

# REM Changes and Energy Storage

June 3, 2025

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## Similan Consulting

- Produce a quarterly Alberta Price Forecast
- Provide analytics and financial modelling services
- And present at every CanREA event they invite us to! Thanks CanREA!

# REM – Our Take

## Previous Proposal

- Day Ahead Market
- Day Ahead Unit Commitment (DAC) product
- Ramping products (R10/R60)
- Lower energy offer cap \$999.99/MWh → \$800/MWh
- Negative pricing at REM inception
- Congestion Avoidance Market. Locational Marginal Pricing

**High Complexity**  
**Lower stakeholder support**

## Current Proposal

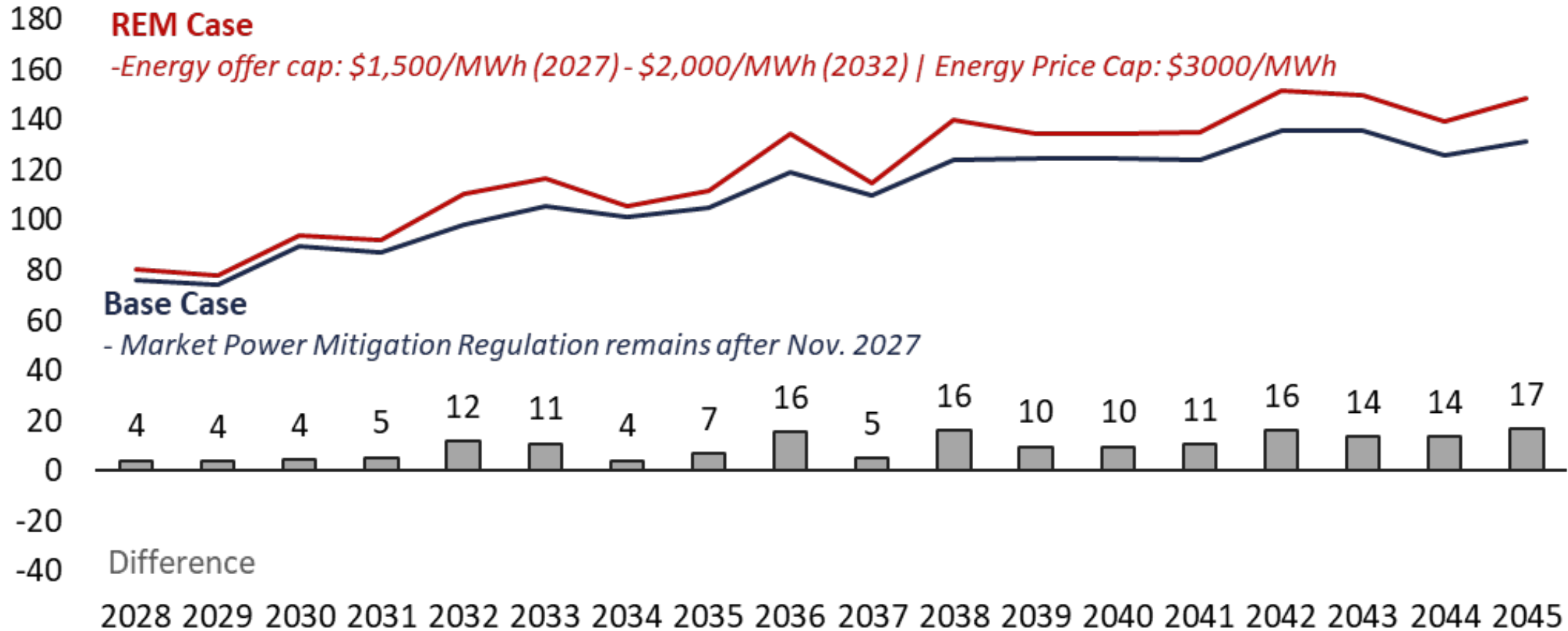
- Real-time market only
- Reliability Unit Commitment (RUC)
- Ramping products (R30)
- Higher energy offer cap \$999.99/MWh → \$2,000/MWh
- Negative pricing in 2032
- Locational Marginal Pricing

**Simplified design (still complex)**  
**Higher stakeholder support**

# Impact of REM – Current Proposal

Energy offer cap increases prices by \$10/MWh between 2028 and 2045 (excludes incremental reserves costs)

## Pool Price (\$/MWh)

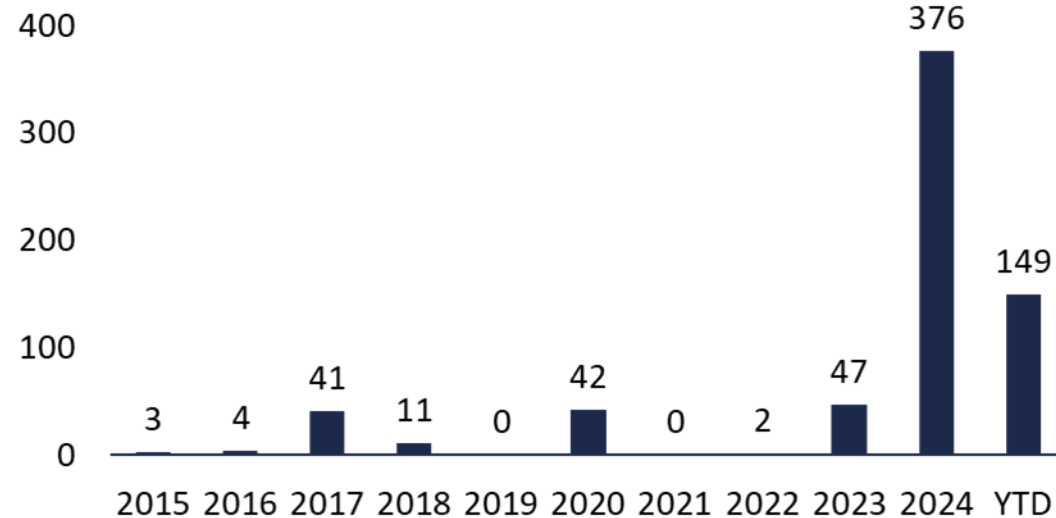


Source: Similan Q2 2025 Forecast

# Supply Surplus (Zero Dollar Hours)

Zero Dollar Hours Actuals

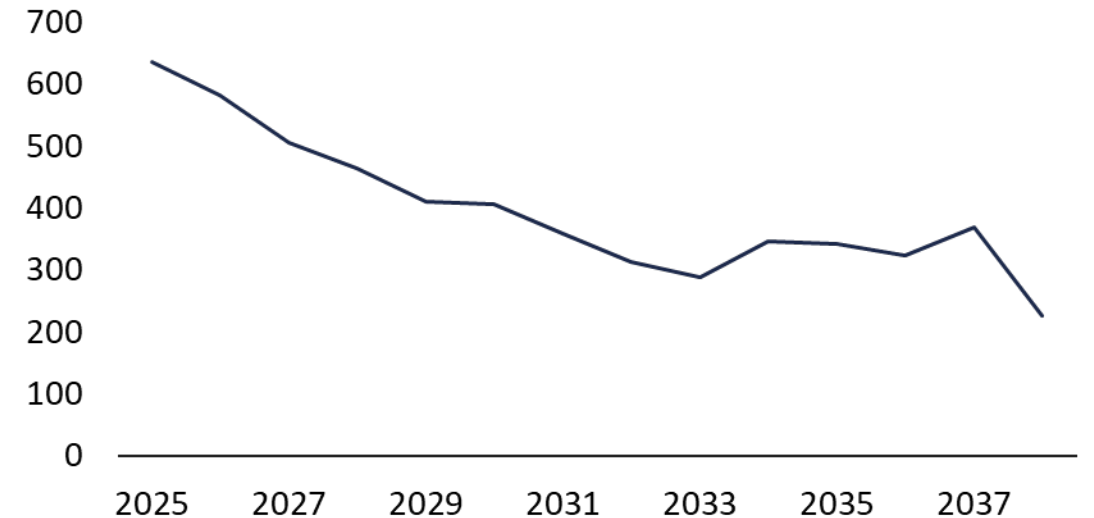
(Zero Dollar Hours)



Source: AESO data

Supply Surplus Hours Forecast

(Supply Surplus Hours)



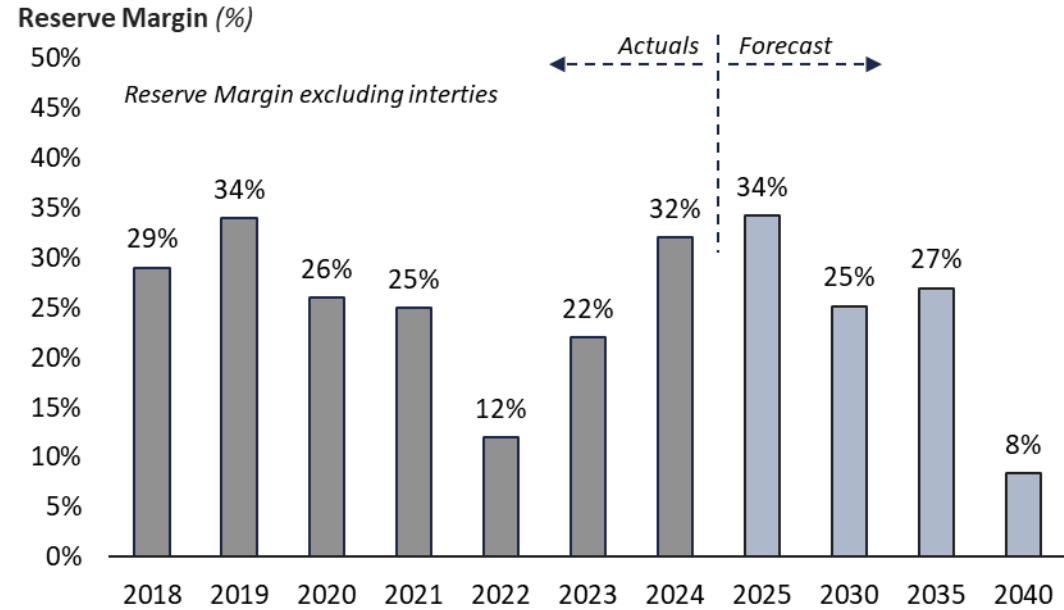
Source: Similan Q2 2025 Forecast

Supply surplus hours increased significantly over the past year following the great Wind and Solar build out...

...but we are (likely) at peak supply surplus hours

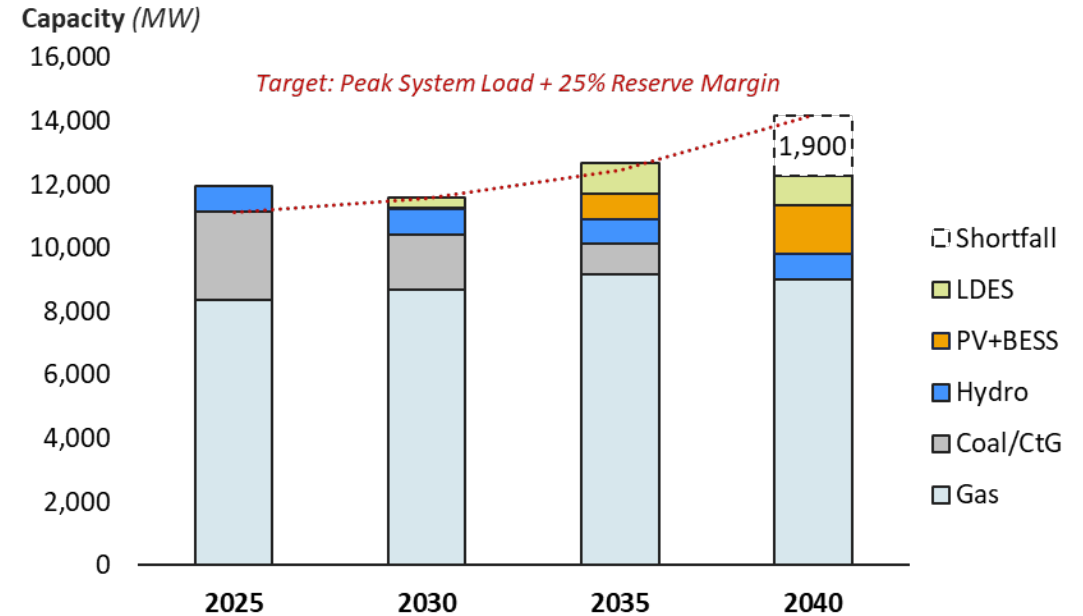
# New Investment in Storage Required in 2030

## Reserve Margin Forecast



Source: AESO May 2025 Long Term Adequacy Report, AESO 2024 LTO, and Similan Analysis

## Target Reserve Margin and Capacity Shortfall



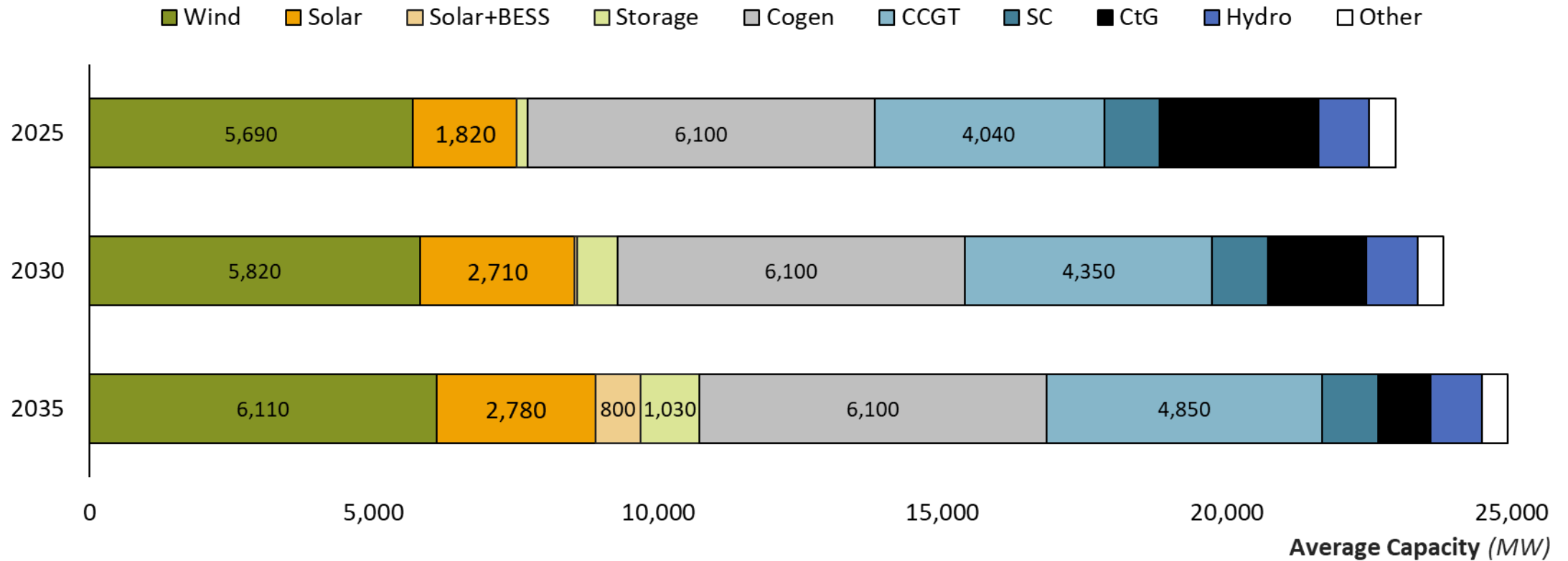
Source: AESO May 2024 Long Term Adequacy Report, and Similan Analysis

Reserve margins are currently at historical highs...

...and we are (likely) replacing the inflexible generation with more flexible generation

# Supply Mix Outlook

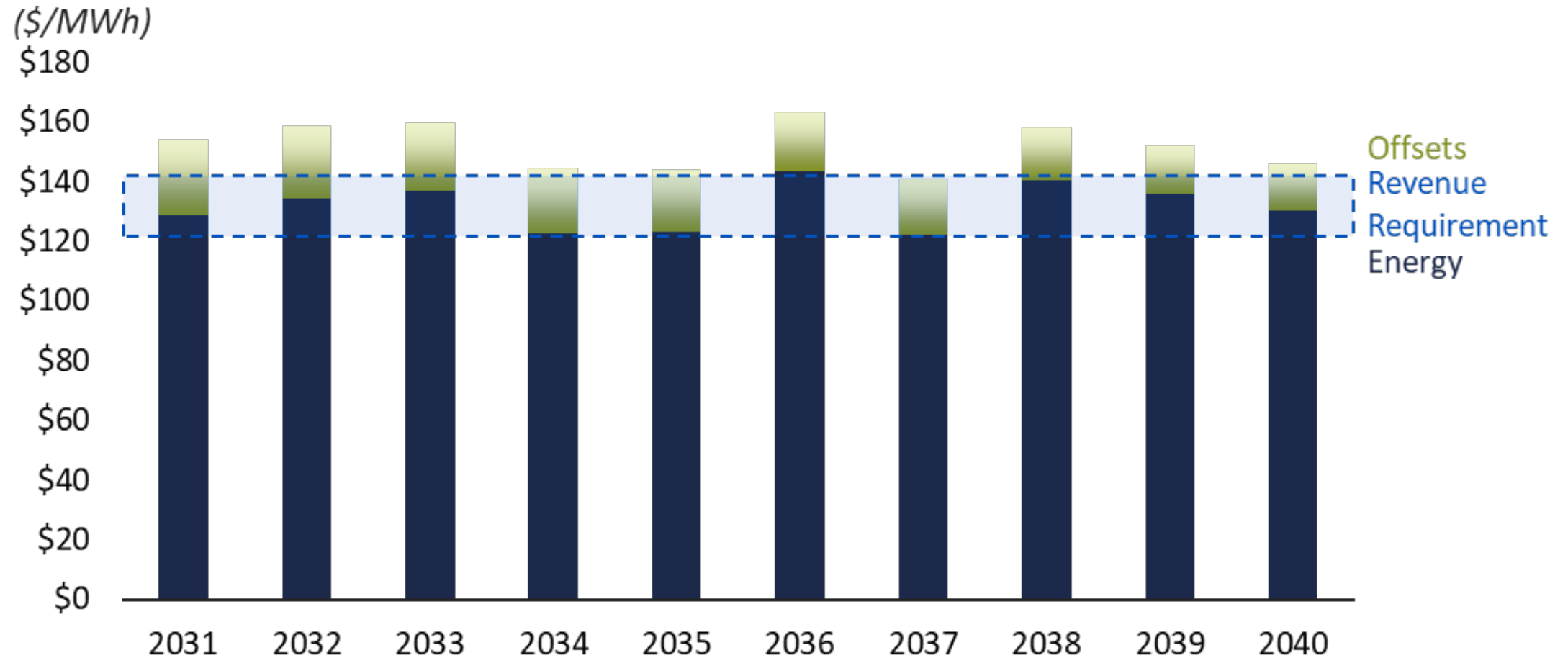
We forecast 2,000 MW of storage (stand-alone and paired with solar) by 2035



Source: Similan Q2 2025 Forecast

# Value of Solar + BESS PPA under Current REM

Price volatility results in higher energy capture prices that approach the revenue requirement of Solar + BESS



Source: Similan Q2 2025 Forecast



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