UTILITY ASSISTANCE PROGRAMS - UPDATE

July 24, 2019

Francine Artis





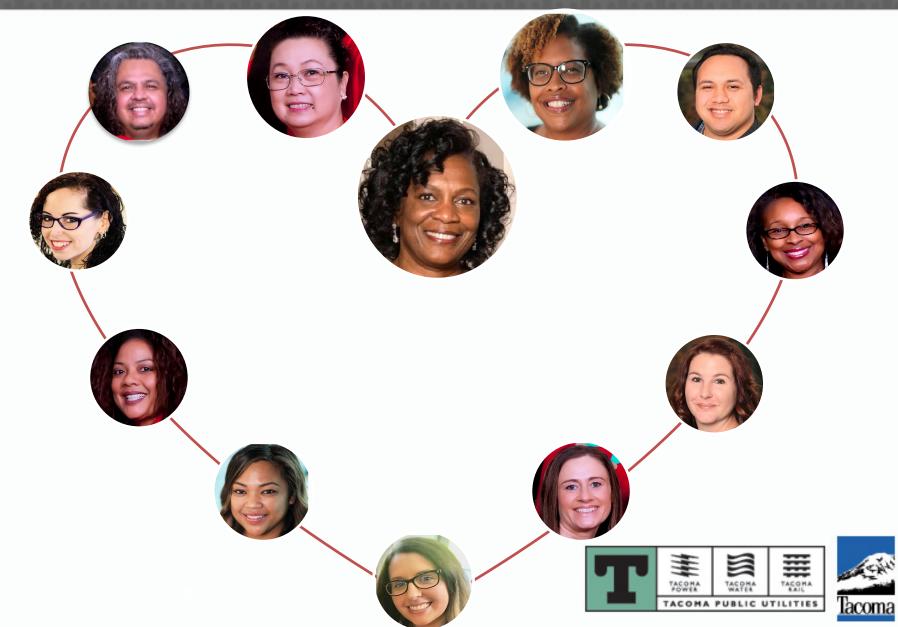
CUSTOMER SOLUTIONS OFFICE

What is the Customer Solutions Office?

- A team of 12 Customer Services employees dedicated to working with seniors, customers with disabilities, and households with limited incomes who are seeking help with their utility bills.
- We work closely with our customers and community partners to provide a holistic approach to providing assistance for utilities provided through TPU and Environmental Services.



CUSTOMER SOLUTIONS TEAM



CURRENT UTILITY ASSISTANCE PROGRAMS



- *Credits are based on the number of services billed directly from TPU.
- ** Completion of approved financial education program.





HALF-YEAR REPORT & COMPARISONS

Bill Credit Assistance Plan (BCAP) January – June 2018 vs 2019

Activity	2018	2019	Difference	Total Active Accounts
	Customers	Customers		
New Enrollments	121	1,061	777% 🐧	1,254

Activity	2018	2019	Difference	
	Dollars	Dollars		
Credits Earned	\$47,535	\$101,290	113% 1	





HALF-YEAR REPORT & COMPARISONS

Discount Rate Program January – June 2018 vs 2019

Activity	2018	2019 Difference		Total Active
	Customers	Customers	Difference	Accounts
New Enrollments	381	643	69% 🕇	5,295

Activity	2018 2019		Difference	
	Dollars	Dollars	Difference	
Discounts	\$1,657,539	\$1,711,929	3% 1	





MARKETING & OUTREACH

Banners, Counter Stands, Posters & Table clothes















MARKETING & OUTREACH

Brochures



English



Russian





Spanish





Korean



Vietnamese





MARKETING & OUTREACH

Community Events



IN THE WORKS

Information being researched for future consideration

- Income Guidelines Researching using Washington State Median Income vs Federal Poverty Guidelines.
- Customer Donations Reviewing possibility of expanding customer donations to be used for all utility services.



CONTACT INFORMATION

Tacoma Public Utilities

Customer Solutions Office

3628 South 35th Street

Tacoma, WA 98409

Phone: 253-502-8400

Website: MyTPU.org/Assistance



Tacoma Power

Energy Risk Management/Power Supply Update – Q2'2019

Ying Hall

Energy Risk Manager

Todd Lloyd

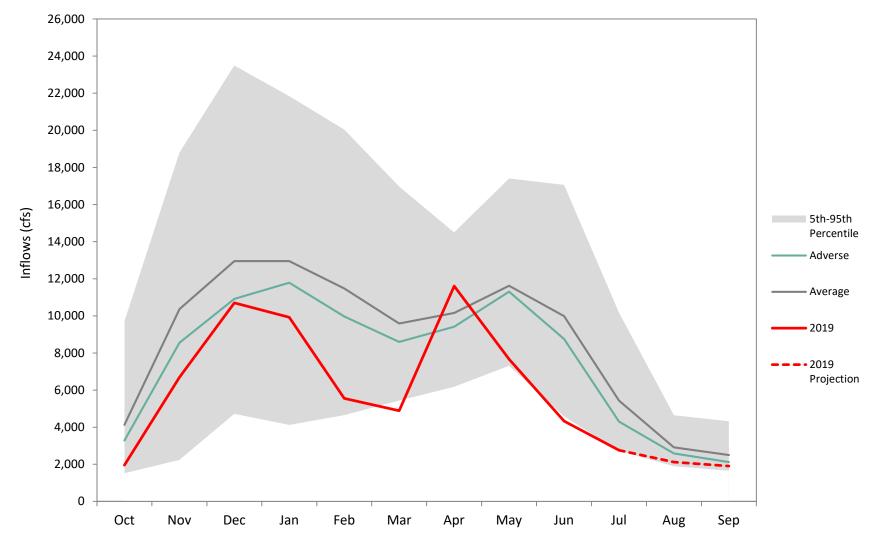
Assistant Power Manager, Resource Operations & Trading



Power Supply

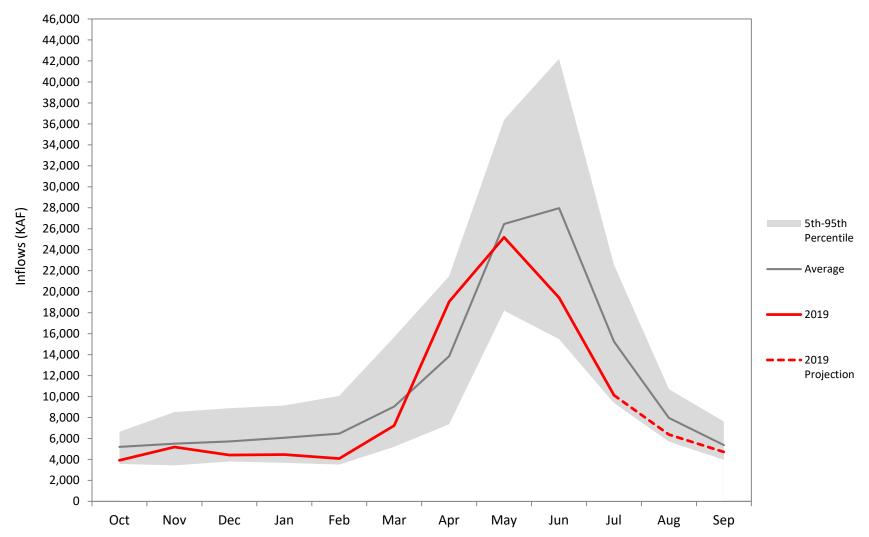
Section 1

Graph 1: Tacoma System Flows Near 5th Percentile for May through July (Tacoma System Hydro Flows, Water Year 1929 – 2019)

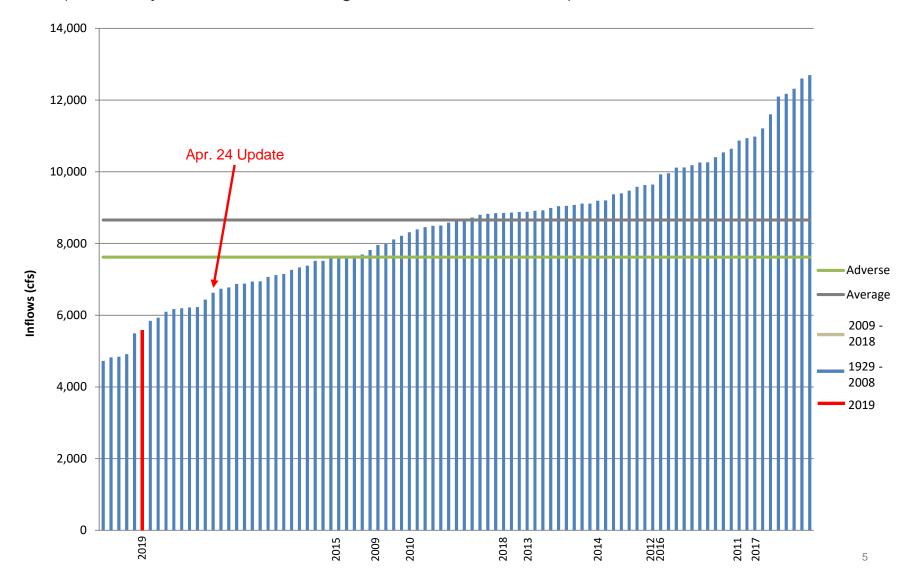


Graph 2: Federal System Flows Have Been Below Average

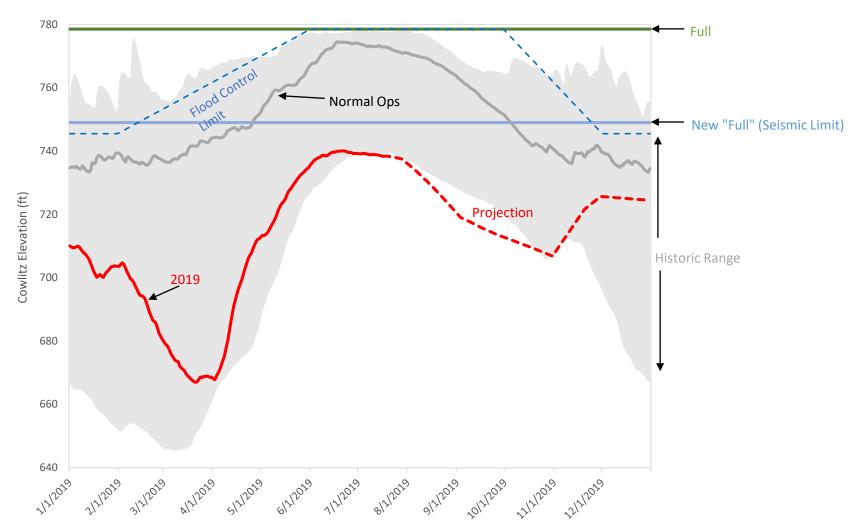
(Federal System Hydro Flows, Water Year 1961 – 2019)



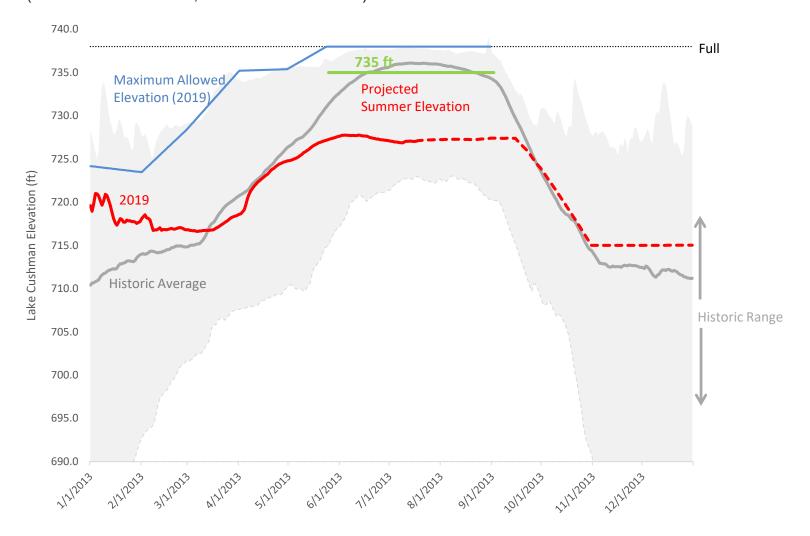
Graph 3: 2019 Tacoma System Flows are Nearing Lowest on Record (Tacoma System Flows Annual Avg., Water Year 1929 – 2019)



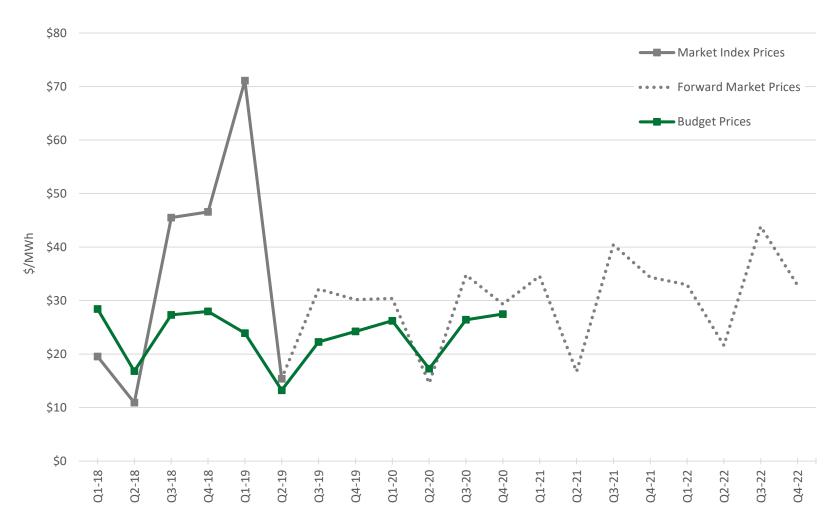
Graph 4: Cowlitz Has Filled Substantially, but is Unlikely to Reach "Full" (Cowlitz Elevation, Current vs. Historic)



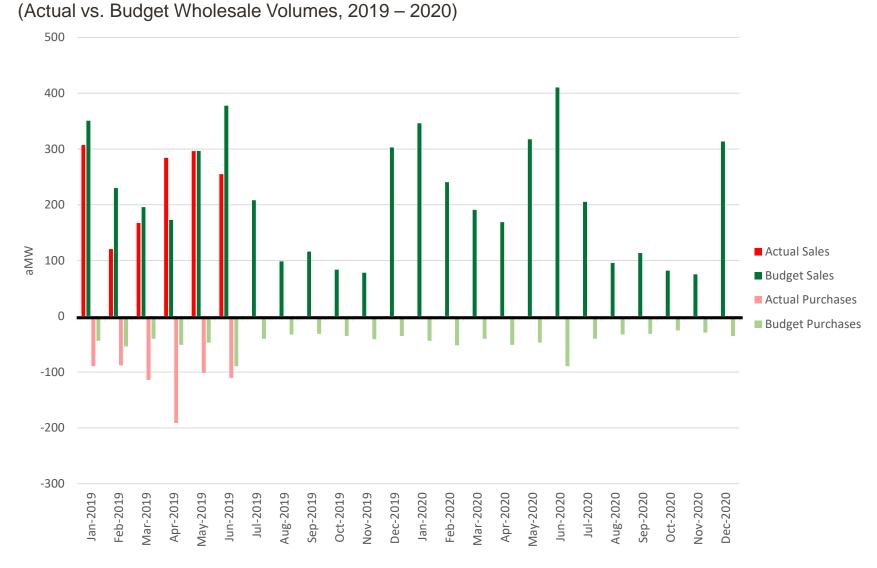
Graph 5: Lake Cushman unlikely to reach 735 ft this summer (Cushman Elevation, Current vs. Historic)



Graph 6: Market Prices Have Decreased Closer to Budget Levels (Market vs. Budget Prices, 2018 – 2022)

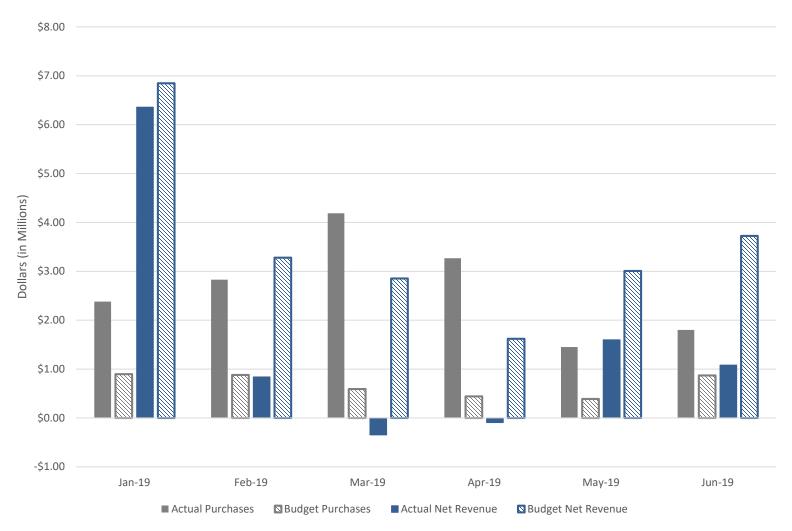


Graph 7: We've Been Selling Less than Budgeted, Purchasing More



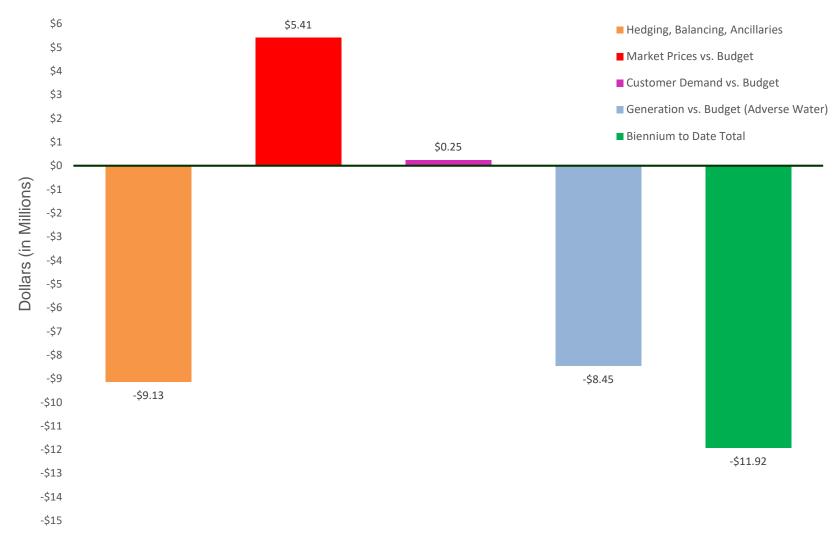
Section 2

Graph 8: Actual Wholesale Net Revenue is \$12M Below Budget YTD (Monthly Actual vs. Budget Wholesale Purchases and Net Revenues)



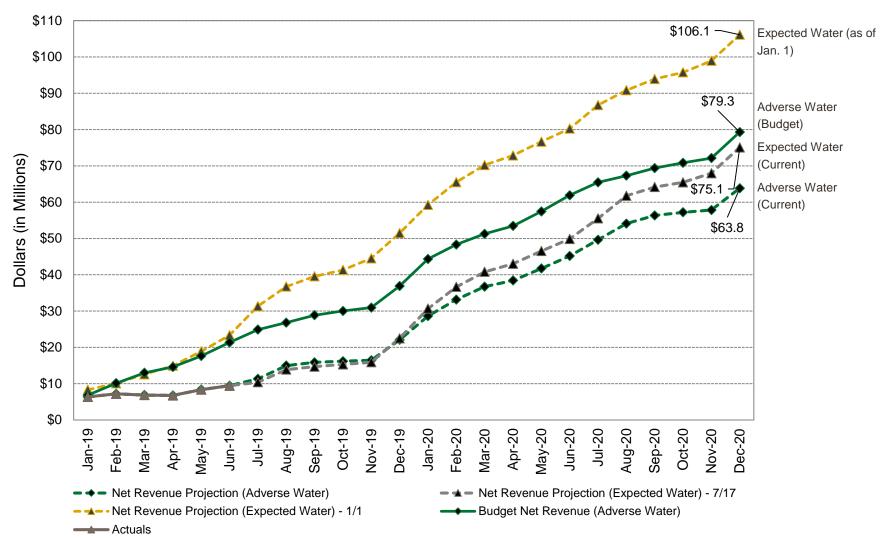
Graph 9: \$12M Below Budget Due to Poor Hydro, Purchases

(Cumulative Wholesale Net Revenue Variance, Jan – Jun 2019)



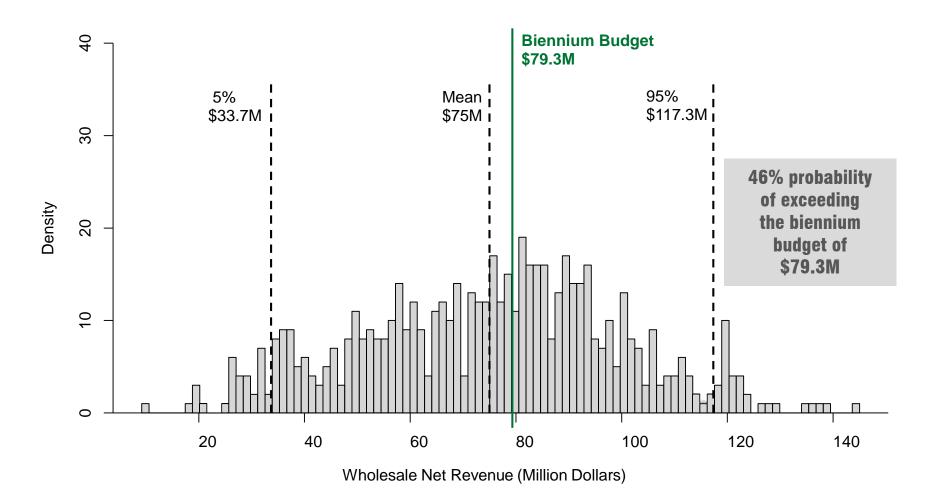
Graph 10: Low Q2 Revenues, Projections Below Budget

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



Graph 11: Probability of Making Budget Has Decreased to 46%

(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 policy enforces dollar cost averaging of surplus sales and prohibits holding deficit positions.

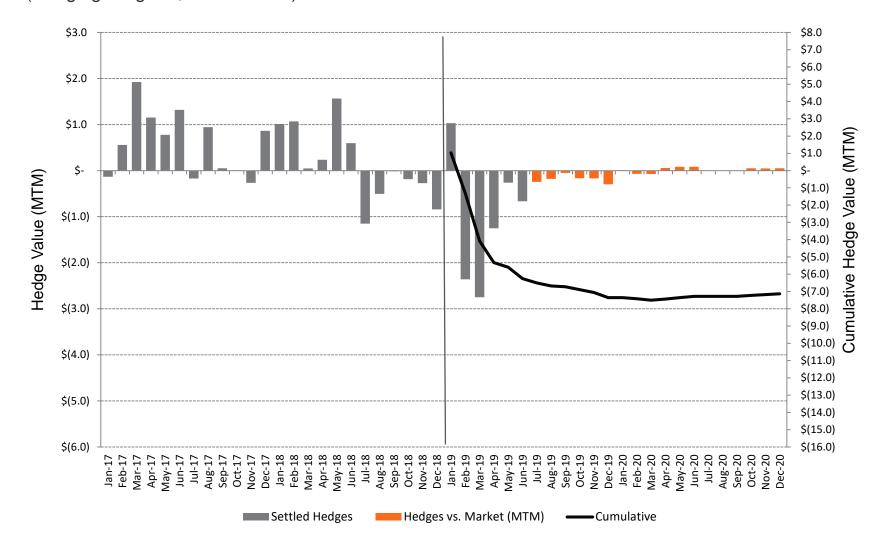
The program has a two year horizon, and utilizes physical forward contracts.

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 12: Current Hedging Program Performance Is Not Typical (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 13: Current Credit Exposures Are at Typical Levels

(Top 15 Counterparty Credit Exposures)

Rank	Counterparty	Internal Model Rating	Letter of Credit Collateral	Loss in Event of Default
1	Citigroup Energy, Inc.	A-		\$1,050,824
2	Avangrid Renewables, LLC	BBB+		\$729,396
3	California ISO	AA-		\$612,964
4	Puget Sound Energy, Inc.	BBB		\$563,276
5	Sacramento Municipal Utility District	AA-		\$367,691
6	Public Service Company of Colorado	BBB+		\$297,440
7	Portland General Electric Co.	BBB+		\$284,966
8	Macquarie Energy, LLC	Α		\$284,712
9	Morgan Stanley Capital Group, Inc.	A+		\$241,803
10	Powerex Corp.	A+		\$178,624
11	TransAlta Energy Marketing (US) Inc.	BB+	\$1,000,000	\$163,985
12	PacifiCorp	A-		\$80,800
13	Bonneville Power Administration	A-		\$68,263
14	BP Energy Company	A-		\$44,506
15	Shell Energy North America (US), L.P.	BBB		\$37,905