

Tacoma Power

Energy Risk Management/Power Supply Update – Q2'2020

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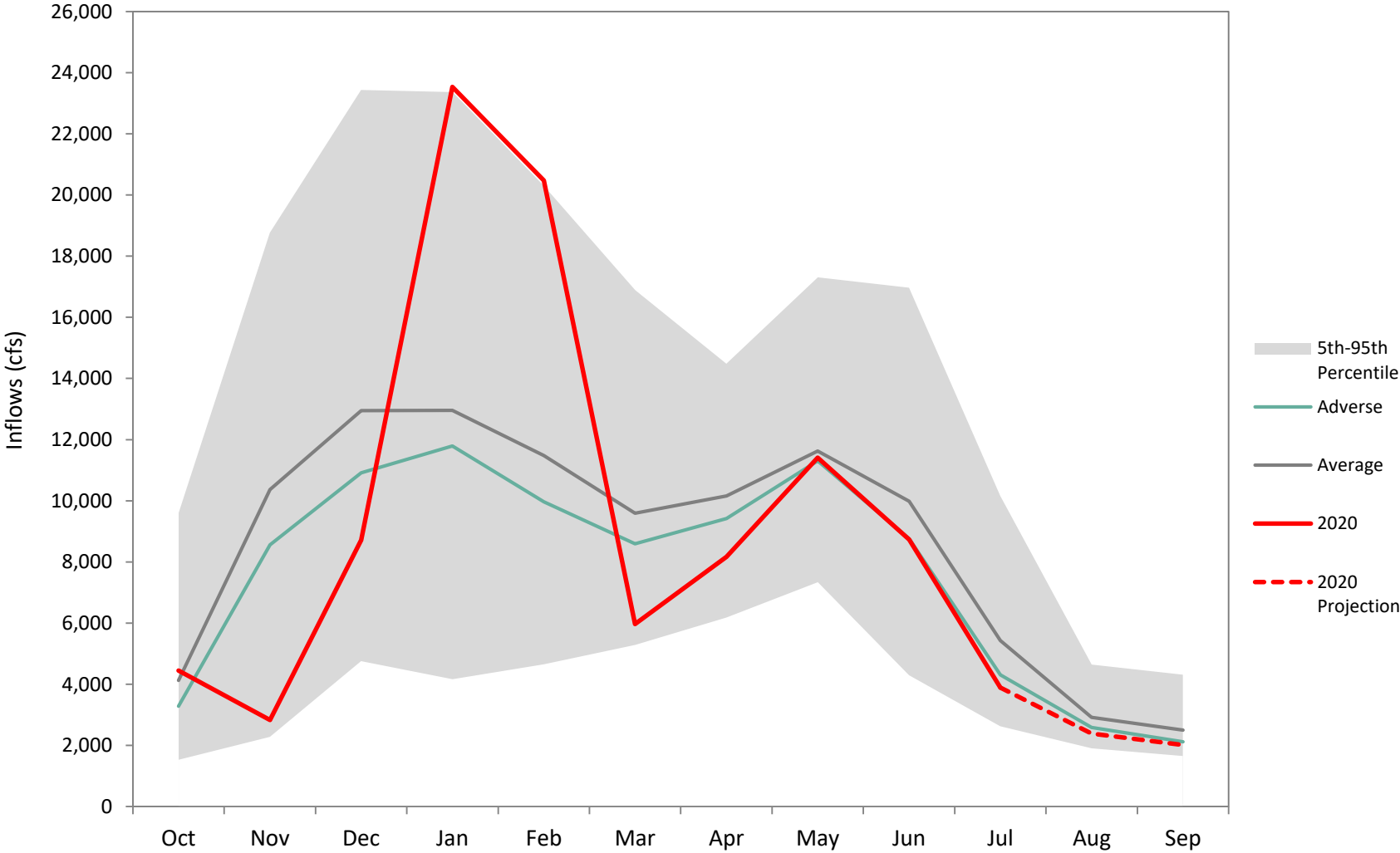
Power Supply

Section 1

Power Supply Update

Graph 1: Tacoma System Inflows – Very Volatile Water Year – Adverse Runoff

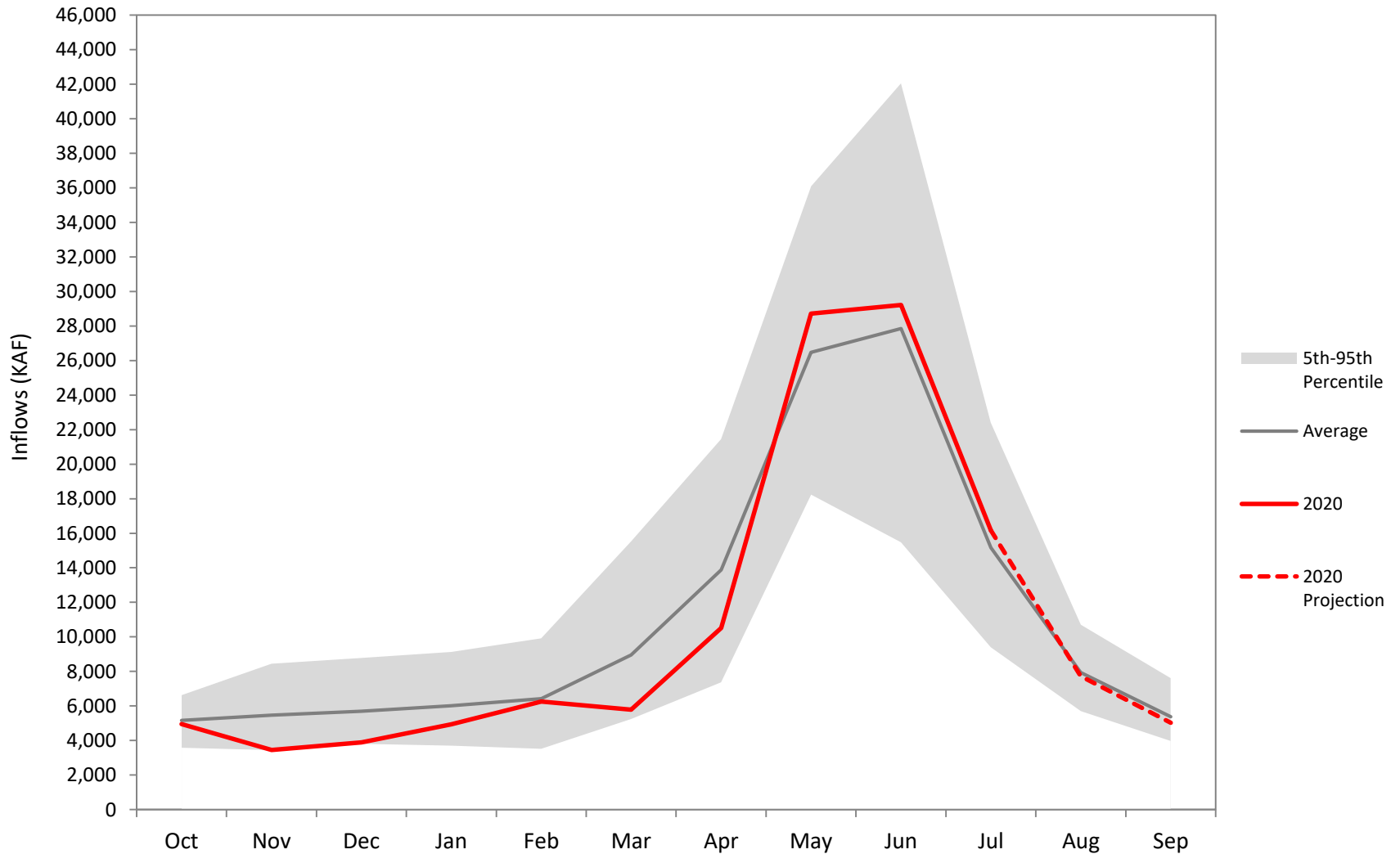
(Tacoma System Hydro Inflows, Water Year 1929 – 2020)



Power Supply Update

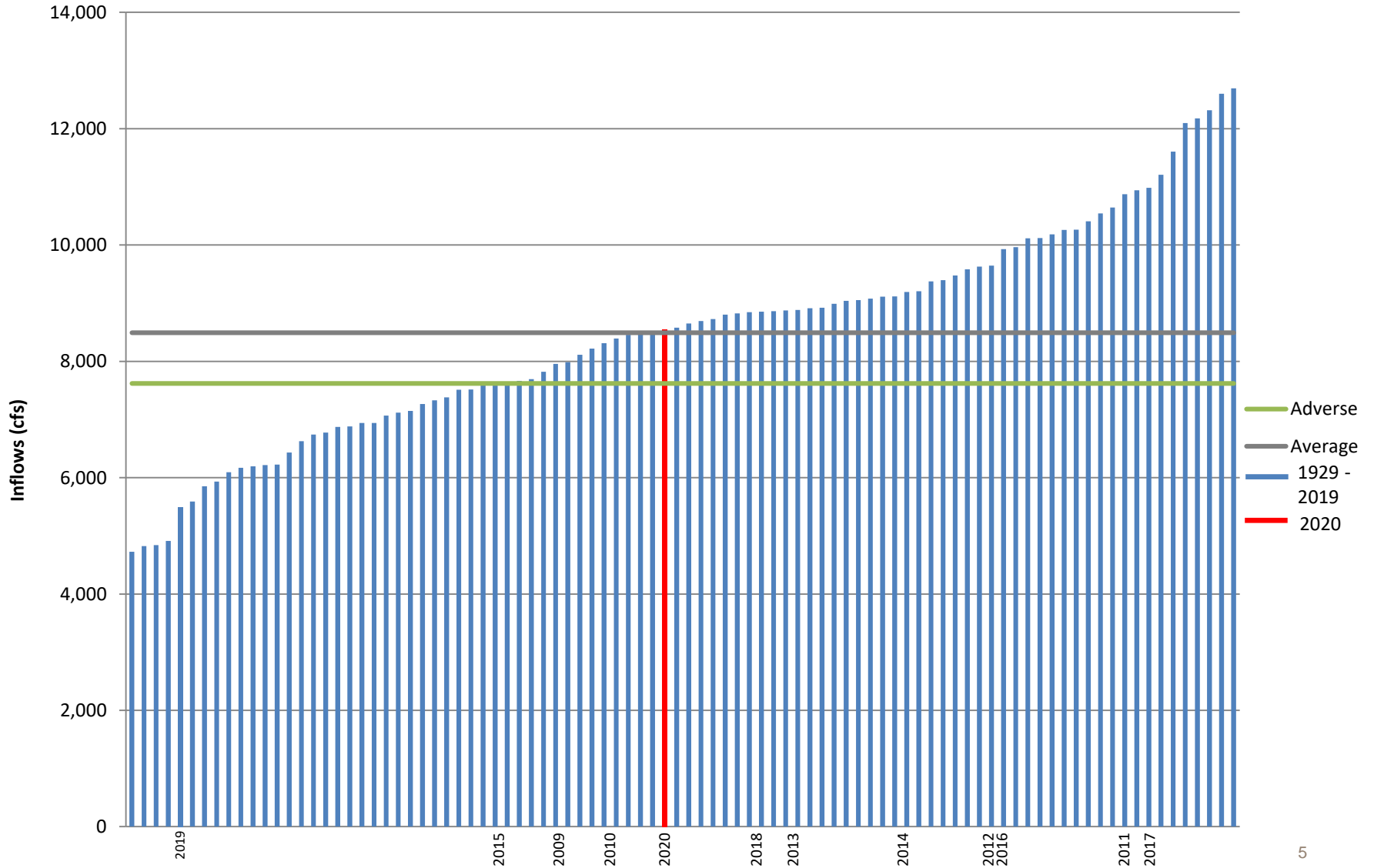
Graph 2: Federal System Inflows – Not as Volatile – Very Good Runoff

(Federal System Hydro Inflows, Water Year 1961 – 2020)



Power Supply Update

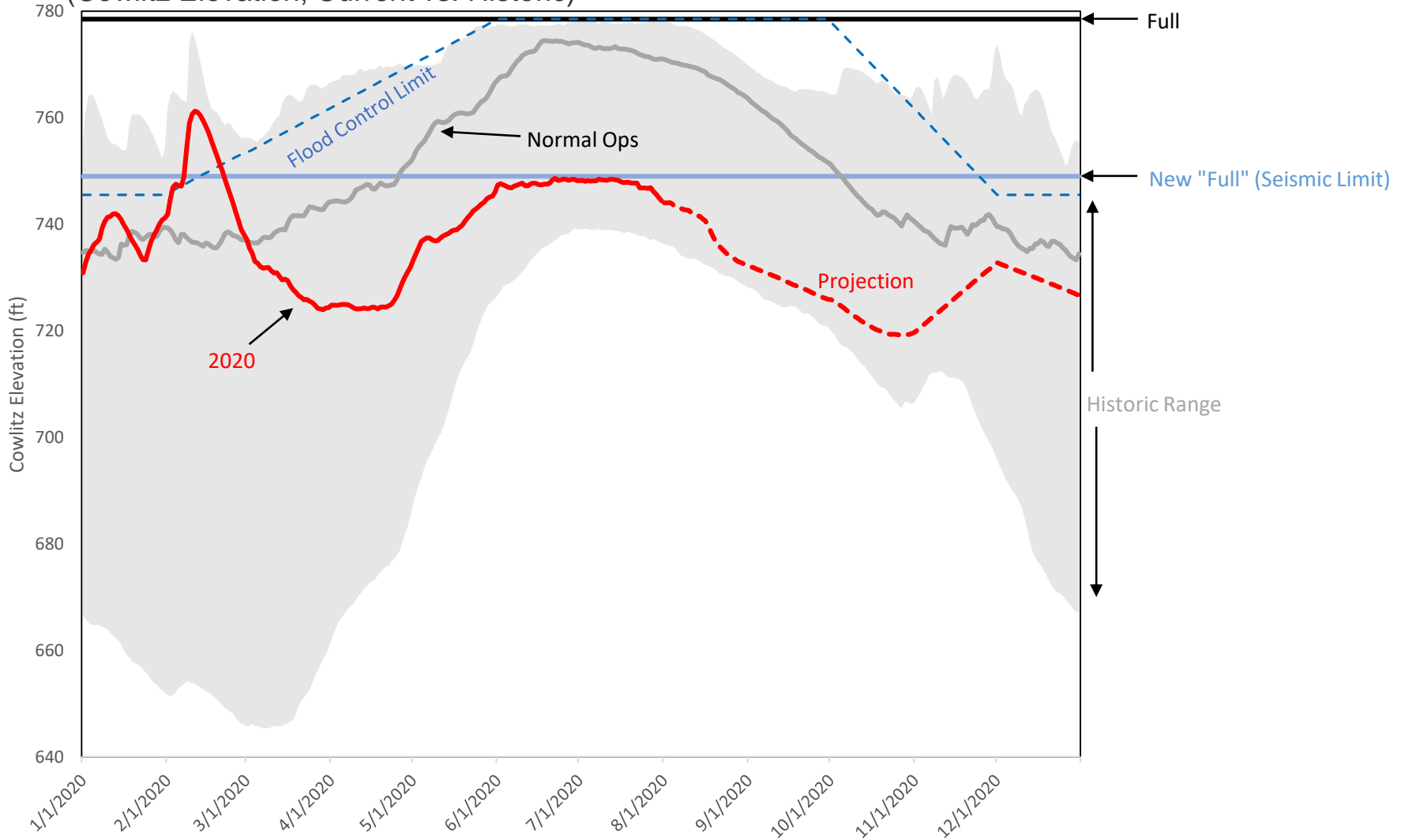
Graph 3: WY 2020 Tacoma System Inflows – Near Average Water Year (Tacoma System Inflows Annual Avg., Water Year 1929 – 2020)



Power Supply Update

Graph 4: Cowlitz Project's Elevation – Riffe Lake Refilled in Spring

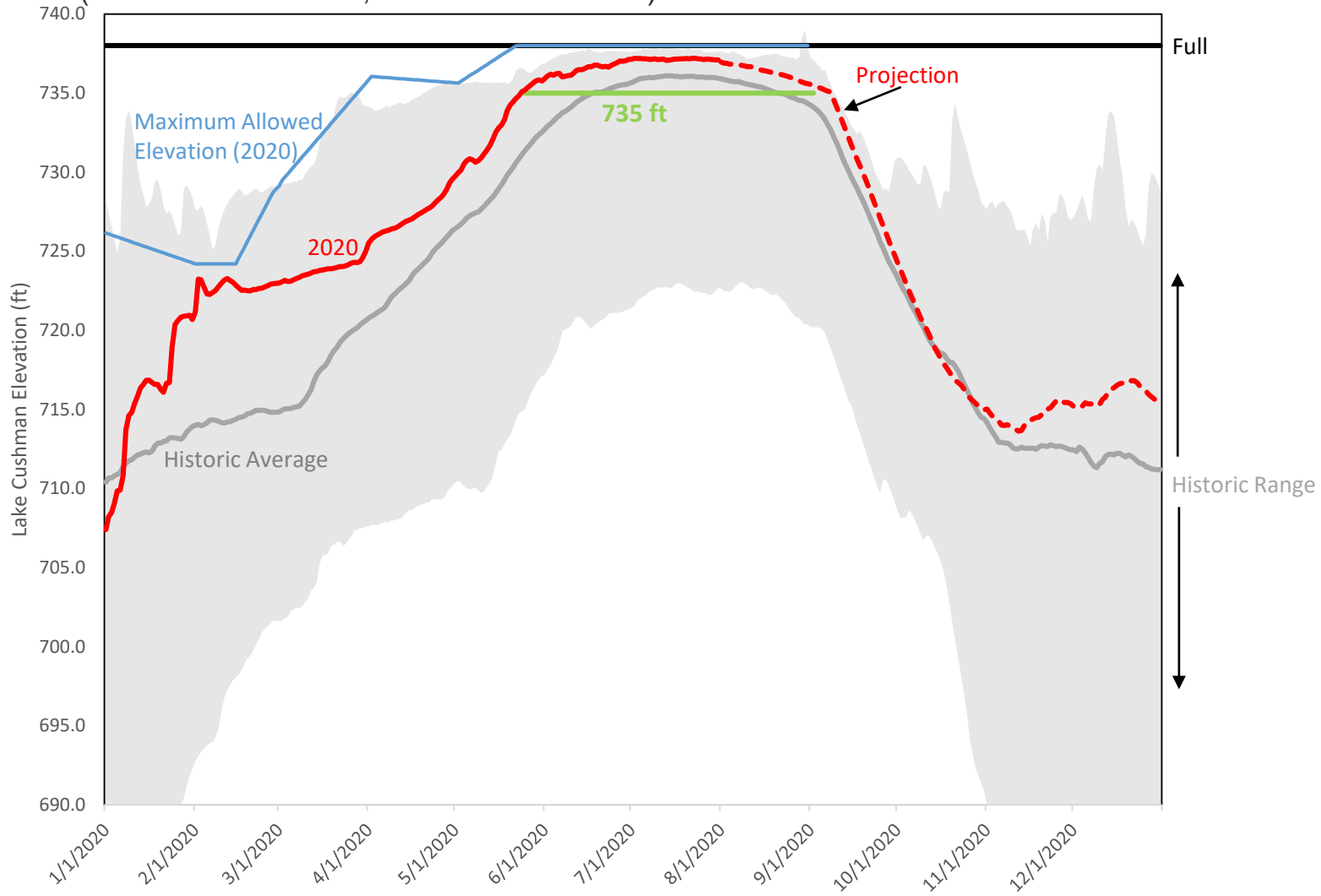
(Cowlitz Elevation, Current vs. Historic)



Power Supply Update

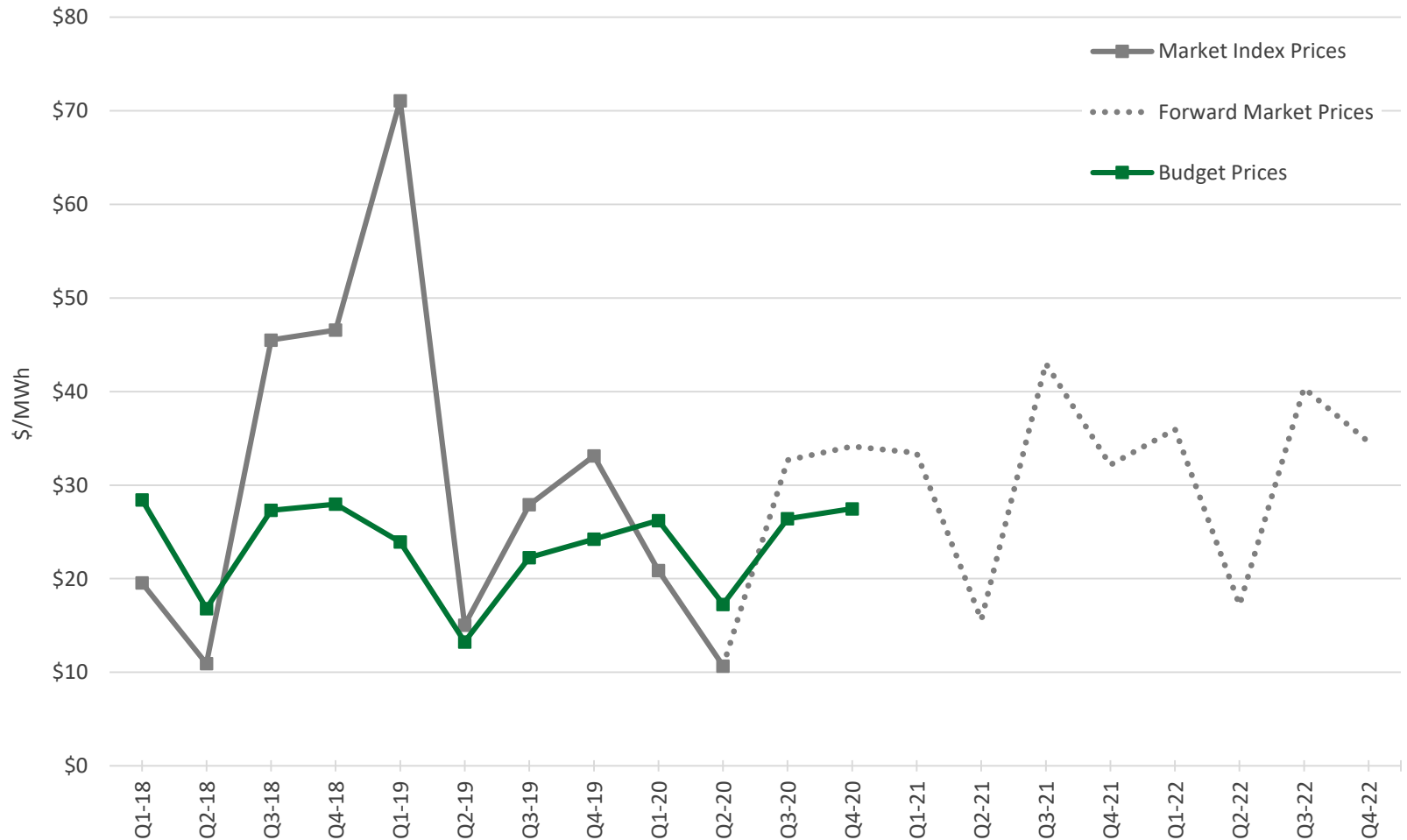
Graph 5: Cushman Project Elevation – Lake Cushman Refilled in Spring

(Cushman Elevation, Current vs. Historic)



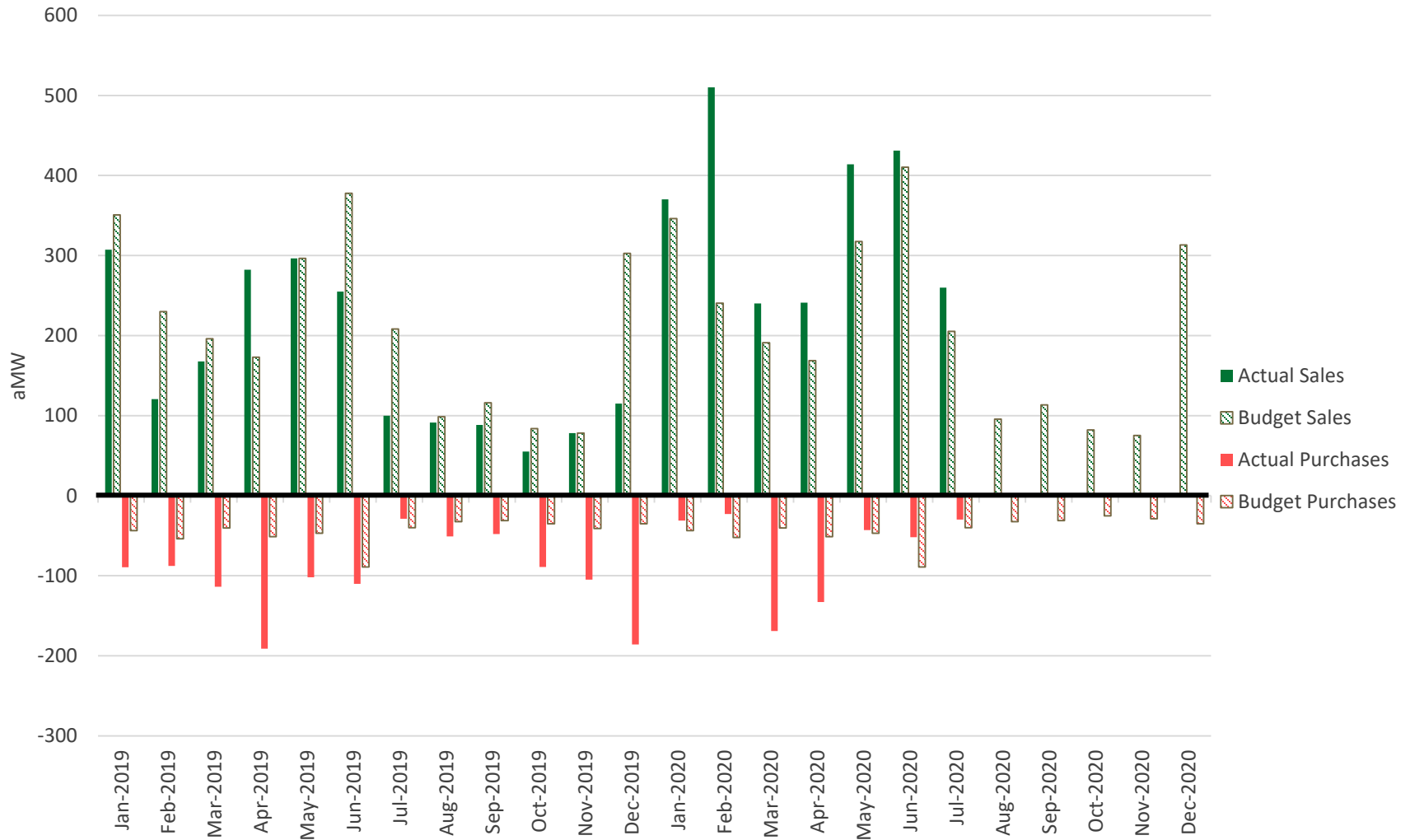
Power Supply Update

Graph 6: Q1/Q2 Market Prices were Below Budget, Forward Prices are Above Budget – Note: Prices only through Q2, Q3 will be Above Budget (Market vs. Budget Prices, 2018 – 2022)



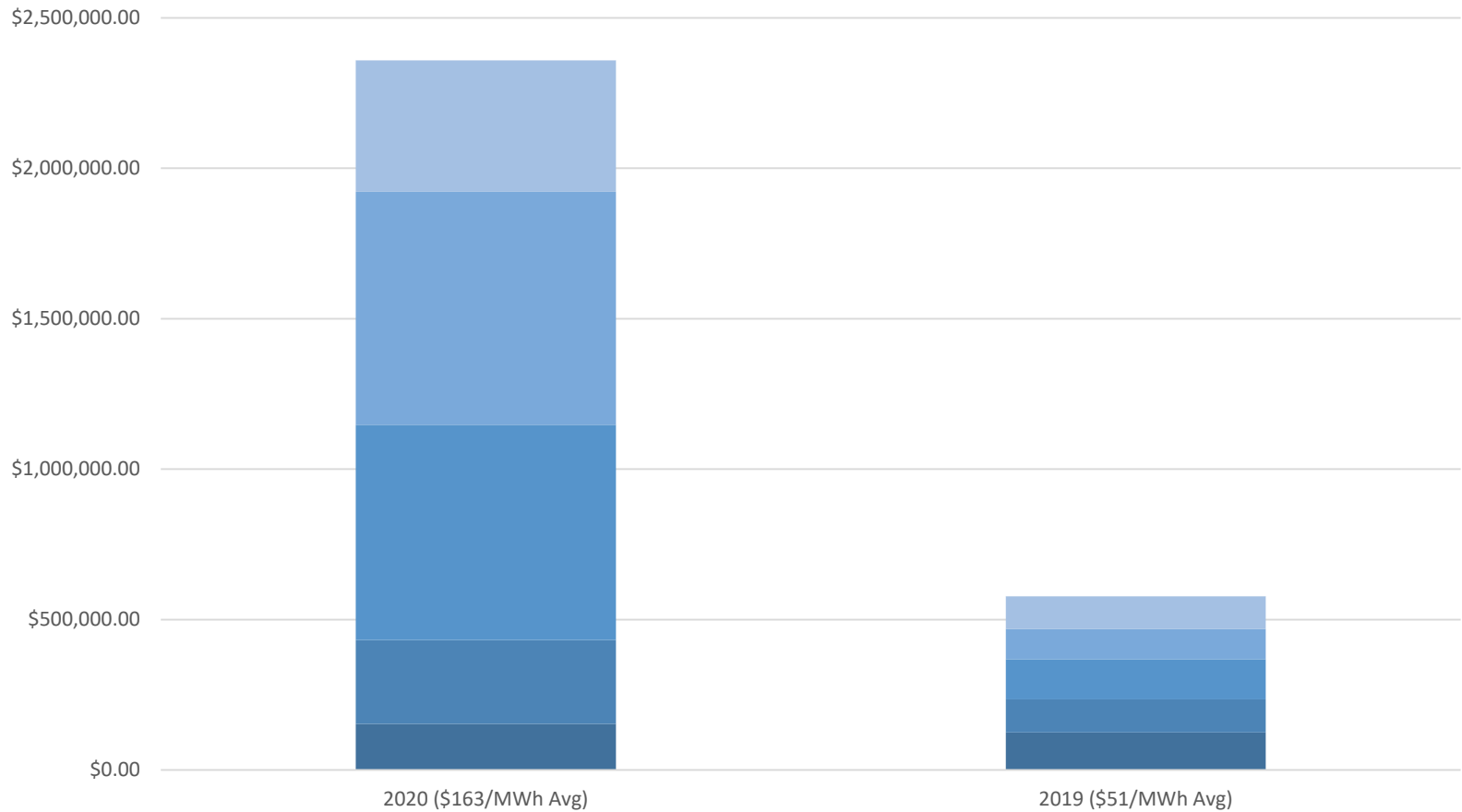
Power Supply Update

Graph 7: Q2 Sales Higher than Budget, Purchases Lower than Budget due to Healthy Springtime Runoff



Power Supply Update

Graph 8: Recent Heat Wave Provided Opportunity to Gain Significant Wholesale Revenue from Daily and Realtime Sales
(8/15/20-8-19/20 vs. Top 5 Days of 2019)

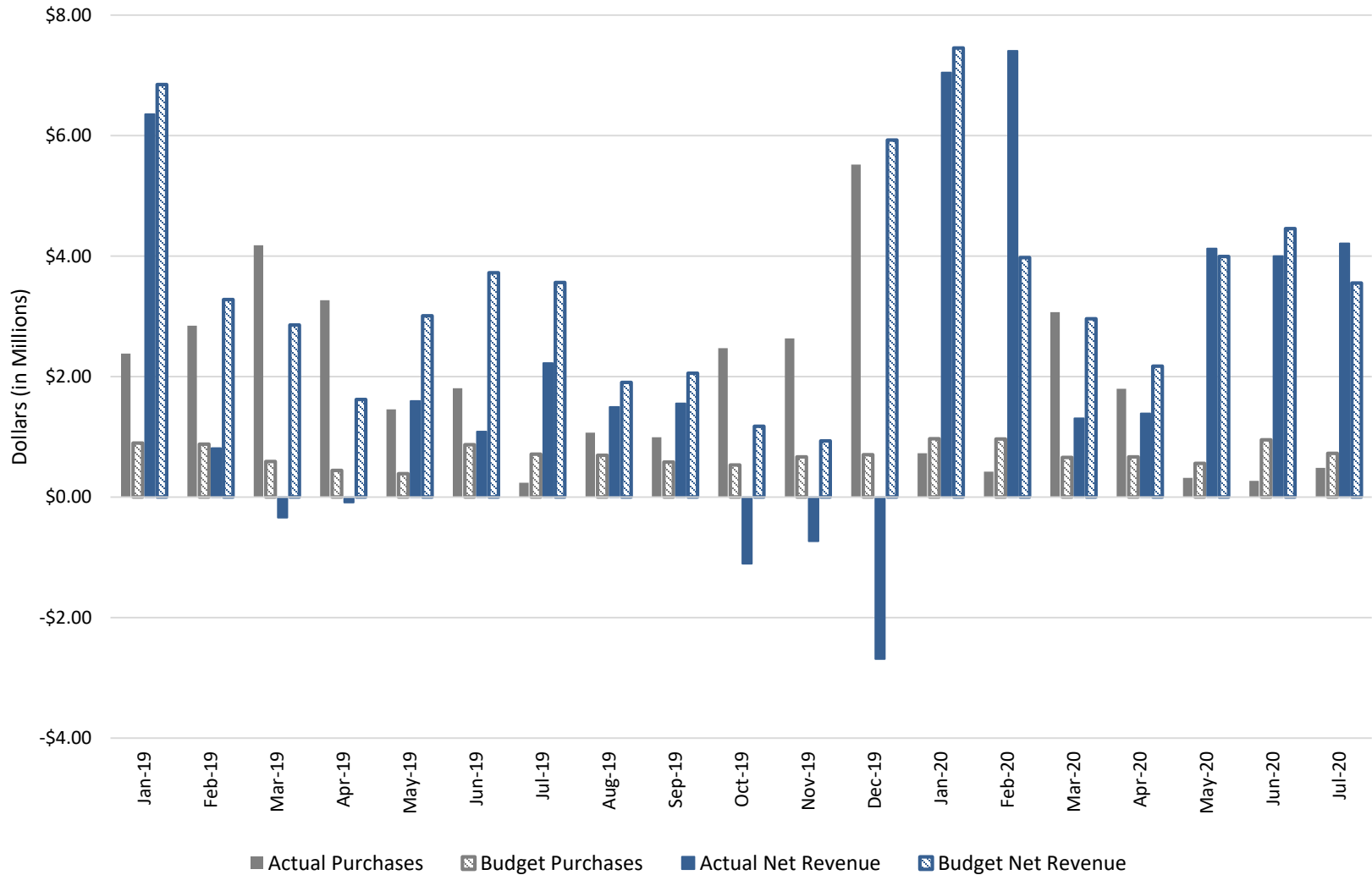


Wholesale Net Revenues

Section 2

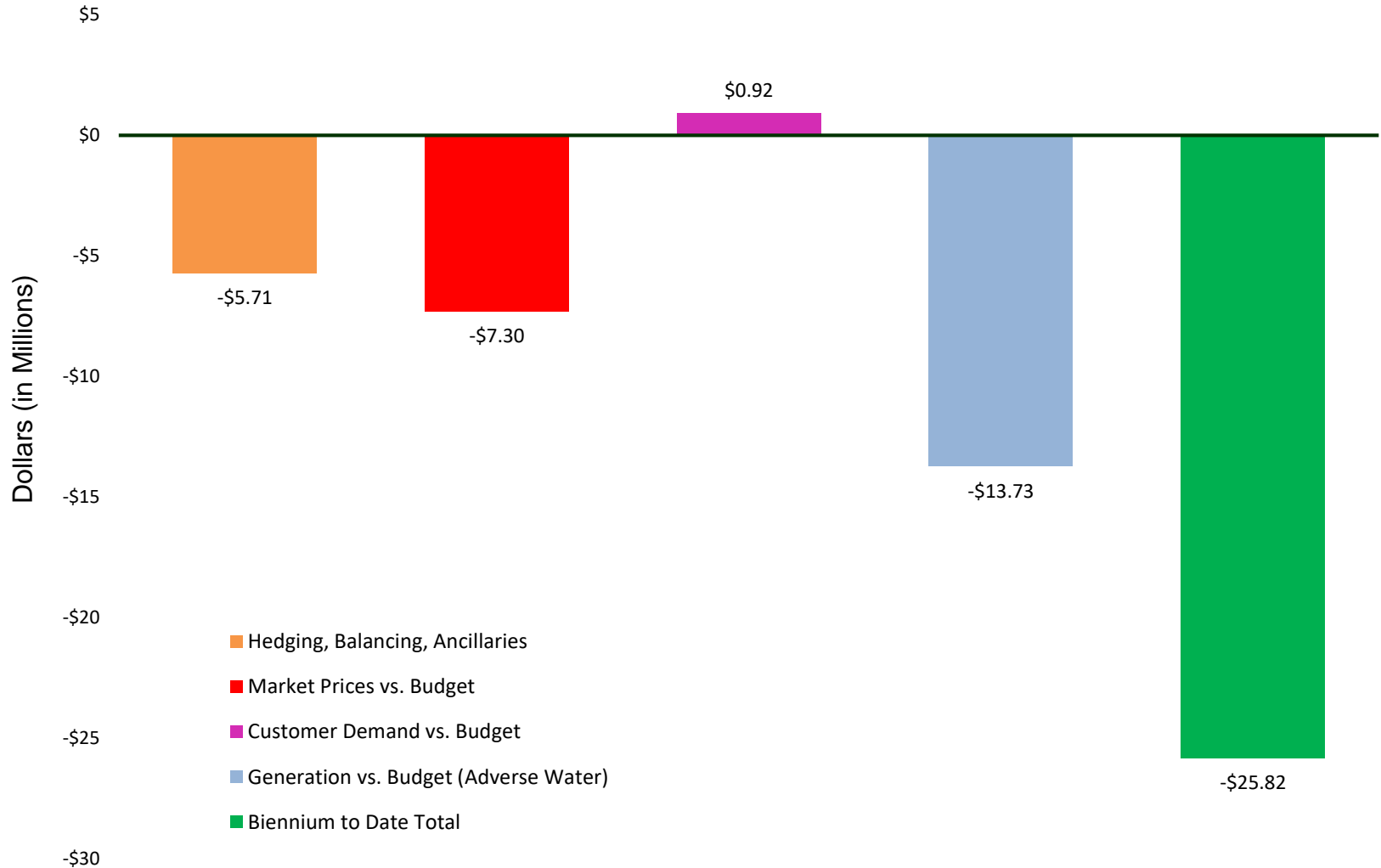
Wholesale Net Revenues

Graph 9: Actual Revenue is \$26M Below Budget Biennium-To-Date
(Monthly Actual vs. Budget Wholesale Purchases and Net Revenues)



Wholesale Net Revenues

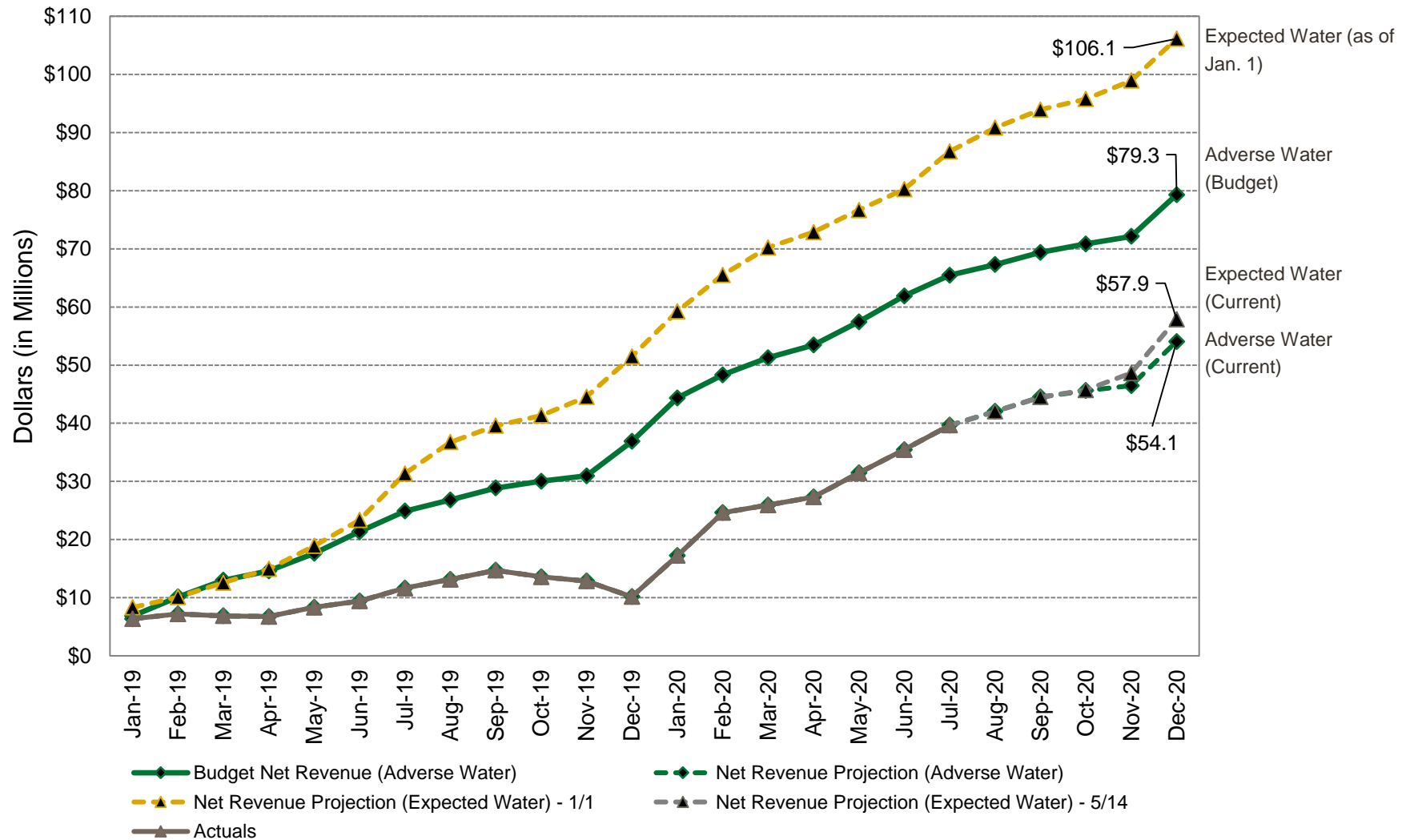
Graph 10: \$26M Below Budget Due to Poor Hydro in 2019, Purchases
(Cumulative Wholesale Net Revenue Variance, Jan 2019 – Jul 2020)



Wholesale Net Revenues

Graph 11: High Q1, Q2 Revenues, Projections Remain Below Budget

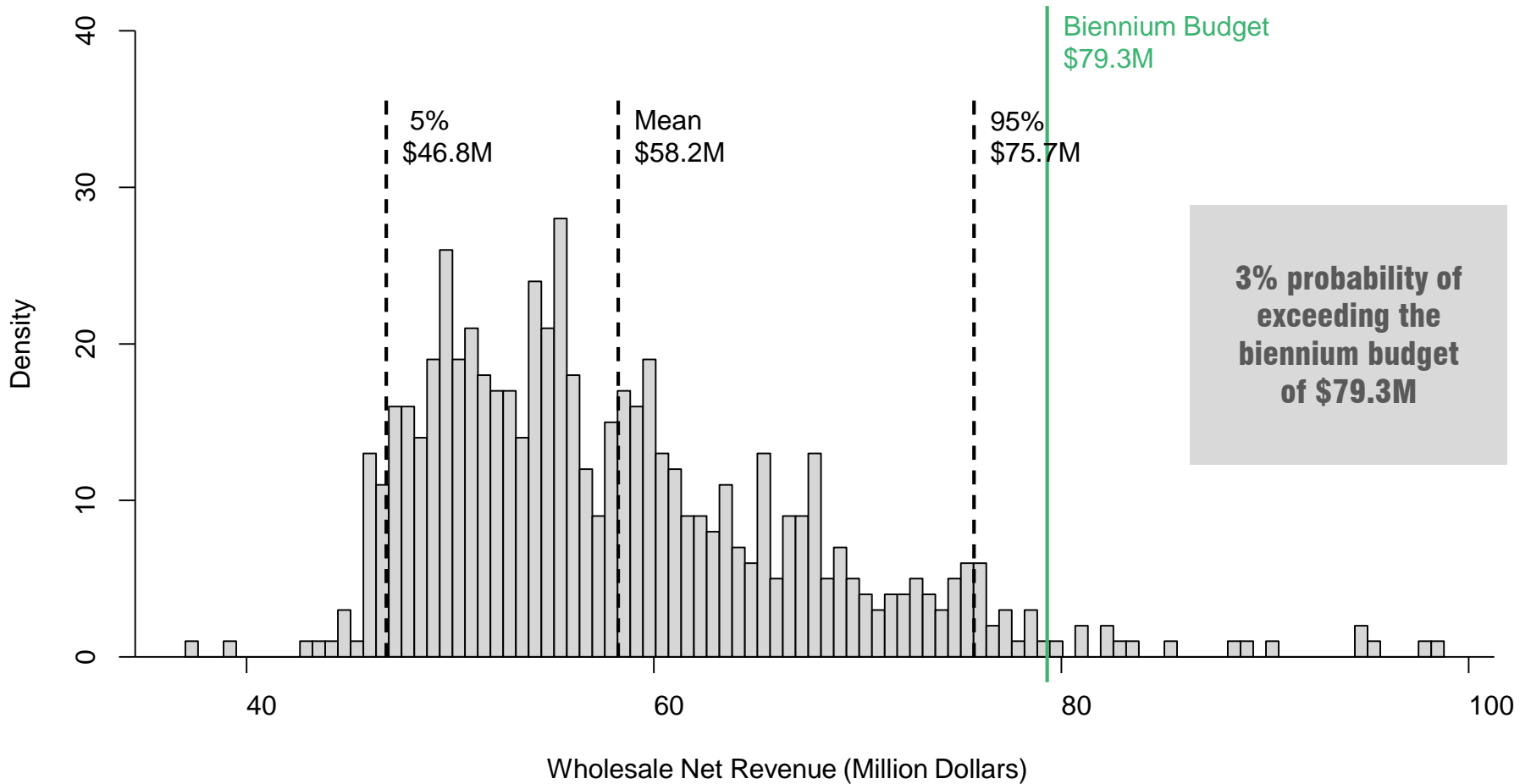
(Cumulative Actual vs. Budget Wholesale Net Revenues, 2019 – 2020)



Wholesale Net Revenues

Graph 12: Probability of Making Budget Has Decreased to 3%

(Risk Model Simulation of Biennial Net Revenues, 2019 – 2020)



Hedging Program & Credit Risk Management

Section 3

Hedging Program

Overview

Hedging Program Objective

A hedging program is part of Tacoma Power's energy risk management policy.

The objective of the hedging program is to:

- ✓ Stabilize net revenues from wholesale operations
- ✓ Protect against very low wholesale revenue outcomes

Hedging Program Design

The hedging program enforces dollar cost averaging of surplus sales and prohibits holding deficit positions.

The program has a two year horizon, and utilizes physical forward contracts.

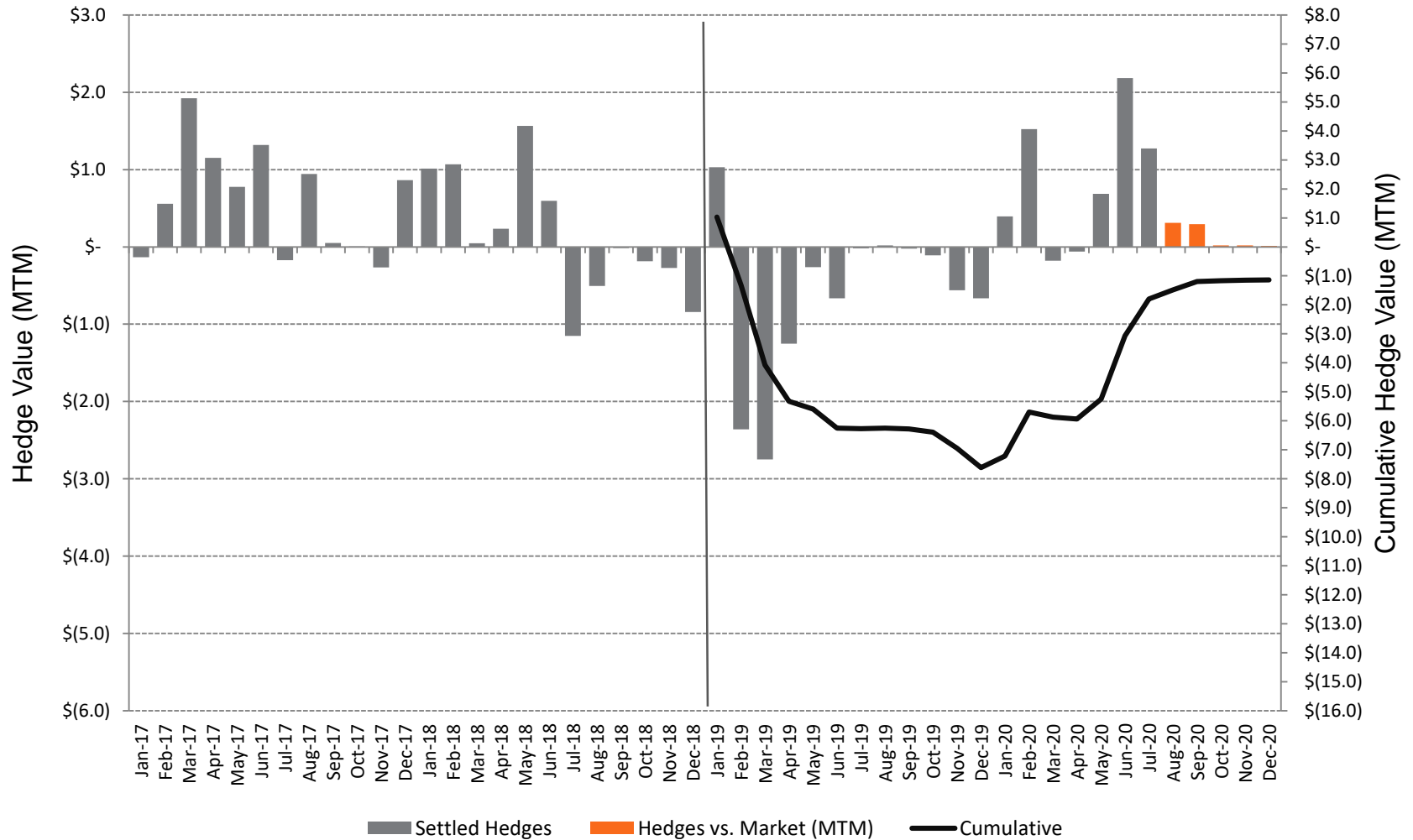
Allowable hedge ratio governed by "hedging bands" that:

- ✓ Limit the maximum amount hedged far into the future
- ✓ Require progressively more surplus be hedged as time to delivery gets closer

Hedging Program

Graph 13: Hedging Program Values Have Increased

(Hedging Program, 2017 – 2020)



Credit Risk Management

Overview

Background

- ✓ Tacoma Power frequently sells electricity to wholesale trading partners or “counterparties”
- ✓ Tacoma Power incurs credit exposure – money that the utility could lose in the event of a counterparty default

Credit Risk Management Program

Tacoma Power manages credit risk by:

- ✓ Extending credit to investment grade counterparties only
- ✓ Setting exposure limits based on creditworthiness
- ✓ Daily monitoring of credit quality
- ✓ Daily monitoring of exposure
- ✓ Actions include stopping trading with a specific counterparty, requesting collateralization

Wholesale Credit Exposures

Graph 14: Current Credit Exposures Are at Typical Levels

(Top 10 Counterparty Credit Exposures)

Rank	Counterparty	Internal Model Rating	S&P Rating	Loss in Event of Default
1	Modesto Irrigation District	A+	A+	\$1,356,520
2	Avangrid Renewables, LLC	BBB+	BBB+	\$1,184,978
3	Portland General Electric Co	BBB+	BBB+	\$610,775
4	Sacramento Municipal Utility District	A+	AA-	\$495,280
5	Morgan Stanley Capital Group, Inc.	A-	BBB+	\$426,957
6	Puget Sound Energy, Inc.	BBB	BBB	\$426,193
7	California ISO	AA-	A+	\$346,166
8	PacifiCorp	A-	A	\$289,810
9	Eugene Water & Electric Board	A+	AA-	\$215,396
10	Macquarie Energy, LLC	A	A+	\$174,761