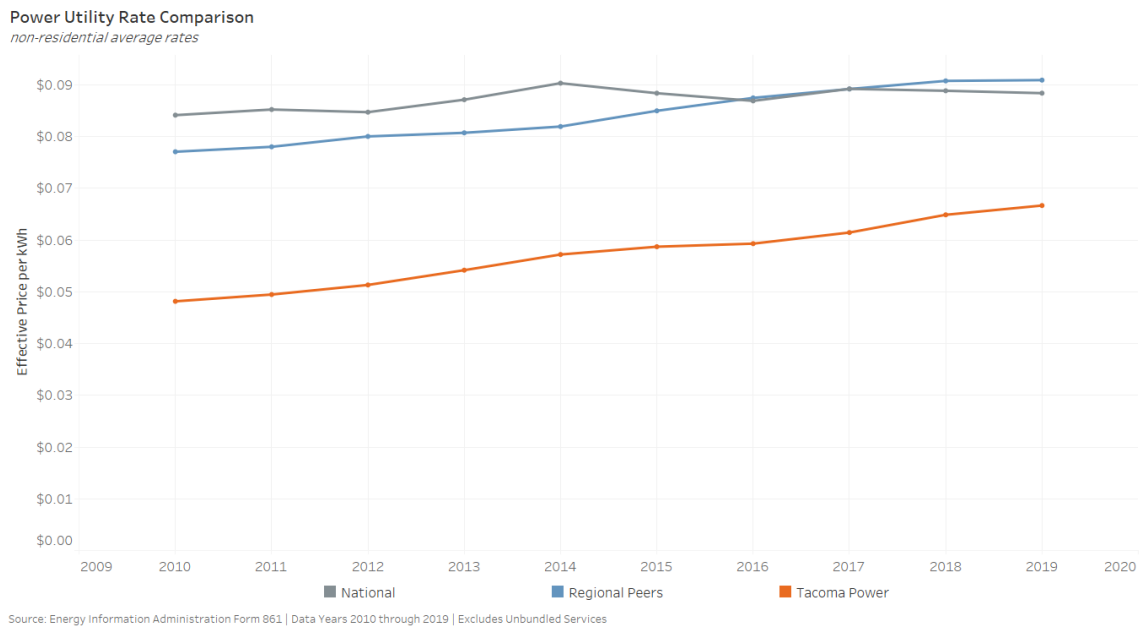


TACOMA POWER RESPONSES TO CITY COUNCIL QUESTIONS

Response to 20 October 2020 Government Performance and Finance Committee Meeting:

PLEASE PROVIDE THE TEN-YEAR HISTORY OF BUSINESS RATE INCREASES.

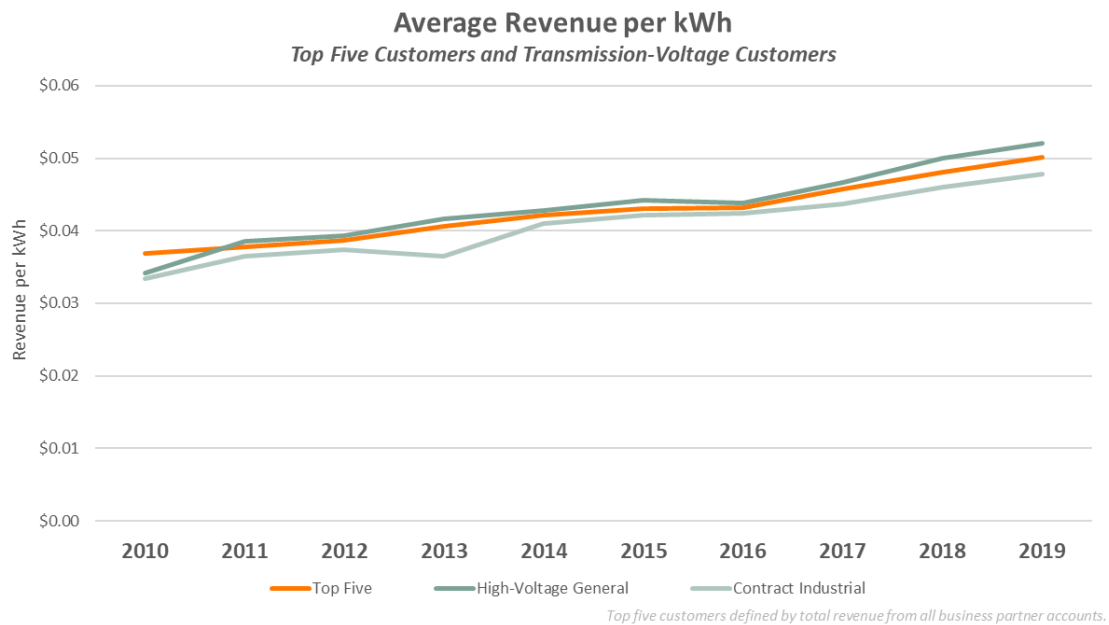
The following graph shows the average Tacoma Power price of electricity for business and other non-residential customers, compared to the national average and the average of Tacoma Power’s nearest peer utilities* for such customers.



* Seattle City Light, Snohomish PUD, Eugene Water & Electric Board, Puget Sound Energy, and Clark County PUD

WHAT IS THE HISTORY OF RATE INCREASES FOR THE TOP FIVE LARGEST CUSTOMERS?

The graph below shows the approximate average annual revenue per kWh from the five largest Power customers, as well as for the two rate categories offered to customers taking service at transmission-level voltage—Schedule HVG (High-Voltage General) and Schedule CP (Contract Industrial). Note that the HVG and CP classes include both very large and relatively small customers—applicability of the rate is based on voltage levels, not total power consumed.



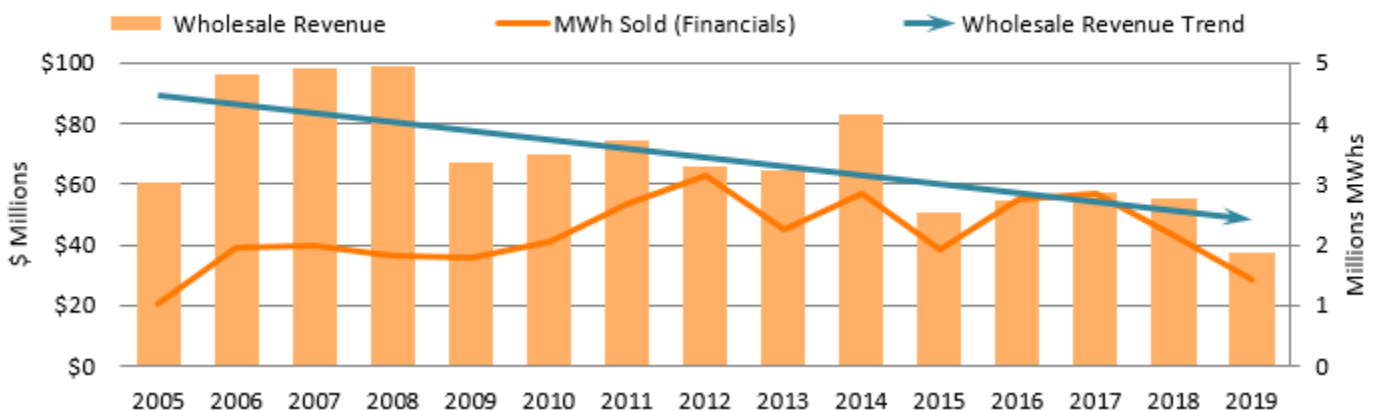
Rate-level differences between the various classes are based on a Cost-of-Service Analysis (COSA), which takes into account how different customer classes use the electric grid. Residential and small business customers tend to have higher overall average rates (dollars per kWh consumed), but lower bills (dollars per month) than larger non-residential customers. This is primarily due to the fact that residential and small business customer costs reflect a higher proportion of grid- and power-delivery-related expenses (such as poles, wires, and substations) relative to the amount of electricity consumed (kWh). Because large commercial and industrial customers tend to use less of the distribution system (the industrials don't use the distribution system at all), they are on average less expensive to serve on a dollar per kWh basis.

PLEASE PROVIDE FOR THE LAST TEN YEARS OF REVENUE FROM SALES OF SURPLUS POWER IN THE WHOLESALE MARKET.

Tacoma Power typically has surplus energy beyond our customers' needs, which allows us to sell the excess into the wholesale power market in order to help offset retail rates. This means that when prices are high, we make more on the excess hydropower we sell and when prices are low, we make less to contribute to overall revenues. Between 2006 and 2019, wholesale market revenue declined -61% (from \$96,142,405 to \$37,420,681). In 2006, wholesale revenue represented 24% of total Power revenue, while by 2019 it had declined to only 8% of total revenue.

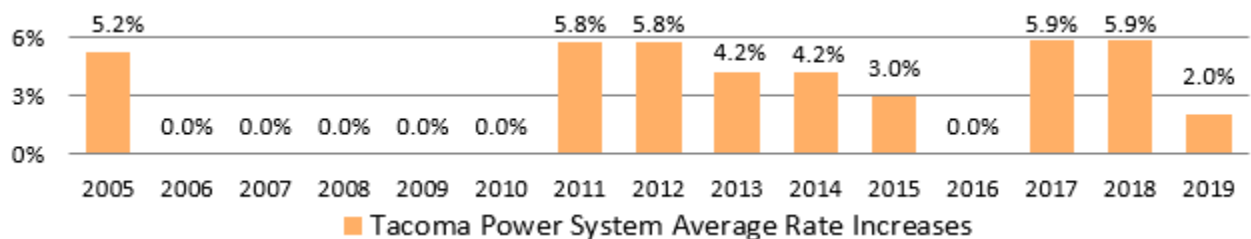
The declining trend in wholesale revenues is mainly driven by a change in market fundamentals that has led to much lower market prices over time. Increased energy production from hydraulic fracturing and renewable resources has depressed market prices since 2009. While Tacoma Power's actual year-to-year hydroelectric supply is highly impacted by weather, the available wholesale quantity under normal weather conditions have remained relatively stable over time.

Wholesale Revenue and MWh Sold



Wholesale revenues have been an important contributor to low Tacoma Power prices. The high power market prices and resulting higher revenues in the mid-2000s allowed the utility to avoid rate increases for five years between 2006 and 2011. The higher wholesale revenues also has provided the cash to refinance debt and pay for more capital over the years. However, 0% rate increases still build pressure on rates since the input costs the utility faces continue to go up in price. Notice that rates have spiked (see below) after no rate increase.

Retail Rate Increases over the Same Period



*Response to Request from 26 October Email:***PROVIDE A LIST OF PROJECTS THAT HAVE BEEN DELAYED OR SUSPENDED AS PART OF OUR BUDGET CUTS FOR BOTH 2020 AND 2021/22.**

1a). In response to the financial impacts of our critical water year in 2019 and the COVID pandemic, Tacoma Power identified **\$6.1 million** in reductions to our revenue-funded capital projects for 2019/20. The following list identifies each project and the work that was deferred or cancelled.

2019/20 CAPITAL PROJECT REDUCTIONS

Section	2019/20 Project Title	Reduction Amount	Description
General Plant	General Plant A&R	(700,000)	Keep \$200k – EV charging in Lot D (upfront costs). Other projects didn't come to fruition.
General Plant	Tacoma Power Storage Facility	(2,900,000)	Defer new construction until results received from Helix Study for campus, Cushman Sub and other storage needs.
		(3,600,000)	General Plant Total
Generation	Plant Engineering A&R	(60,000)	Reduce spending on tools and equipment
Generation	Generation Paving A&R	(100,000)	Defer all paving improvements
Generation	ADA Improvements A&R	(50,000)	Defer all ADA improvement this year
Generation	Water and Sewer Systems A&R	(140,000)	Defer replacements of some water and sewer equipment
Generation	Cushman Project Generation A&R	(15,000)	General reductions including Cushman #1 stop log expenditures
Generation	Cowlitz Project Recreation A&R	(50,000)	Defer the replacement of the Mossyrock Park Fuel Tank
Generation	Nisqually Project Generation A&R	(22,769)	Hold off on equipment shed outside of park shop
Generation	Cushman Project Generation A&R	(86,472)	Hold off on gravelling the Alder Powerhouse access road and Project office improvements
		(524,241)	Generation Total
UTS	Cybersecurity A&R	(410,000)	Identity Access Management software not installed
UTS	Communications A&R	(155,000)	Delay adding redundant communication path into Mountain
UTS	Telephony A&R	(135,000)	Delay telephony capital enhancements
UTS	System Management A&R	(215,803)	Refined forecast
UTS	UTS Capital Portfolio, 2019/2020	(1,045,919)	Cancellation of Conference Room Technology Refresh and reduction of scope for IT Service Management/IT Asset Management Enhancements and Facilities & Communications Systems Monitoring. Refined forecasts for several other projects.
		(1,961,722)	Utility Technology Services Total

1b). Tacoma Power staff reviewed proposed 2021/22 capital projects for opportunities to defer, reduce or cancel projects based on criticality. The following list identifies **\$8.8 million** in projects that have been deferred for consideration in future biennia.

2021/22 DEFERRED CAPITAL PROJECTS

Section	2021/22 Project Title	Amount
General Plant	TPU Admin Complex Parking Lot D Drainage and Paving	(1,521,000)
General Plant	Tacoma Power Mixed Use Facilities	(2,708,000)
	General Plant Total	(4,229,000)
Generation	Cowlitz Mayfield and Mossyrock Spillway Seismic Structural Upgrades	(1,065,000)
Generation	Cowlitz Mossyrock U51,U52 Generator Breaker Refurbishments	(249,000)
Generation	Cushman #1 Fuel Dock	(407,000)
Generation	Cushman #2 Draft Tube Stoplogs	(1,289,000)
Generation	Nisqually LaGrande Downstream Fish Barrier - FERC	(308,000)
Generation	Nisqually Upper & Lower Stacil and Boat Launch Restrooms	(562,000)
	Generation Total	(3,880,000)
Power Management	Demand Response	(371,000)
	Power Management Total	(371,000)
T&D	Transmission Line Auto Sectionalizing	(320,000)
	Transmission & Distribution Total	(1,062,000)

1c). Several O&M programs / projects were also deferred or reflected reduced funding for 2020-22. In addition to reductions associated with training, travel, materials and licenses, certain programs were put on hold or dramatically reduced, including:

- Hydro and facility maintenance - \$3.7 million
- Fish studies \$657,000
- Conservation program spending - \$2.5 million
- Tree-trimming expenses - \$750,000
- Transmission Pole audits - \$1.1 million
- Project Management portfolio management tool - \$400,000
- Reliance on contracted resources for technology programs - \$2.7 million
- Hydro Project/Parks maintenance staff - \$695,000
- Internship programs - \$155,000

2. WHAT DO WE ANTICIPATE DEBT FUNDING IN 2021/22 AND PROVIDE A LIST OF PROJECTS

In general, the Power utility tries to assign capital projects to debt funding, rather than revenue (cash) funding, sources when the assets are longer lived, so that there is a greater association between who pays for the assets and who is benefiting from their use (between current and future customers).

In 2019/20, our capital portfolio was planned as 60% revenue-funded and 40% debt-funded. To mitigate future rate pressure, in 2021/22 Tacoma Power plans to debt fund 60% of its capital portfolio, **\$29.4 million** more than was debt funded in 2019/20. Below is a list of the 2021/22 debt funded projects which total \$89,661,000.

2021/22 DEBT FUNDED PROJECTS

Section	2021/22 Project Title	2021/22 Budget
General Plant	Tacoma Power Security Upgrade	\$1,225,000
General Plant	ABN Main Fan Modernization	\$878,000
General Plant	Advanced Meter Program	\$22,918,000
General Plant	Tacoma Power Facility Elevator Controls Upgrade	\$2,465,000
	General Plant Total	\$27,486,000
Generation	Cowlitz Falls Downstream Fish Passage	\$408,000
Generation	Cowlitz Mossyrock Dam Guard Valve and Stop Logs	\$109,000
Generation	Cowlitz Mossyrock PDS-6 Replacement	\$289,000
Generation	Cowlitz Trout Hatchery Remodel	\$4,250,000
Generation	Cushman #1 Dam ROV Replacement	\$3,250,000
Generation	Cushman #2 Powerhouse Bridge Crane Upgrades	\$425,000
Generation	Cushman #2 U31, U32 Unit Rebuild	\$4,250,000
Generation	Cushman FSC Juvenile Fish Collector Upgrades	\$656,000
Generation	Nisqually Alder U11 Generator Rewind	\$8,123,000
Generation	CSH Barrier Dam Repair Cont.	\$6,800,000
	Generation Total	\$28,560,000
T&D	Central Business District A&R	\$2,981,000
T&D	Distribution Transformer Purchase A&R	\$3,457,000
T&D	Distribution UG/PM Switchgear Replacement	\$484,000
T&D	New Services A&R	\$3,822,000
T&D	Overhead Dist & Trans A&R	\$14,834,000
T&D	Rental Light A&R	\$787,000
T&D	Underground A&R	\$2,209,000
T&D	#6 Copper Replacement	\$1,550,000
T&D	Distribution Efficiency	\$207,000
T&D	Distribution Substation Transformer Replacements	\$2,145,000
T&D	Distribution System Upgrades	\$678,000
T&D	Narrows and North Bay Tower Fall Protection	\$178,000
T&D	Replace Digital Fault Recorders	\$283,000
	Transmission & Distribution Total	\$33,615,000