Receive General Energy Update

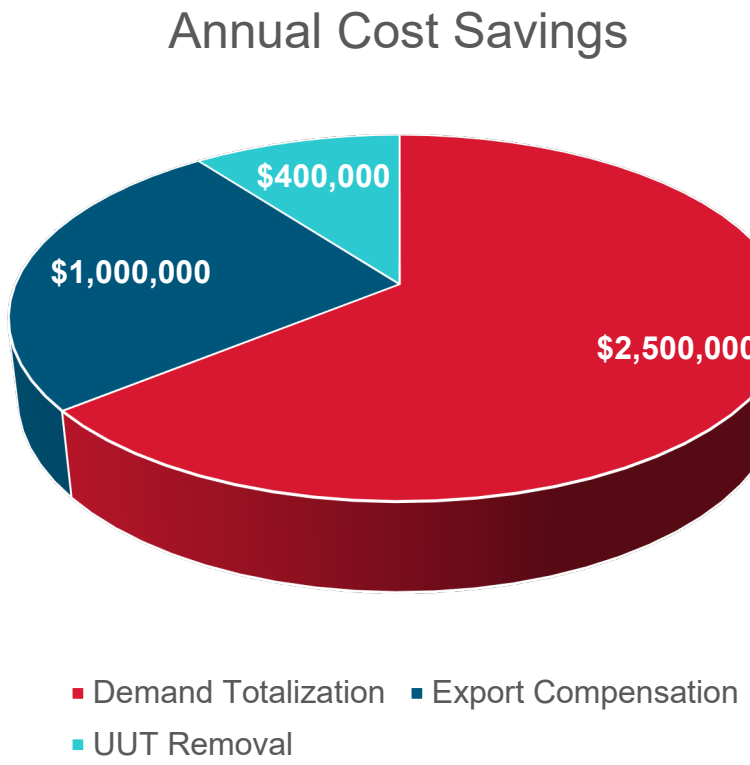
JPB Finance Committee

April 27, 2026

Key Energy Related Updates

- Traction Power Electricity Cost Savings
- Low Carbon Fuel Standards (LCFS) Update
- Distributed Energy Resources (DER) Update
- Other related items

Cost Savings Achieved ~$4M Annually

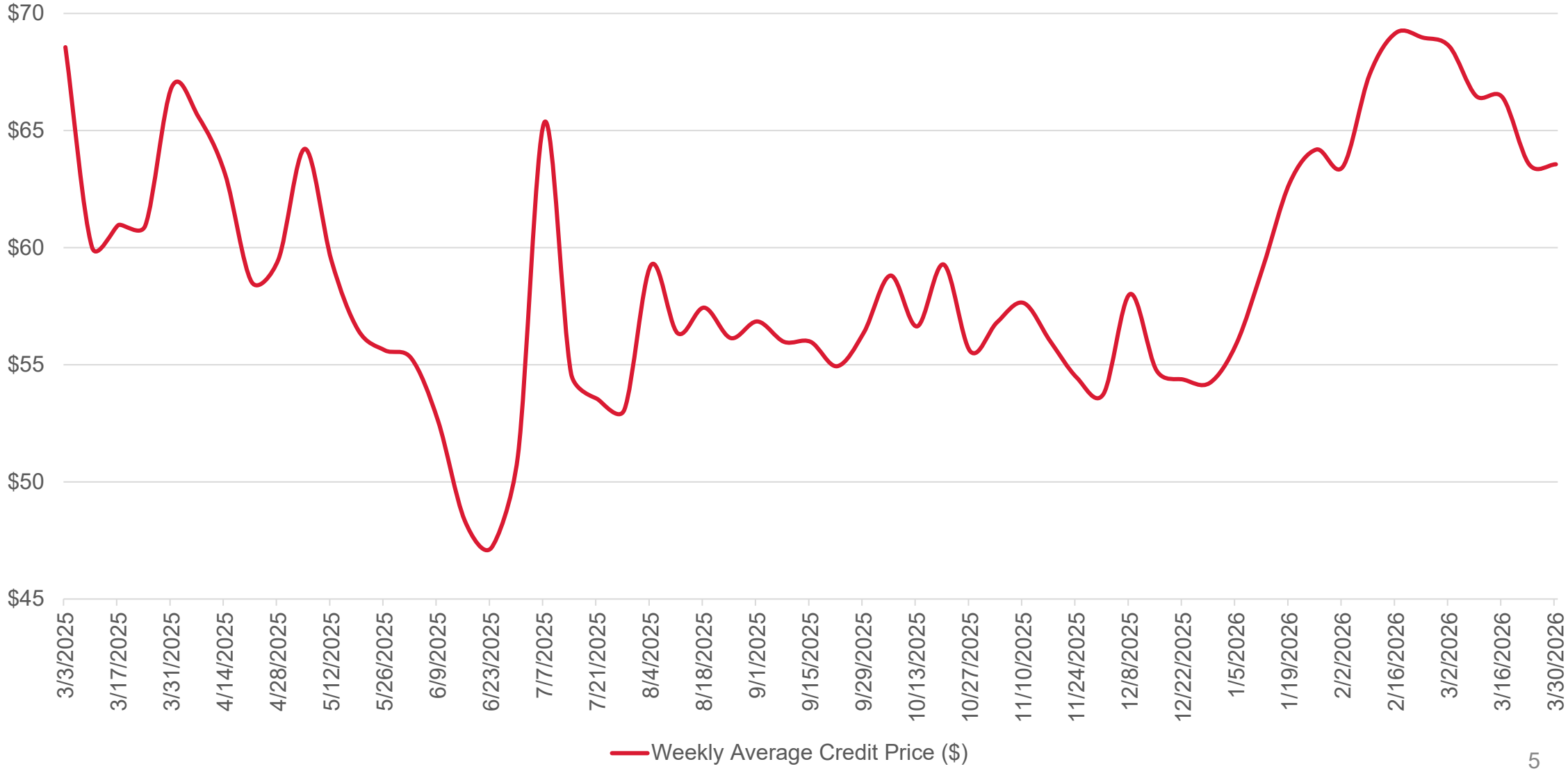


- Demand Totalization - PG&E calculates demand charges based on the combined energy flow across all meters rather than summing individual meter peaks.
- Regenerative Braking Export Compensation - structured under the Net Billing Tariff (NBT), under which exported energy is credited at the utility's avoided-cost rate.
- Utility Users Tax – Caltrain isn't subject to local UUT taxes and shouldn't have been charged. Staff obtained a refund and removal of taxes going forward.

Low Carbon Fuel Standards Program

- LCFS adopted California Air Resources Board (CARB) with the goal of reducing the carbon intensity (CI) of transportation
  - Sets an annual CI benchmark and calculates the CI of gasoline, diesel, and replacement fuels
  - Fuels with CI higher than the benchmark CI generate deficits and fuels lower than the benchmark generate credits.
  - Creates a market where the price of credits is determined by the supply of credits and the demand for them
- Caltrain starting receiving credits September 2024; 50/50 revenue split between operating and capital
- **Volatile market; Caltrain receives ~$6M a year**

LCFS Credit Price Fluctuation



Caltrain LCFS Activity

Sale Date	# of Credits	$/Credit	Revenue
6/11/2025	13,000	$56	$728,000
9/29/2025	20,000	$58	$1,160,000
12/31/2025	44,000	$53	$2,332,000
3/26/2026	15,000	$68	$1,023,750
3/26/2026	10,000	$68	$682,500
	102,000	**$58**	**$5,926,250**
	total	***average***	***total***

Quarter	Credits Generated
2024 Q4	25,635
2025 Q1	25,532
2025 Q2	26,111
2025 Q3	24,852
2025 Q4	24,987

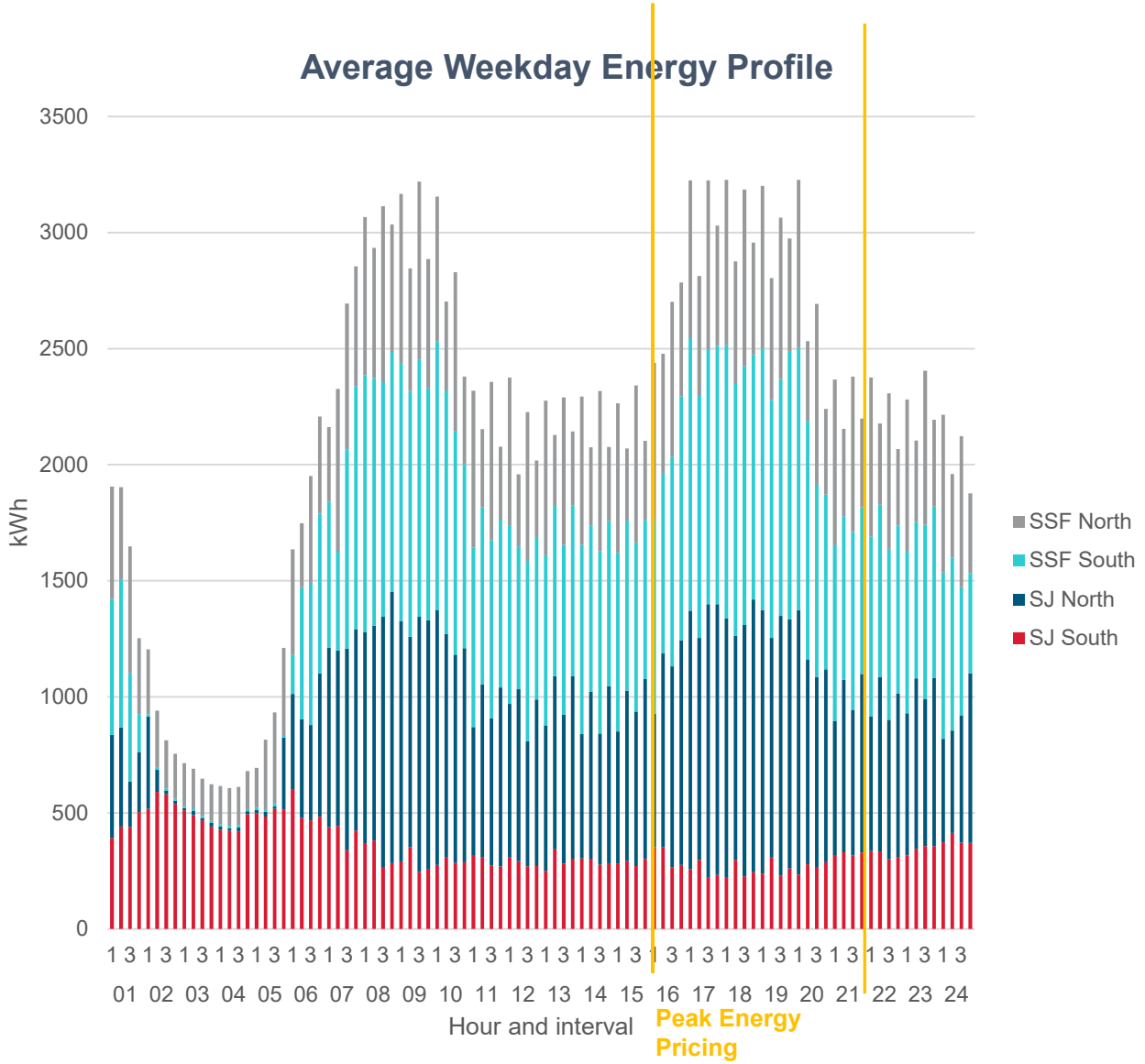
Caltrain Traction Power Load Profile

Energy

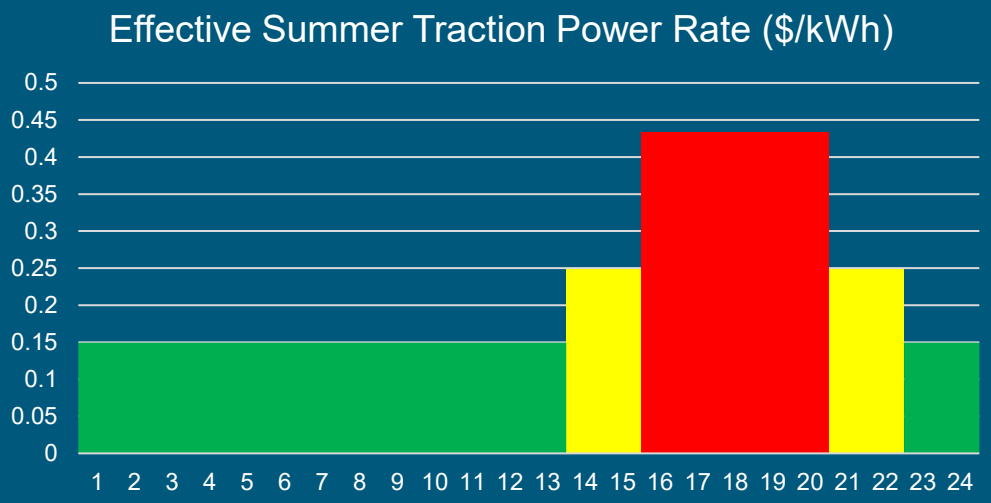
- Two Single Phase 115 kV services at each of two traction stations feeding a 25 kV single phase ac system
- Approx. 70,000 to 75,000 MWh annually of purchased power

Energy Suppliers

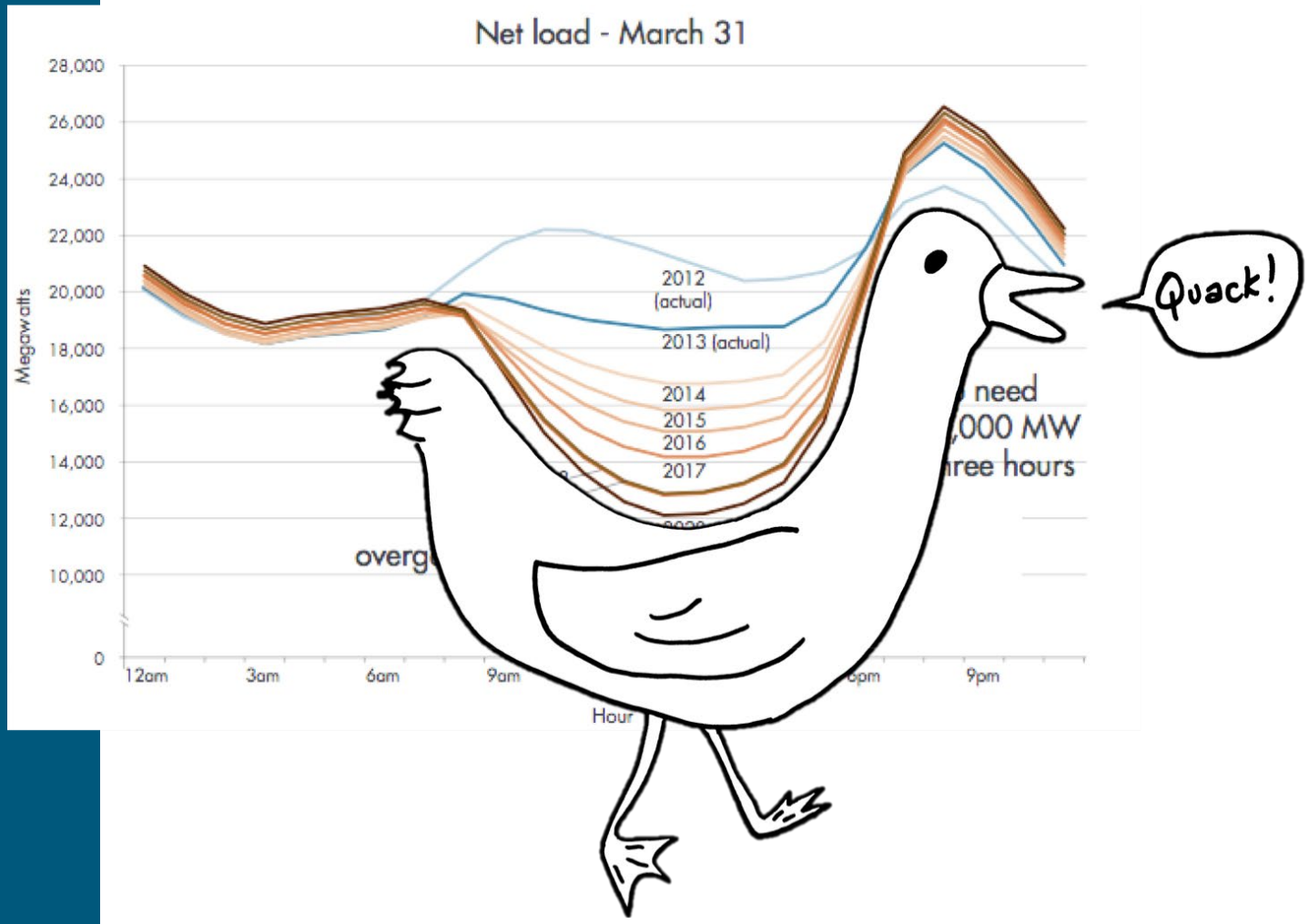
- PG&E – Distribution provider at both sites
- SJCE – Energy procurement at TPS 2
- PCE – Energy procurement at TPS 1
- Procuring 100% zero carbon intensity electricity at both sites primarily for Low Carbon Fuel Standards (LCFS) credit generation purposes



Energy Rates / Time-of-Use



California Duck Curve



Energy Storage RFI Overview

Project Goals:

1. Reduce peak energy usage (demand and/or volumetric)
2. Capture regenerative braking energy for use on the system
3. Create system resiliency in instances of broad grid outages

RFI Takeaways:

- Technically viable but no off-the-shelf solutions for our system
- Financial viability requires clearer understanding of interconnection challenges and costs
- Noted market appetite for vendor or third party to take on some of the risk and/or O&M

Energy Storage Next Steps

- Continue to refine technical needs in advance of a potential pilot project
- Continue to look for grant opportunties
- Continue industry conversations and outreach
- Will come back to the Board as more defined milestones are developed

Other Strategies Being Monitored

- *Wholesale Electricity Market Access*
  - Not currently available to Caltrain
  - Direct Access lottery offers one avenue for access
  - Positive financial results not assured
  - Wholesale participation would entail material new financial risk, staffing, and compliance obligations
- *Solar Generation*
  - NBT provides less generous export compensation
  - Harder to achieve positive ROI
  - Staff will continue to monitor for changes in incentive programs, tariff structures, or consumption profiles that could improve the viability of solar investment

FOR MORE INFORMATION

WWW.CALTRAIN.COM