Agenda

01 Official address
The Hon. Mick de Brenni MP

02 State of the Network
Paul Simshauser

03 TAPR
Stewart Bell

04 Q&A

05 Morning tea

06 Breakout sessions

07 Summary

08 Closing address

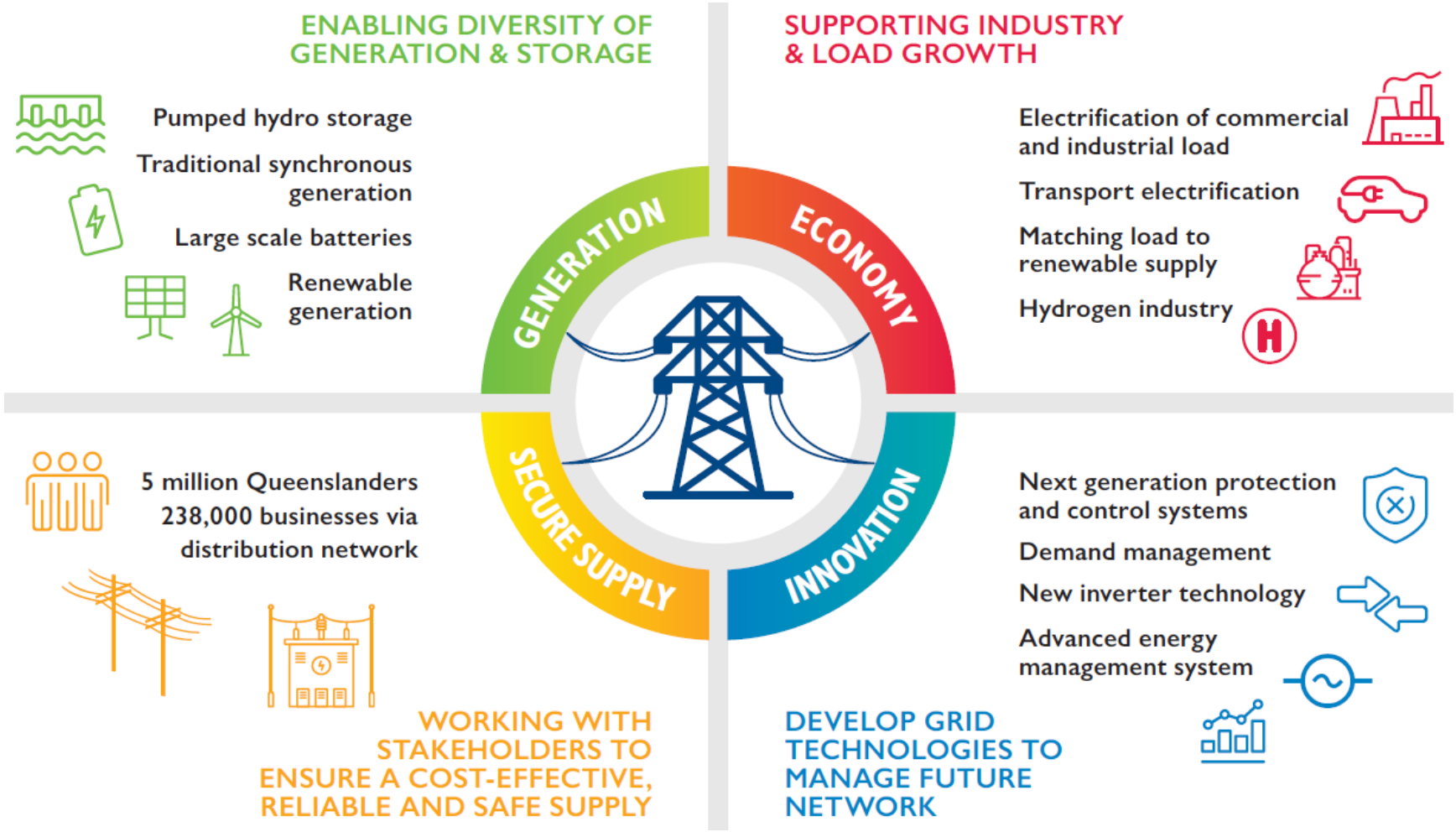
State of the Network

Paul Simshauser
Chief Executive

Monday 15 November 2021

Powerlink Queensland

Transmission at the centre of the power system

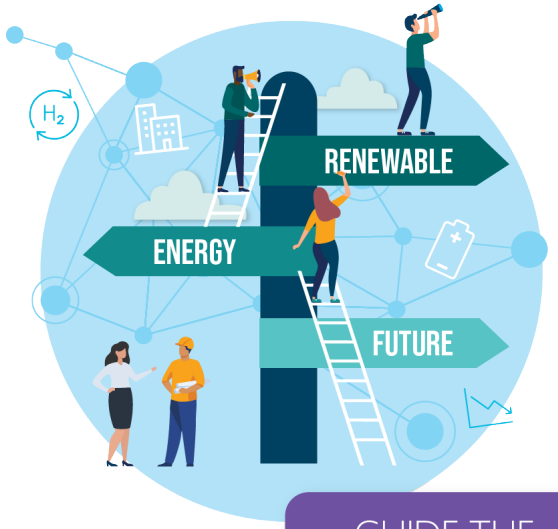


POWERLINK PLAYS A CENTRAL ROLE IN THE ENERGY TRANSFORMATION

Powerlink strategy

BE THE RENEWABLE SUPER GRID

UNLEASH OUR POTENTIAL

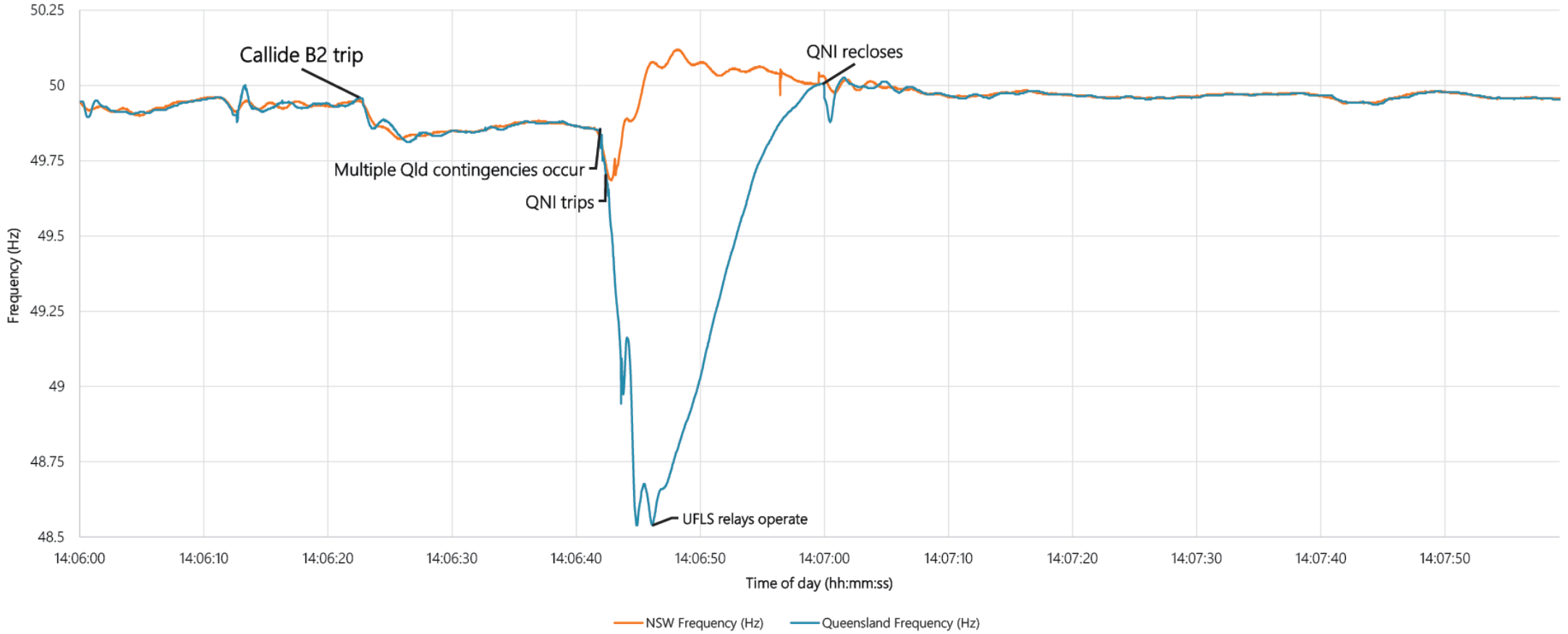


GUIDE THE MARKET

DRIVE VALUE FOR CUSTOMERS

Callide outage – 25 May

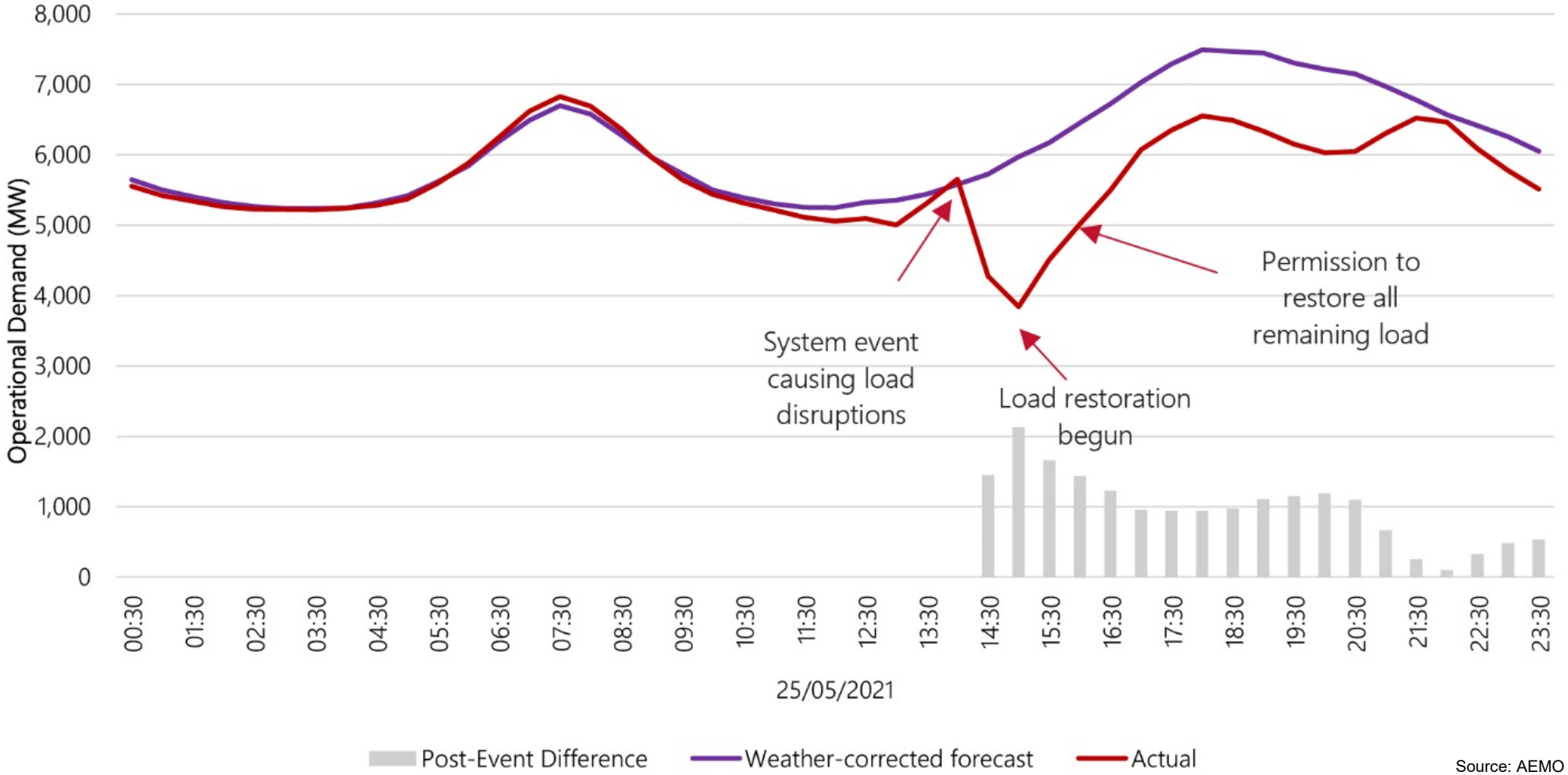
Queensland and New South Wales Interconnector frequency during multiple contingencies



Source: AEMO (2021)

Callide outage – 25 May

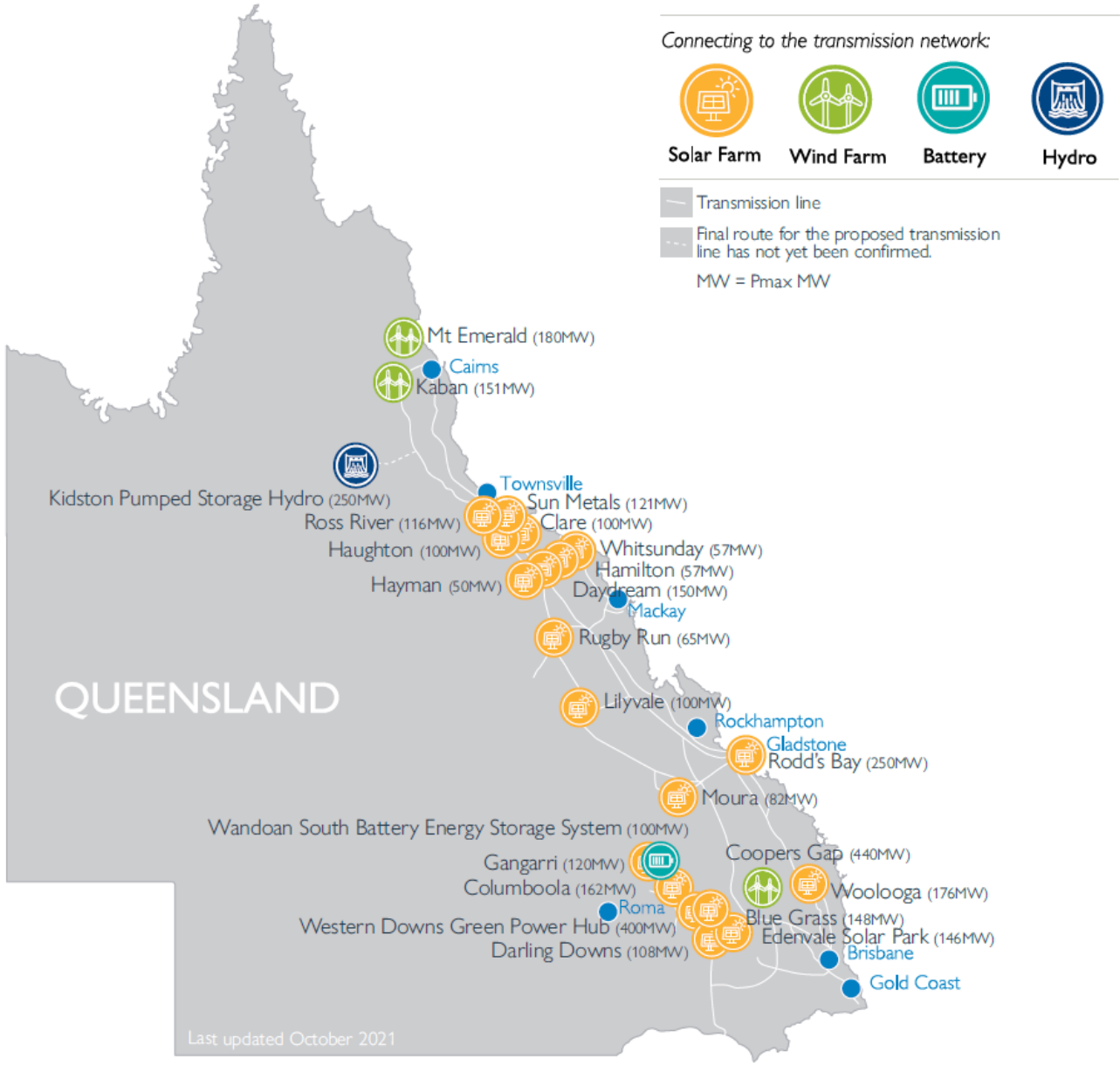
Operational demand reductions estimations



Source: AEMO (2021)

Transmission connections

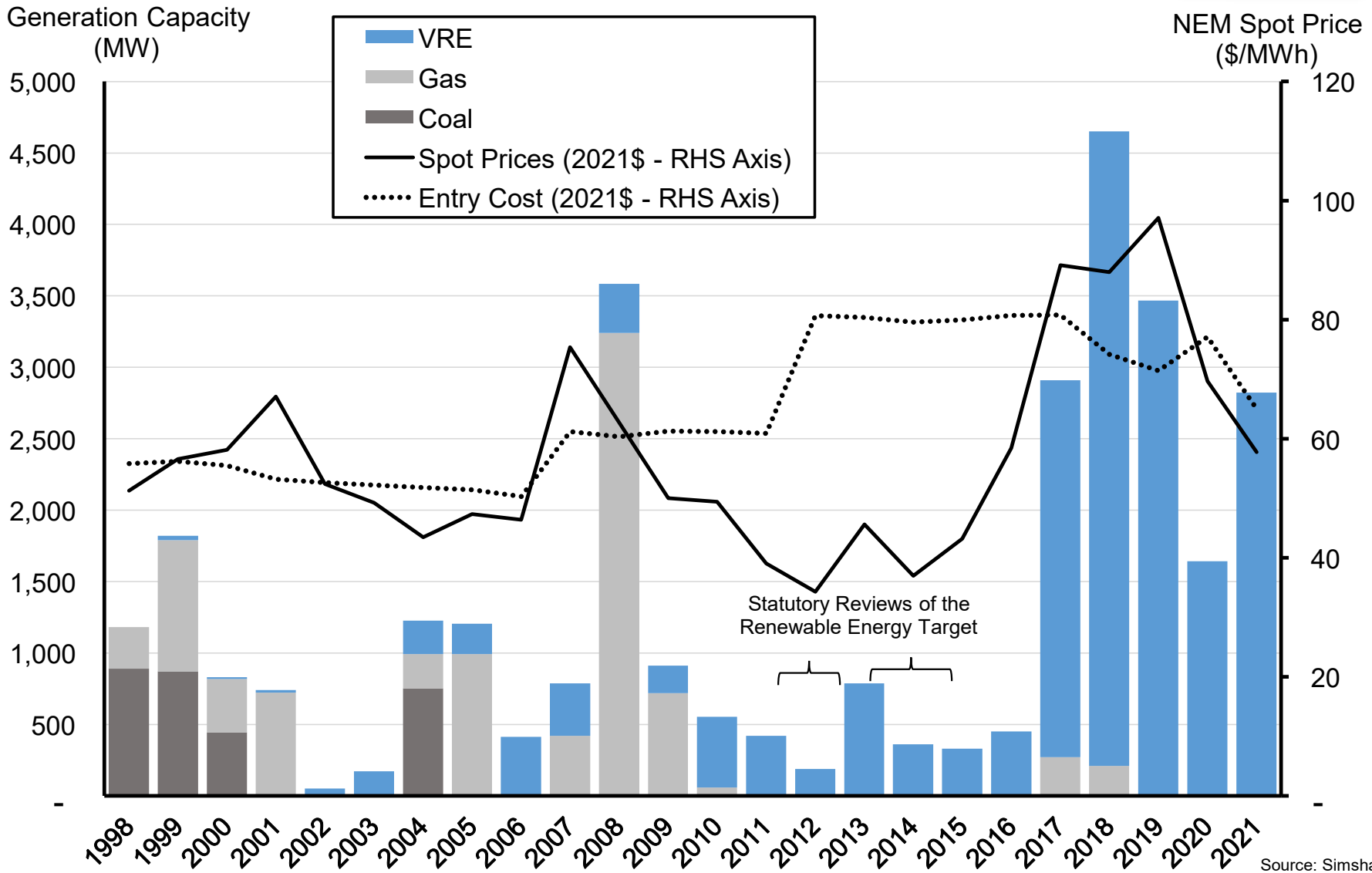
- **Connected 24 renewable projects** with combined maximum output of approximately 3,600MW
- As at September 2021, **23 renewable project applications are being processed** representing approximately 6,700MW of generation
  - Wind – 4,400MW
  - Solar – 2,000MW
  - Battery – 300MW



Major project update

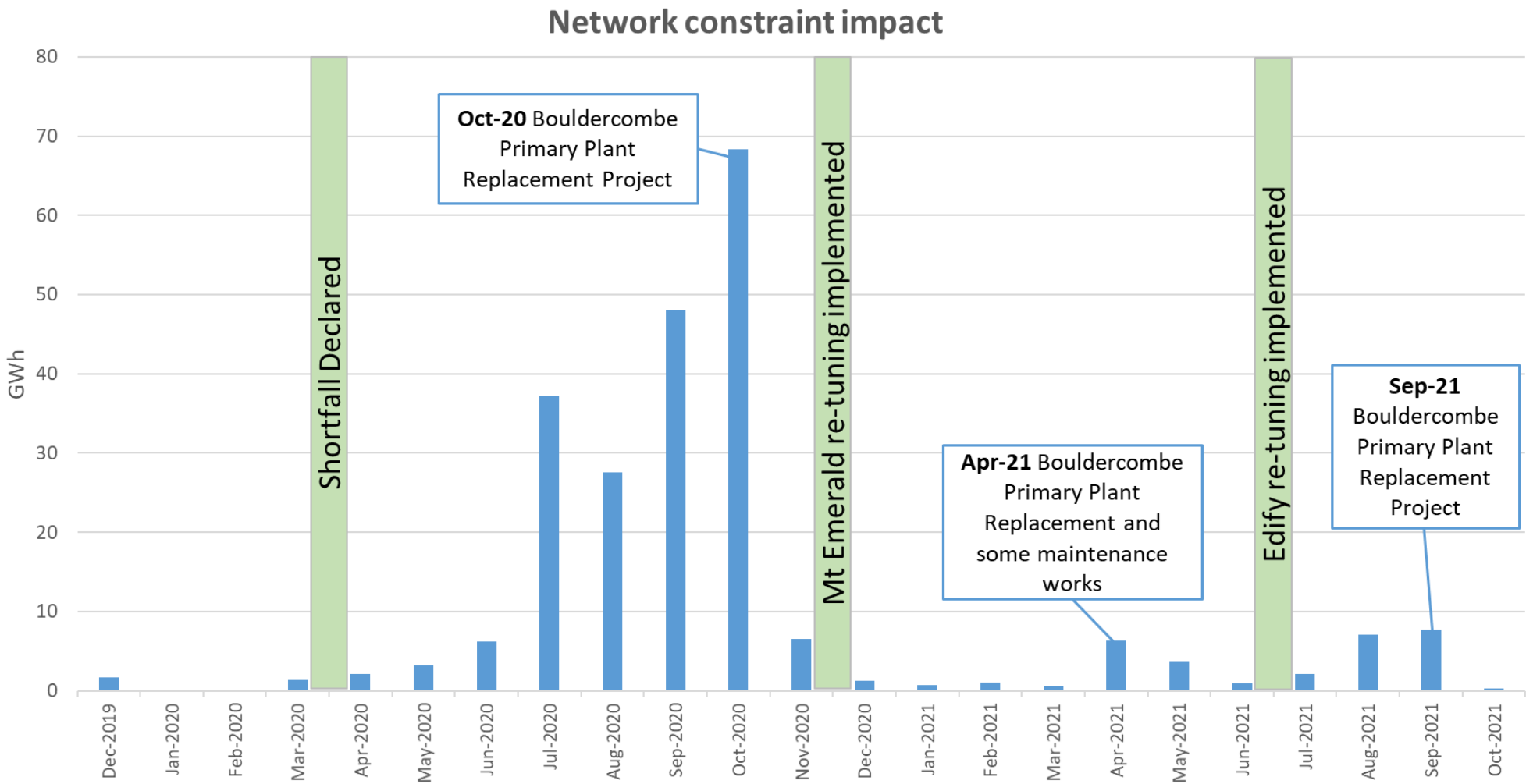
- **Genex Kidston Connection Project**
  - building around 186km of 275kV transmission line, including 340 transmission towers.
  - Local supplier briefing conducted in conjunction with UGL
- **Wandoan South Battery Energy Storage System (BESS)**
  - Queensland first large-scale battery owned by Vena Energy
  - Powerlink component of works completed
  - lithium ion battery will have a capacity of 100MW and store 150MWh of energy, which could power up to 57,000 homes
- **Borumba Pumped Storage Hydro**
  - Queensland Government and Powerlink undertaking Detailed Analytical Assessment over two years to determine the site's suitability for a pumped hydro facility.

NEM supply-side dynamics



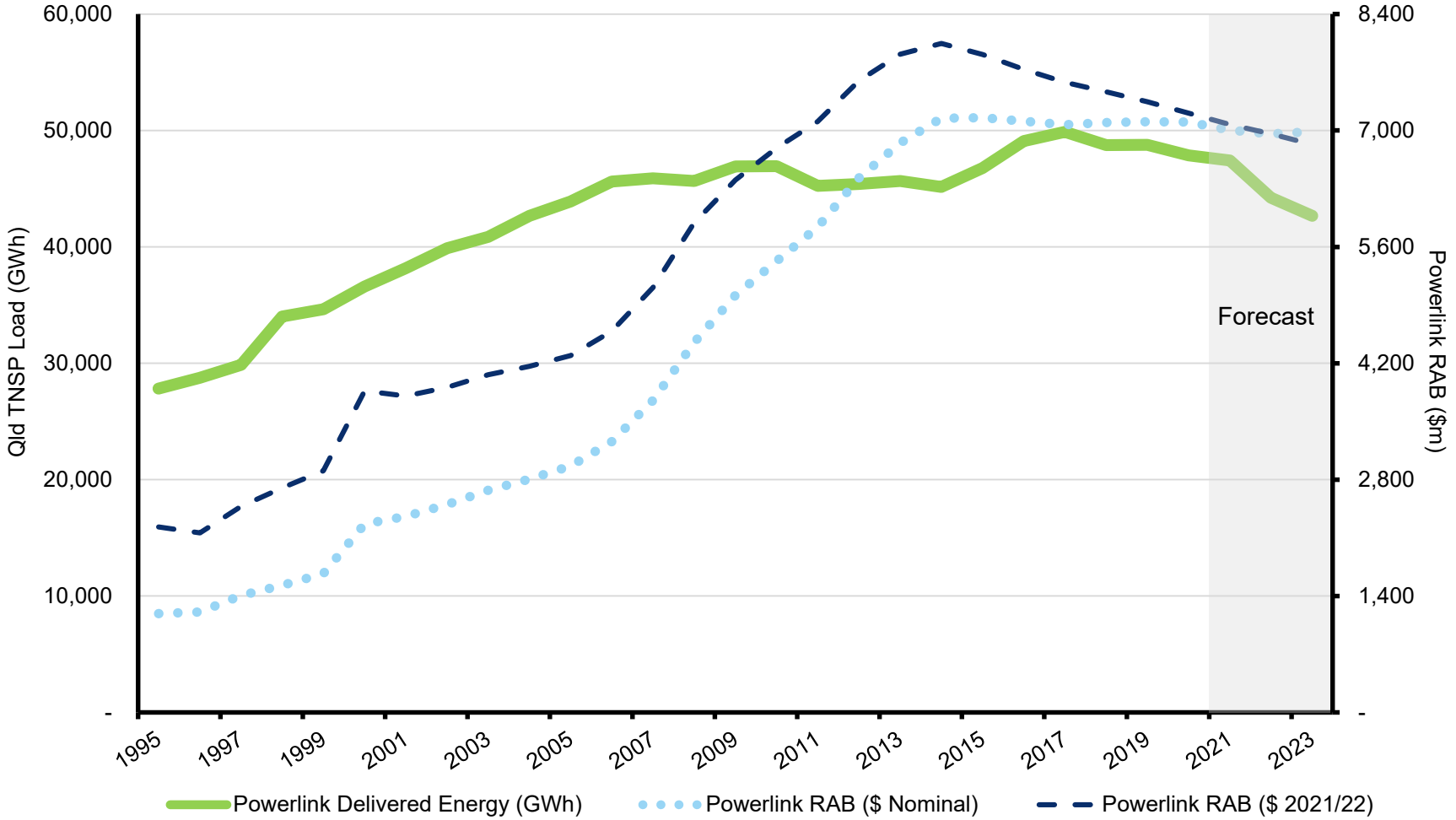
Source: Simshauser & Gilmore (2022)

Retuning inverters

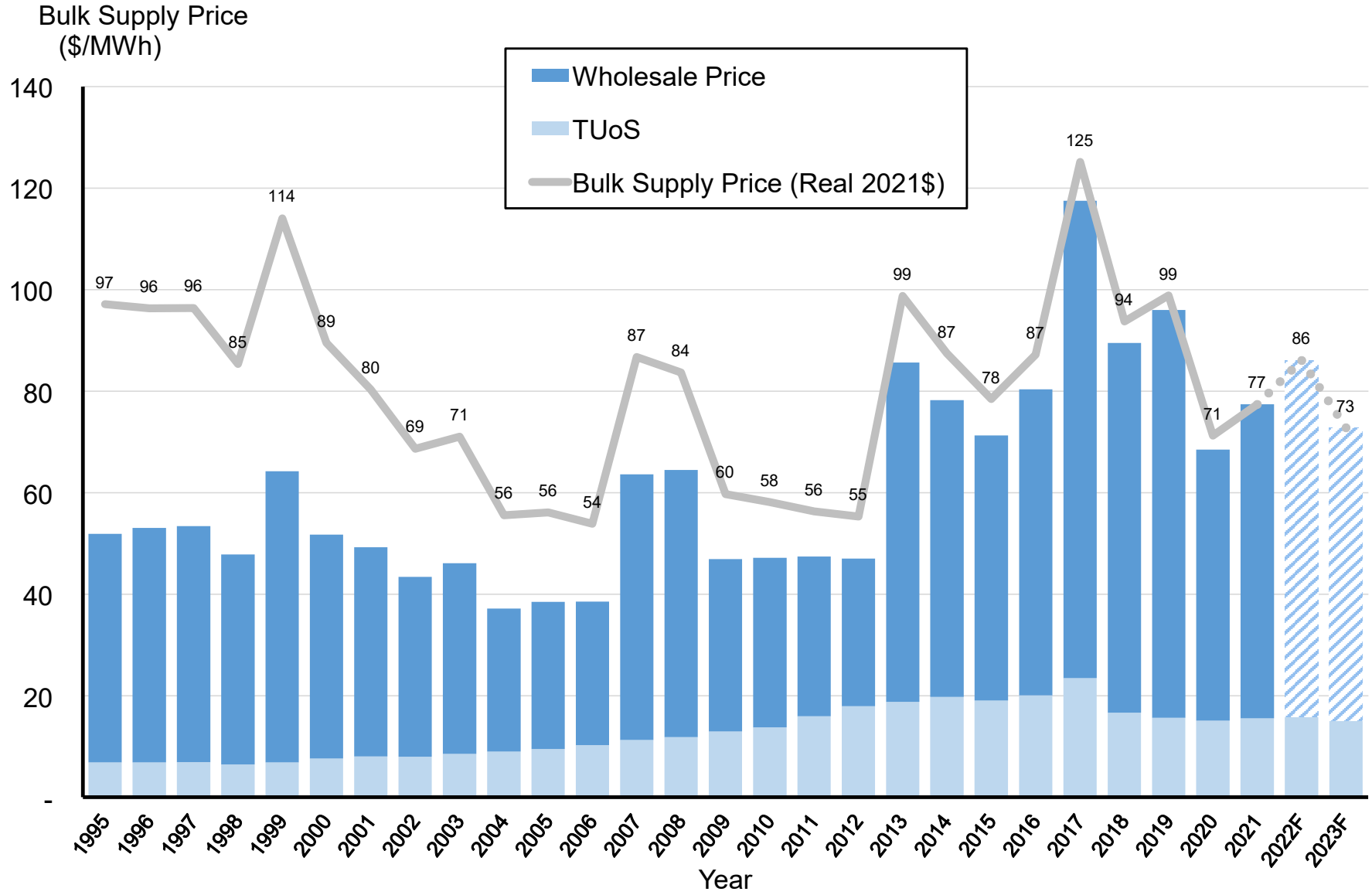


Regulatory Asset Base

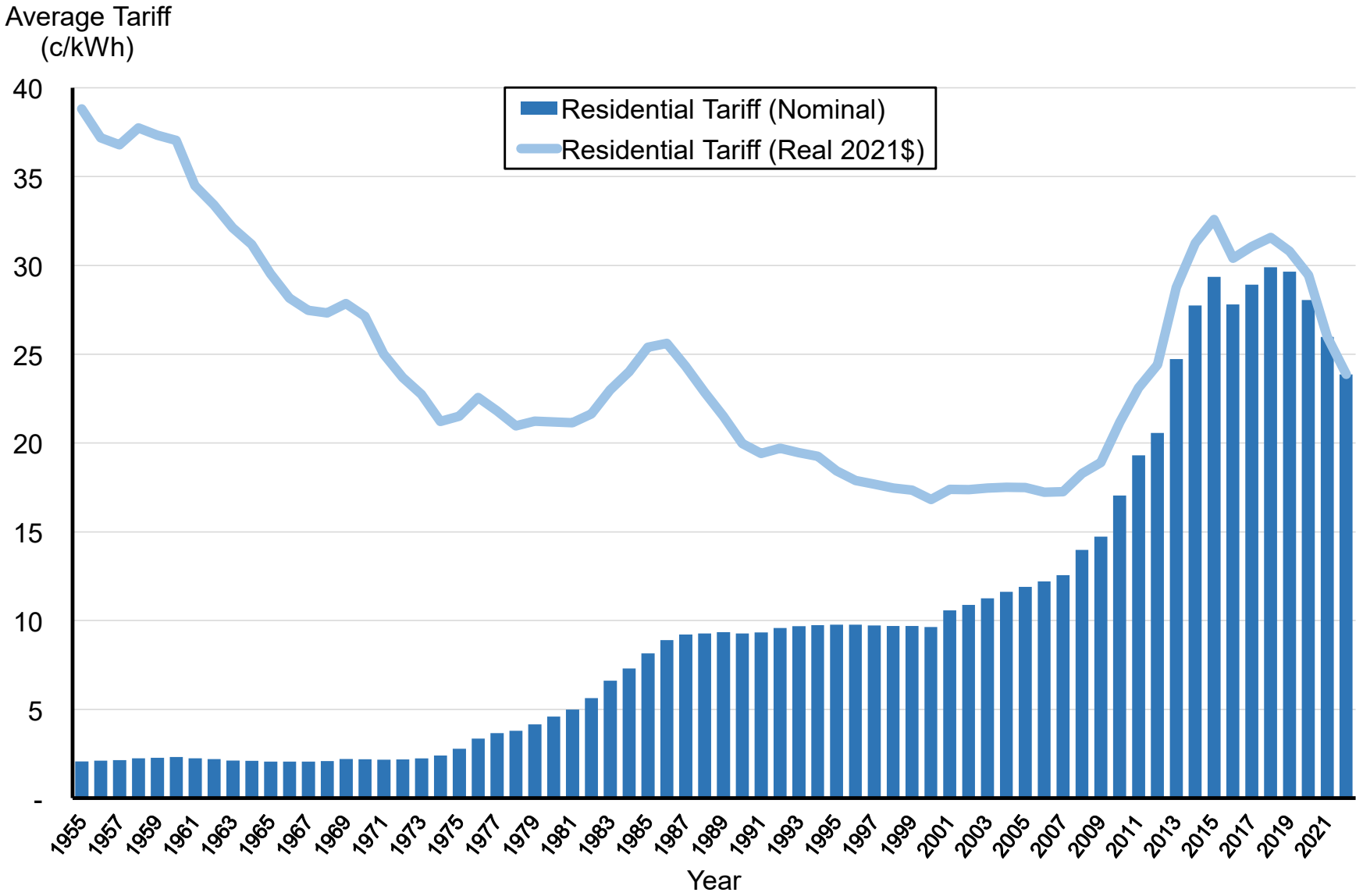
Powerlink forecast delivered energy (GWh) versus RAB



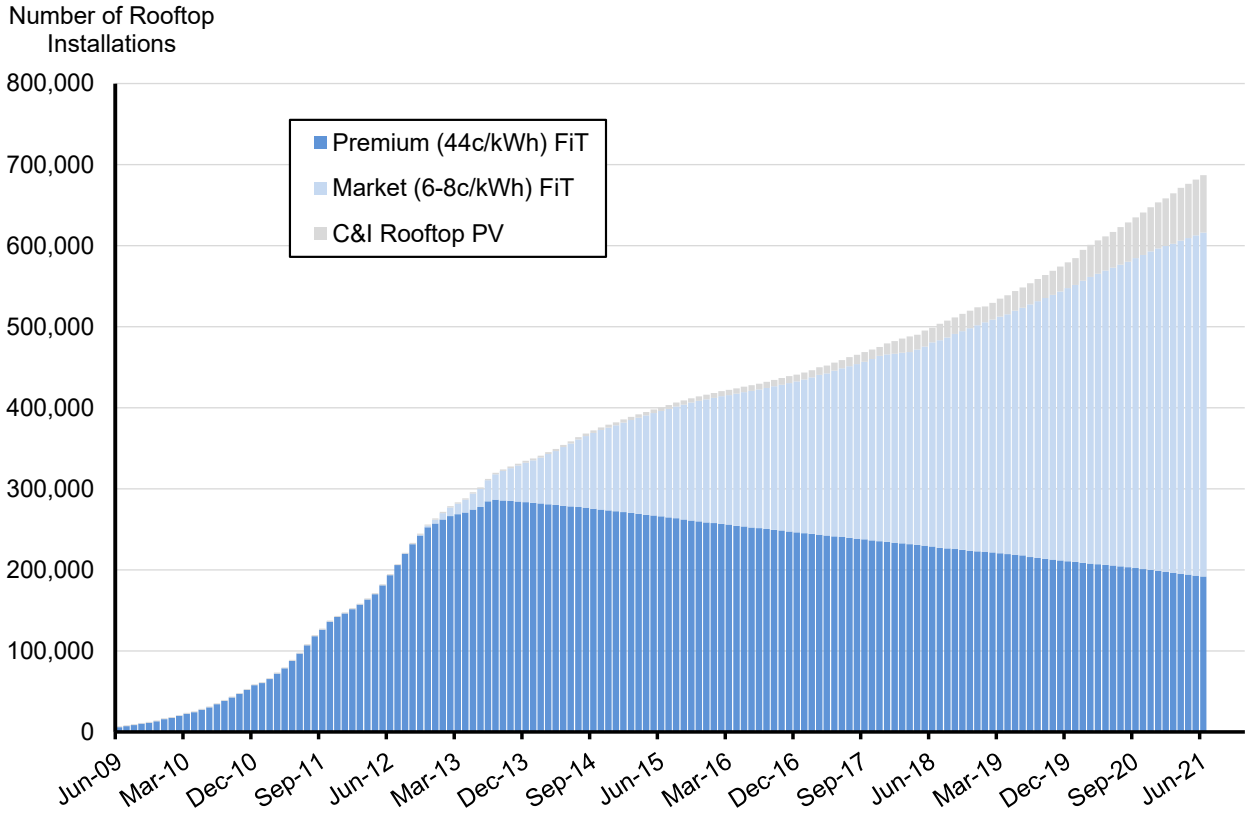
Queensland bulk supply price (1995-2023F)

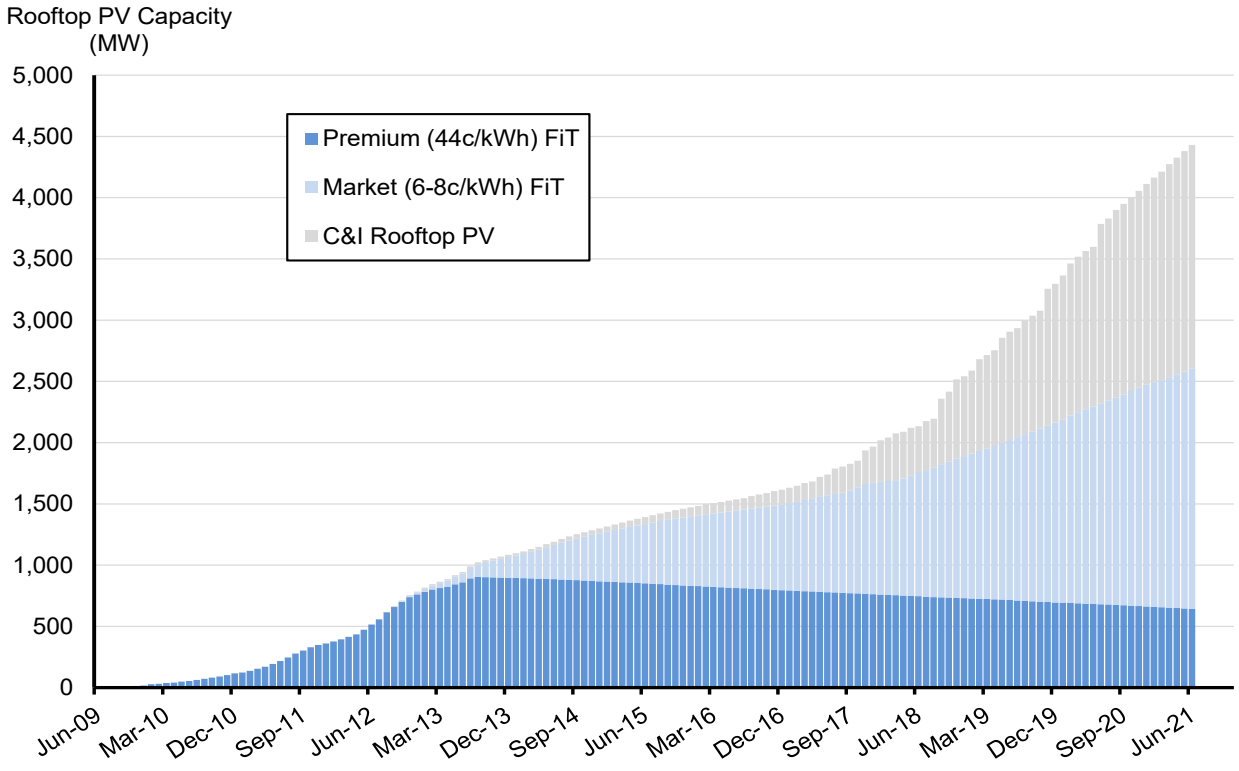


Queensland residential tariffs (1955-2022)

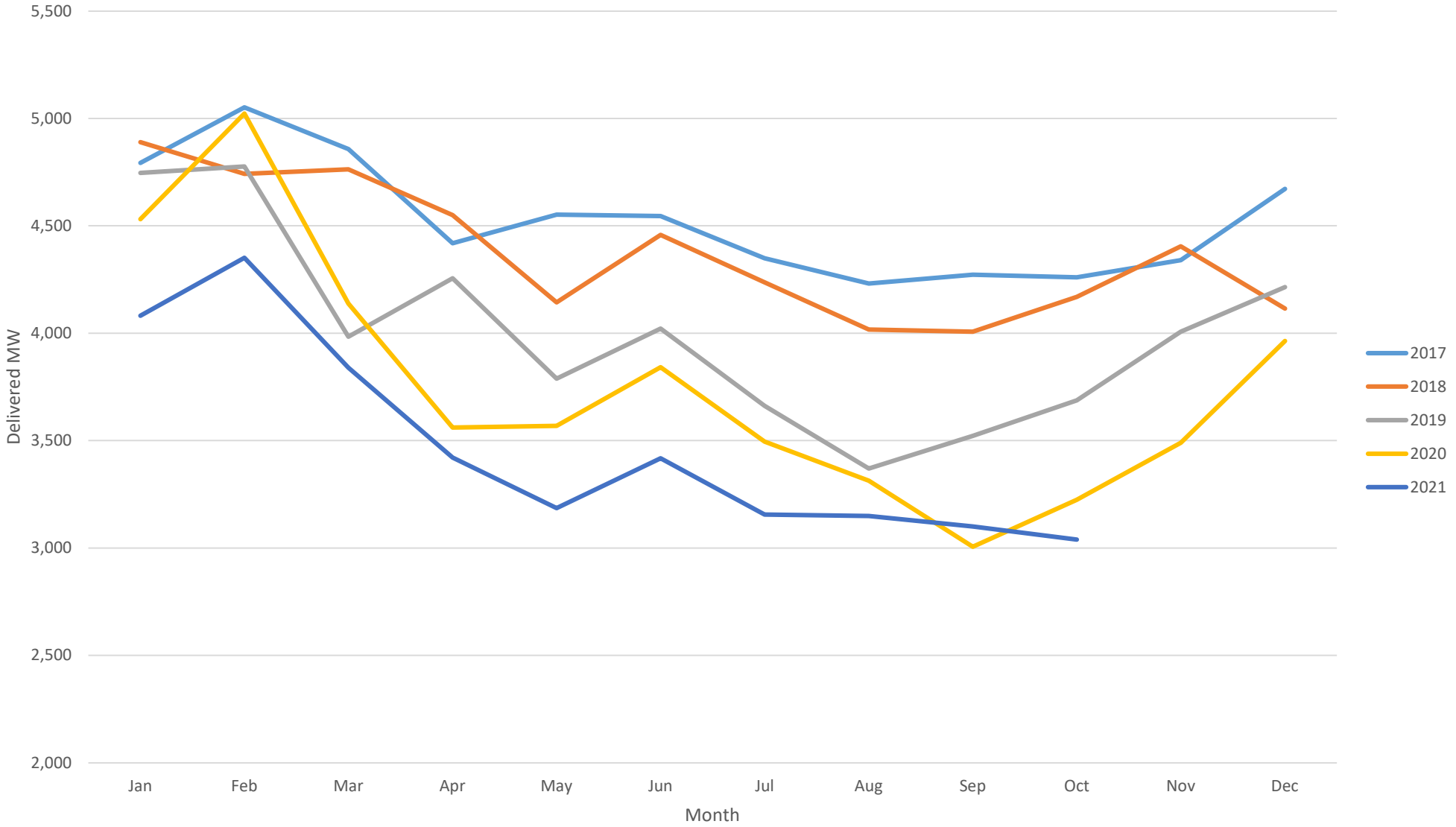


The solar effect



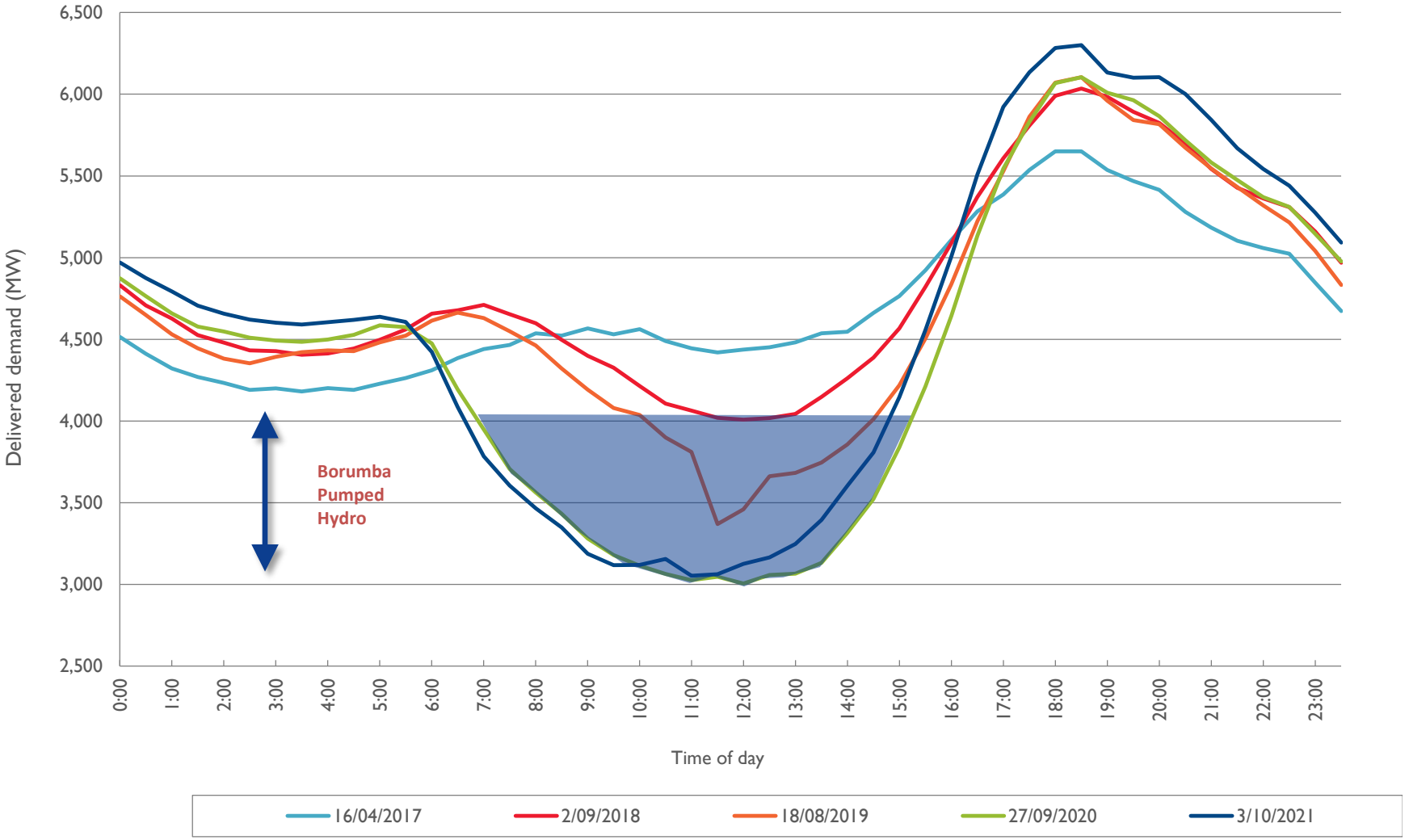


Queensland minimum demand (MW)



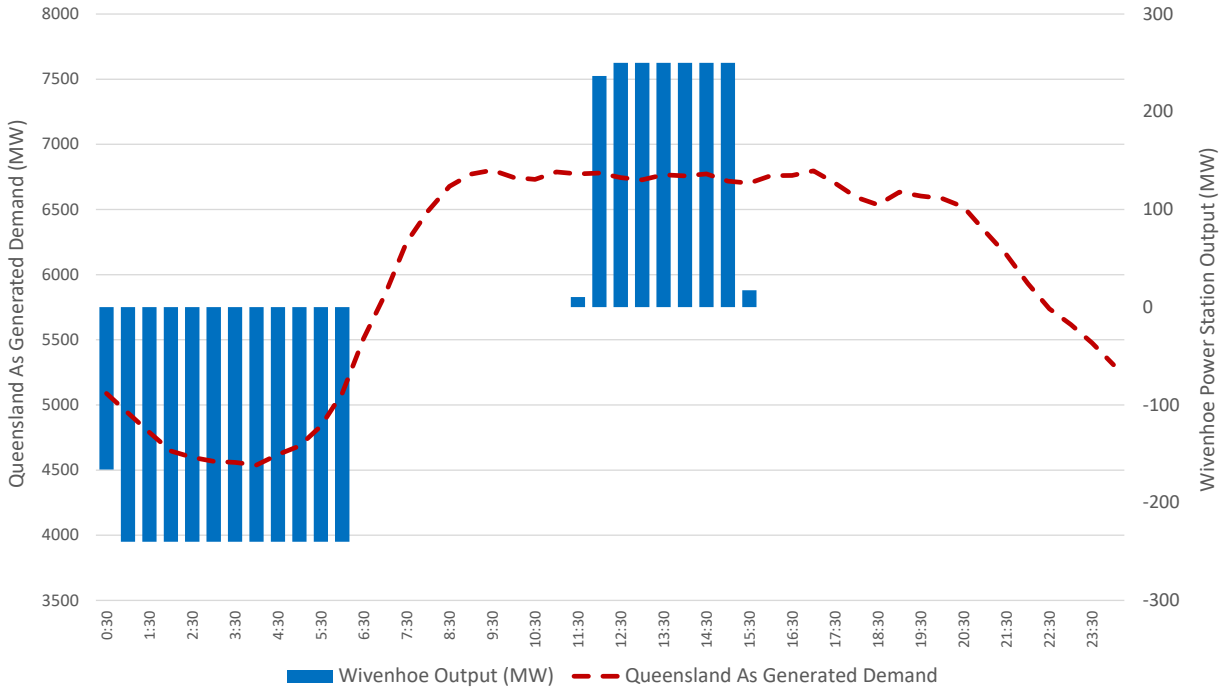
Source: AEMO (2021)

Required energy offsets



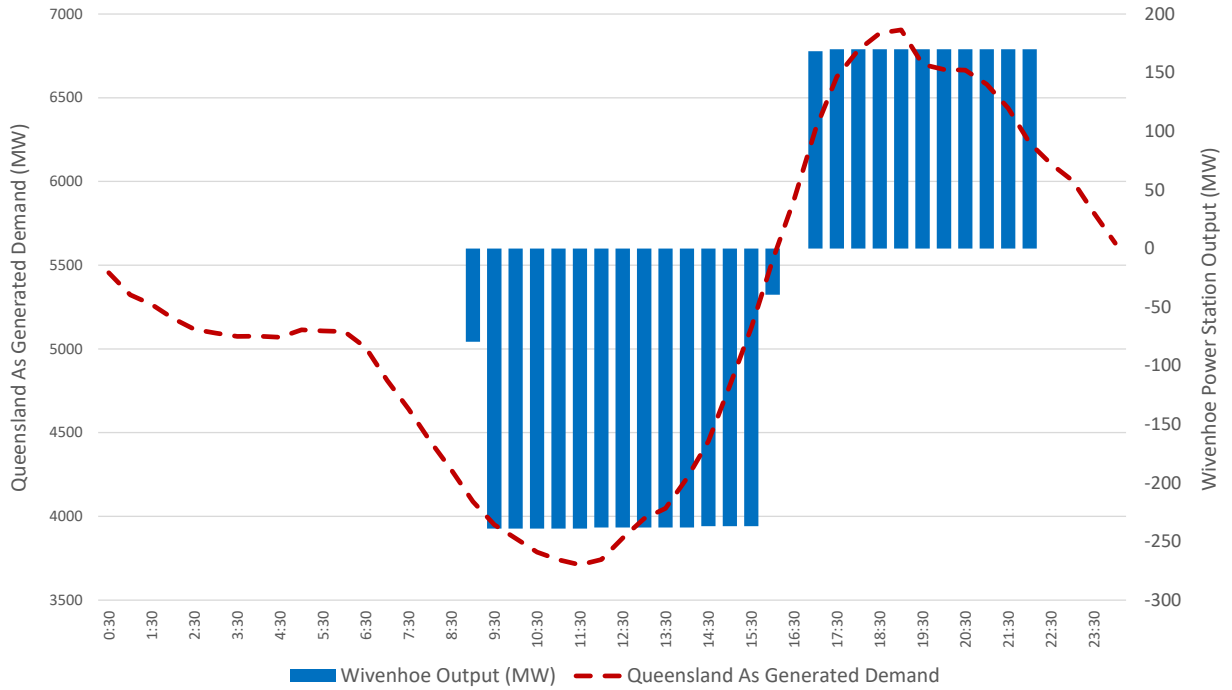
Impact on pumped hydro storage

2010 Wivenhoe Typical Summer Day



Snapshot for 1 December 2010. Note Queensland As Gen Demand > QLD Delivered from the Grid Demand.

2021 Wivenhoe Typical Spring Day



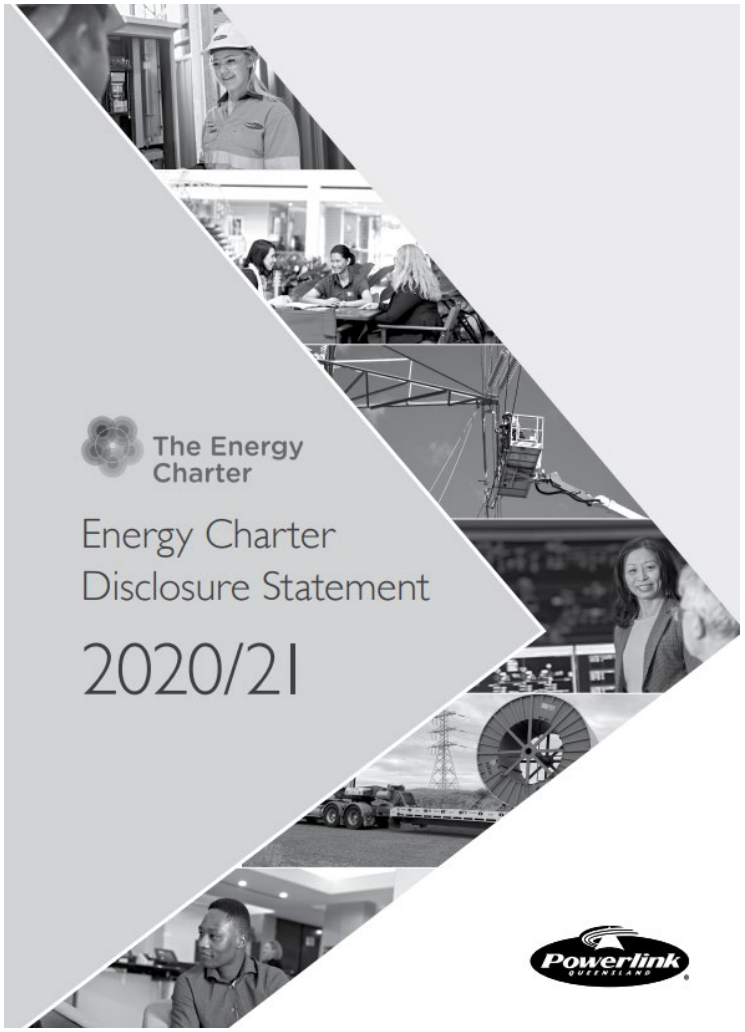
Snapshot for 3 October 2021 (ie: day with lowest day time minimum demand)..

2023-27 Revenue Proposal update

	Capital Expenditure	Operating Expenditure	Rate of Return	Regulatory Asset Base	Maximum Allowed Revenue	Electricity prices
Revenue Proposal	$863.9m	$1,046.4m	4.44%	$6,958.4m	$3,333.9m	11% decrease
Draft Decision	$863.9m	$1,046.4m	4.65%	$6,983.4m	$3,414.9m	9% decrease
Revised Revenue Proposal	$882.4m	$1,071.4m	4.65%	$7,140.4m	$3,427.6m	5% decrease

Consumer engagement Award

The Energy Charter initiatives



Community engagement focus