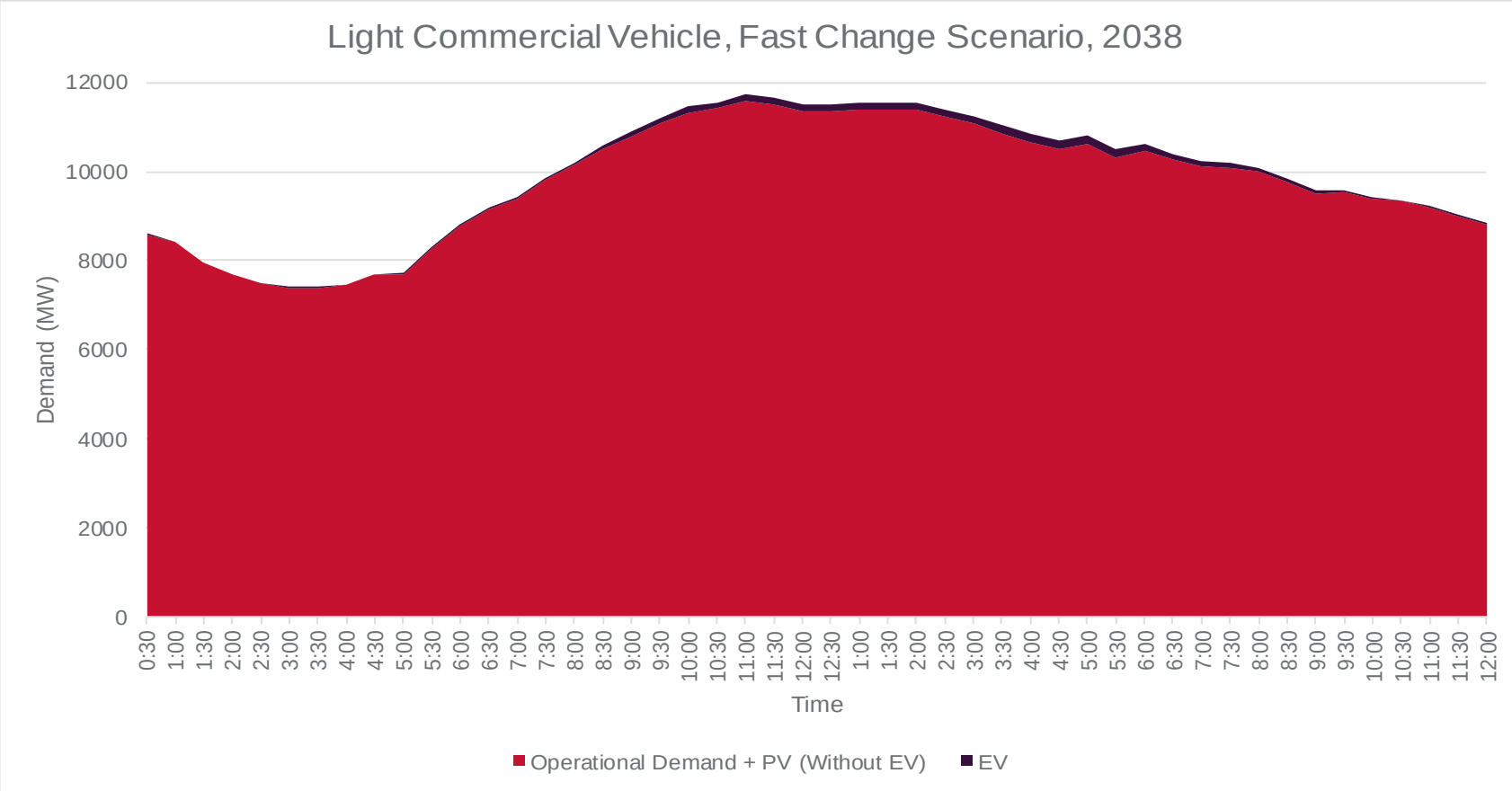
CSIRO Fast Change NSW 2038 Commercial



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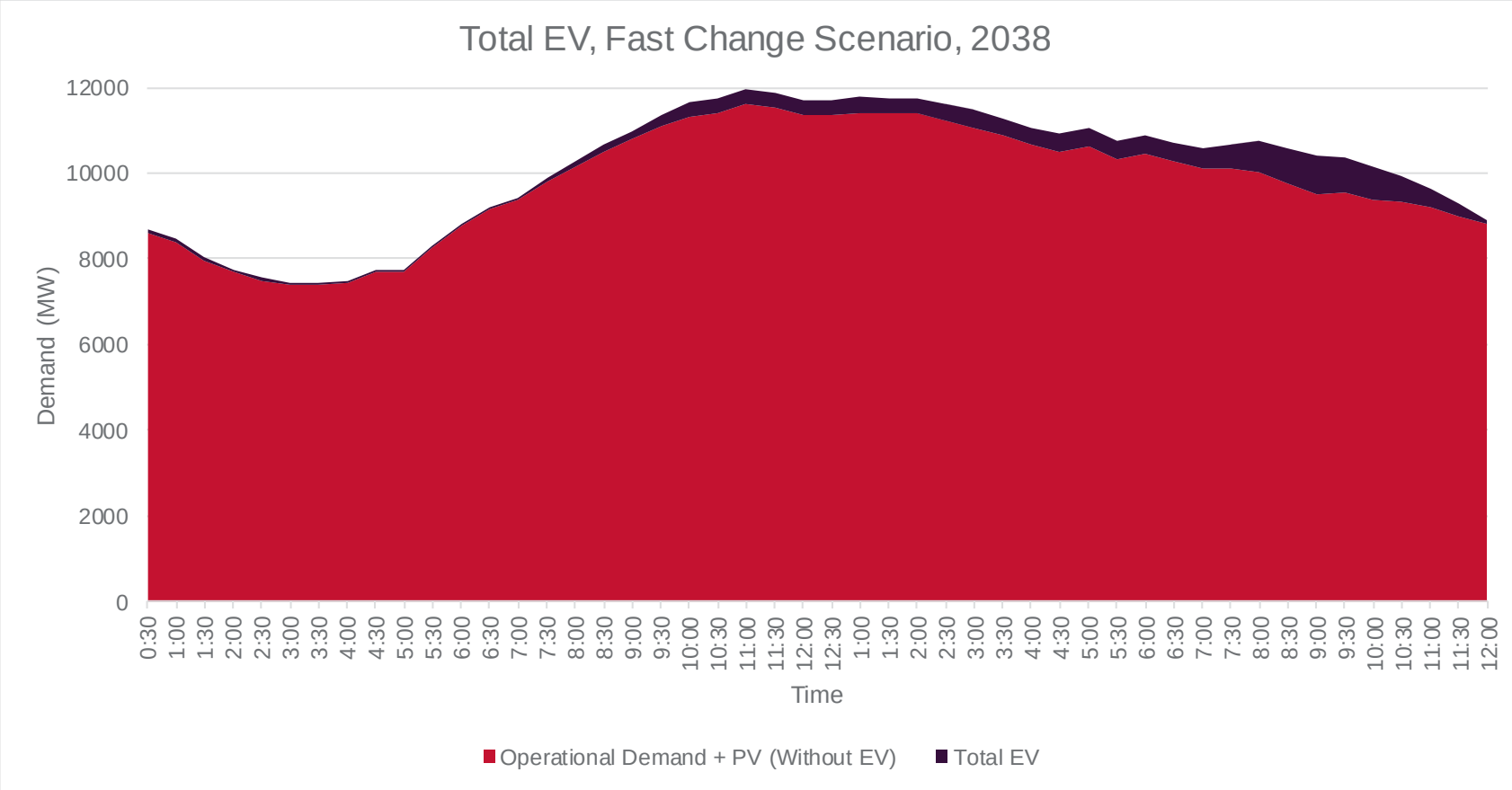
CSIRO Fast Change NSW 2038 Combined



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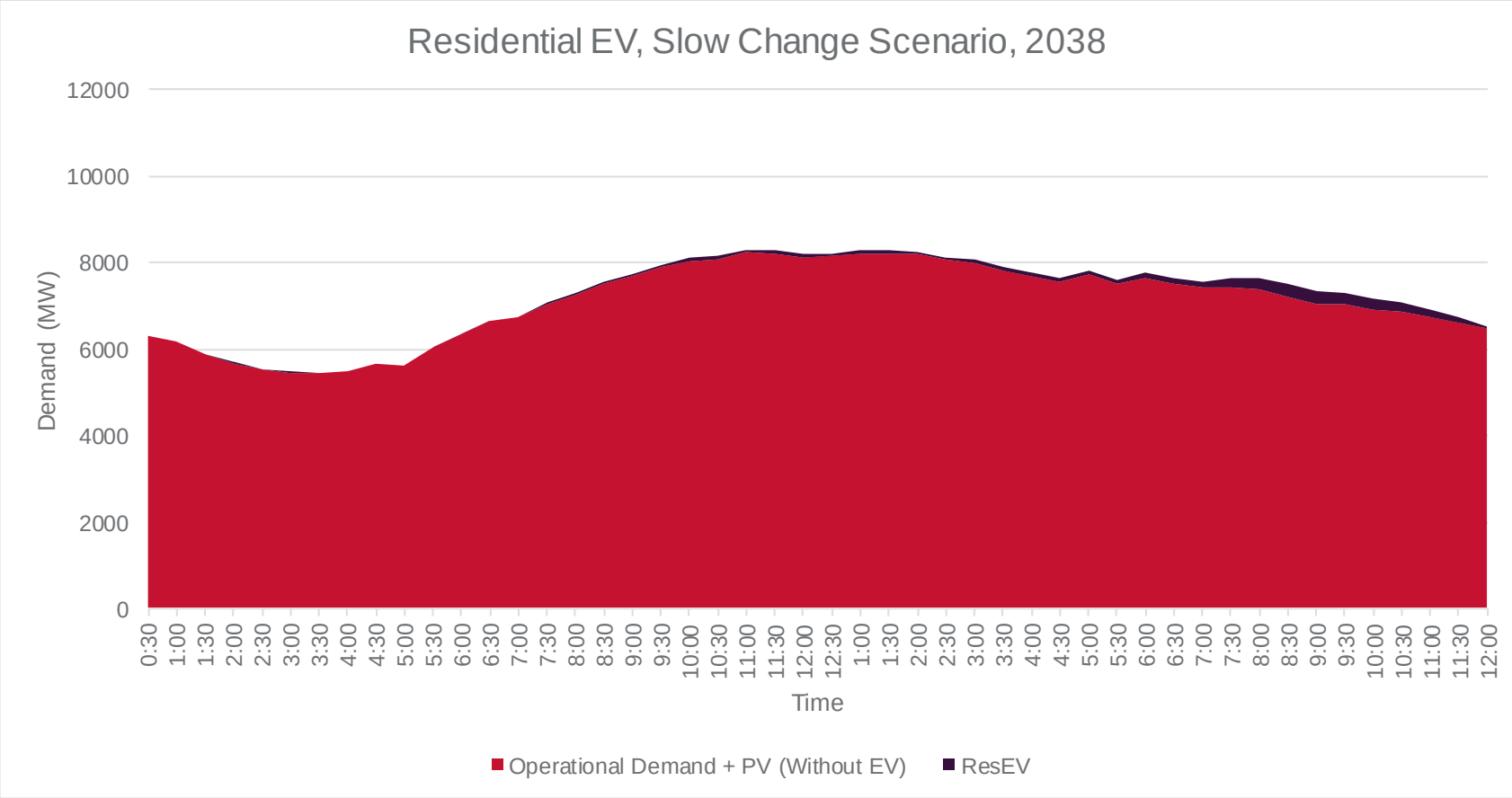
CSIRO Slow Change NSW 2038 Residential



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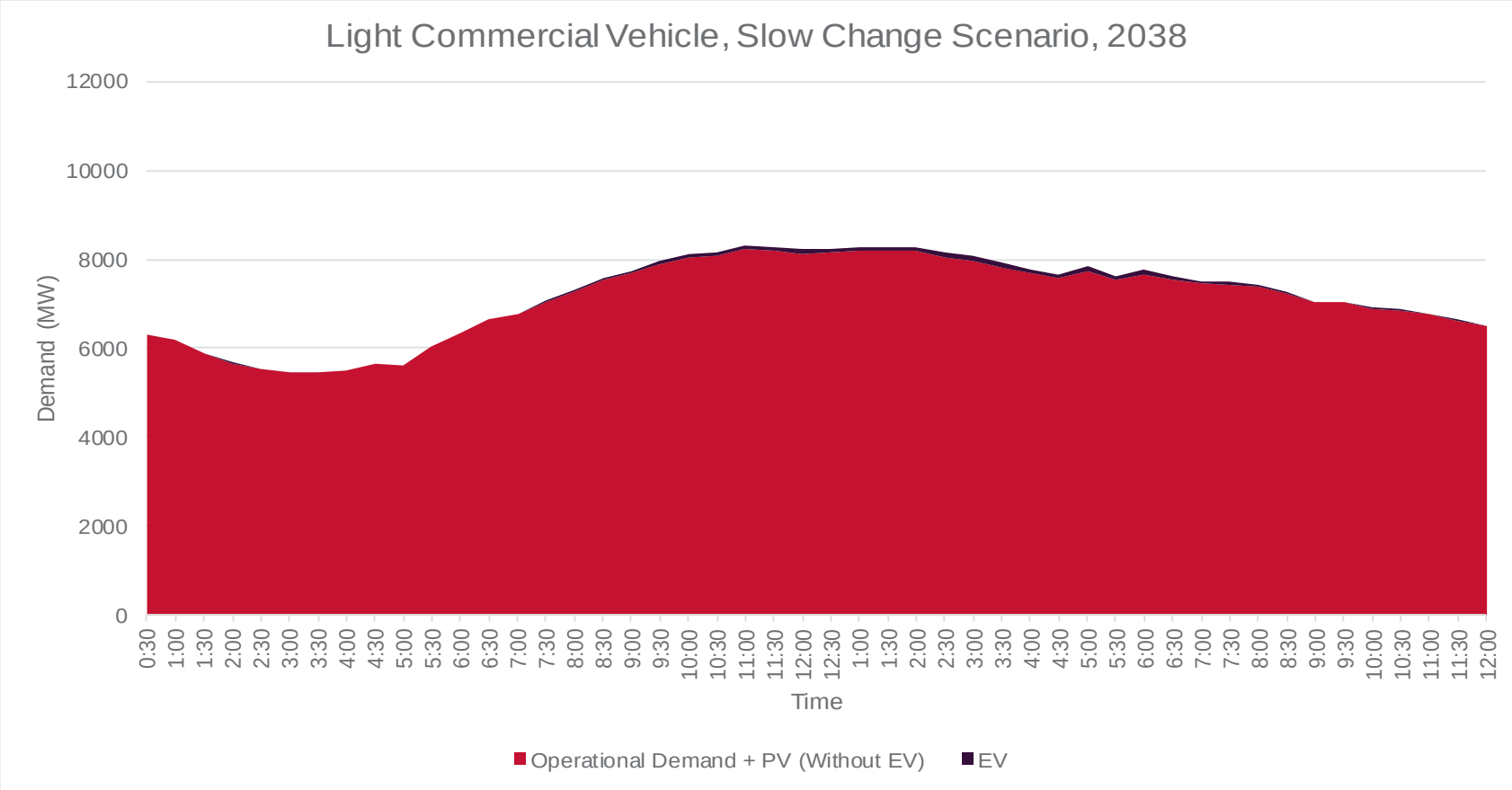
CSIRO Slow Change NSW 2038 Commercial



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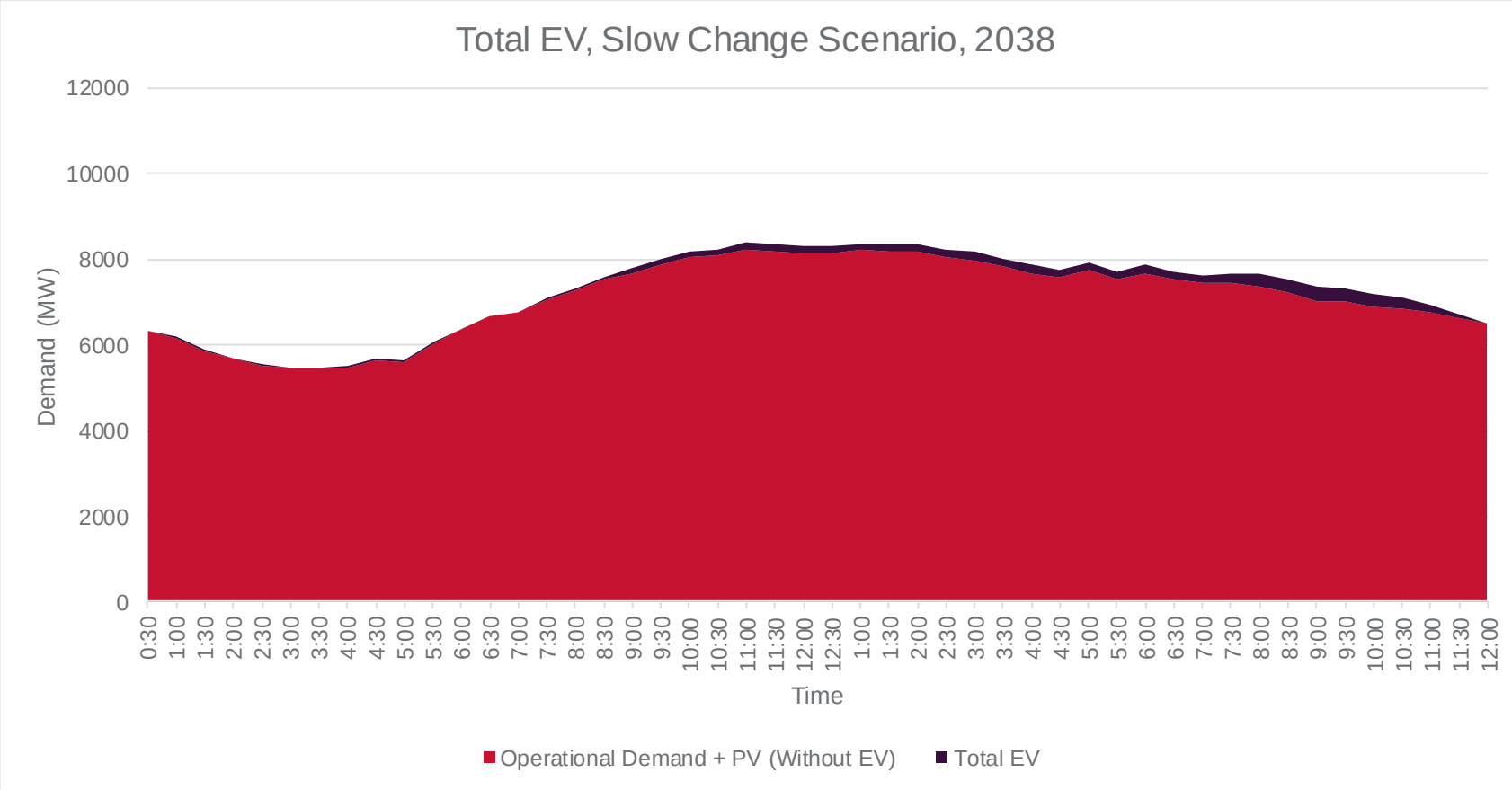
CSIRO Slow Change NSW 2038 Combined



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