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Challenges in Serving New Large Loads

- ➤ Recent high interest from prospective industrial customers for large quantities of low-carbon, low-cost energy.
- > Tacoma Power has limited surplus capacity, especially during peak seasons.
- > Current new resource costs are very high (greater than \$100/MWh).
- > New resource costs far outweigh existing rates.

If new large loads are served at current system average rates, it will create substantial rate pressure and cost shifting to existing customers.



Guiding Rate Principles

- 1. Minimize the impact from new customers
- 2. Customers who incur the cost should pay for the costs
- 3. Cost-based rates for each rate class with gradual changes
- 4. Consistent with industry standard
- 5. No undue burden on Tacoma Power's financial sustainability and grid reliability





Existing Customer Classes and Rates

	Schedule General (G)	High Voltage General (HVG)	Contract Industrial (CP)	New Large Load (NLL)
Current Qualifying Load	above 50 KVA or 65 KW	high voltage	8 MW or above	8-20 MW
Current Status	Open	Closed	Open to existing customers only	Open
Rate per MWh*	\$67	\$52	\$48	\$56
*Estimated at 100% load factor				

- large businesses such as schools, restaurants, hospitals
- 2,500 accounts
- \$110.0 million annual revenue

- 8 large customers directly on the transmission system
- \$26.7 million annual revenue
- 2 large manufacturers directly on the transmission system
- \$24.0 million annual revenue

- 1 new large load customer
- \$2 million annual revenue

General Service



High Voltage General



Contract Power



New Large Load





Energy Cost to Supply New Large Loads is Very High

Embedded Cost

Cost of providing power with our current power supply portfolio (owned hydro and BPA purchased power).

System Average Cost: \$34/MWh

Marginal Cost

Incremental cost of serving an additional new load.

Wholesale Market Price: \$89 - \$123/MWh + Capacity Cost

Wind + Battery: \$77-100/MWh + Ongoing O&M

Power Purchase Contracts: ?

Given the high cost of acquiring additional power supply to serve new large loads, our existing customers would bear the burden of under-recovery under our current rate structure.

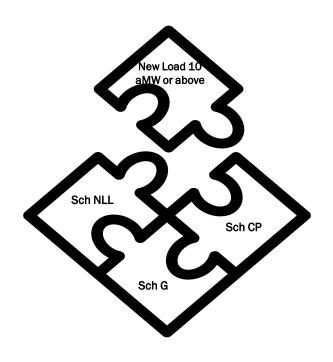


Current Challenges & Proposed Solutions

	Schedule General (G)	High Voltage General (HVG)	Contract Industrial (CP)	New Large Load (NLL)	New Large Load Contracts
Current Qualifying Load	Above 50 kVA or 65 KW	high voltage	8 MW or above	8-20 MW	N/A
Proposed Qualifying Load	Above 50 kVA or 65 KW Max growth of 10 aMW	same	8 MW or above Max growth of 10 aMW	Above 8 MW but not exceeding 10 aMW Max growth of 10 aMW	10 aMW or above
Current Issues	 Lack of clear rate schedule for customers who take power at the transmission level but are below 8 MW. No maximum demand specified. 	N/A	 Lack of clear pathways for customers to Schedule CP. No maximum demand specified. 	 Insufficient cost recovery for loads exceeding 10 aMW at current rates, leading to potential cross-subsidization and rate pressure across rate classes. No maximum demand specified. 	Not exist.
Proposals	 Provide distribution credit to customers who take power at the transmission level. Specify maximum growth of 10 aMW. 	No change.	 Open to existing customers only. Specify pathways from G, HVG and NLL. Specify maximum growth of 10 aMW. 	 Modify qualifying load to 8 MW – 10 aMW. Specify maximum growth of 10 aMW. 	Have contracts for new or existing loads growing by 10 aMW or above. Set energy and demand charges at marginal resource costs.



Proposals



- Create individualized contract requirement for New Large Load 10 aMW or above
- 2. Modify the qualification threshold for Schedule New Large Load (NLL)
- 3. Clarify upper threshold for and pathways to Schedule Contract Power (CP)
- 4. Clarify Schedule G upper threshold; provide a distribution credit for Schedule G customers who do not require local distribution



Proposal 1: Contract for New Large Load 10 aMW or above

Individualized Contract Approach

- Applicable to new customers with 10 aMW load or above, and existing customers who grow by 10 aMW or above
- Contract instead of rate schedule "one size/rate doesn't fit all"
- Minimize rate impact on existing customers
- Must be approved by Board and Council
- Consistent with peer utilities (Snohomish PUD, Chelan PUD, Grant PUD and others)
- Supported by Legal, rate consultants and internal stakeholders

Proposed Rate Design

- Pass-through of power cost (energy and demand charges) based on marginal resource cost, plus a de minimis administrative charge
- Same delivery charge and customer charge as Schedule CP



Proposal 1: Contract for New Large Load 10 aMW or above

Revise Tacoma Power Electric Rate & Financial Policy

- ➤ The current Policy, approved in 2022, provides guidance on rates for New Large Loads 8 20 MW.
- We propose to remove the existing policy language on New Large Loads to remove duplication, since the existing New Large Loads Rate Schedule is already in Tacoma Municipal Code.





Proposal 2 - Modify Schedule NLL

Modify the qualifying upper threshold from 20 MW to 10 aMW

- New large load must meet the threshold for existing BPA contract power of 10 aMW.
- If the growth exceeds 10 aMW, the customer will be transitioned to contract requirement. During the transition, BPA New Resource rates will apply.
- ➢ No effect on existing Schedule NLL customer.
- Consistent with peer utilities' practices.



Limit load growth to 10 aMW

If the growth exceeds 10 aMW, the customer will be transitioned to contract requirement. During the transition, BPA New Resource rates will apply.



Proposal 3 - Modify Schedule CP

Limit load growth to 10 aMW

If the growth exceeds 10 aMW, the customer will be transitioned to contract requirement. During the transition, BPA New Resource rates will apply.

Clarify Pathways to Schedule CP:

- Existing customers on Schedule CP
- Qualifying customers migrating from Schedule G, HVG, NLL





Proposal 4 - Modify Schedule G

Limit load growth to 10 aMW

If the growth exceeds 10 aMW, the customer will be transitioned to contract requirement. During the transition, BPA New Resource rates will apply.

Provide Local Distribution Credit

- Address a gap in rate schedule: larger Schedule G customers who do not use local distribution service shouldn't pay for it.
- Applicable in the unique situation where (1) a Schedule G customer takes power from the transmission level, and (2) if such a customer's demand is less than 8 MW.
- Distribution Credit effectively lowers the delivery charge to reflect cost of service.



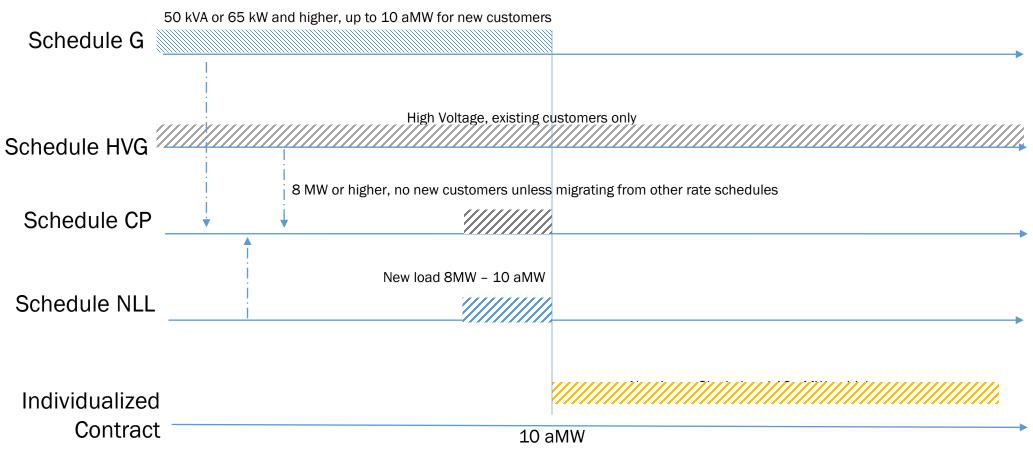
What is the applicable rate schedule

for new load ≥ 20 MW? **Current Status: State of Confusion** 50 kVA or 65 kW and higher Schedule G High Voltage Schedule HVG 8 MW or higher Schedule CP 8 - 20 MW Schedule NLL 20 MW or higher ??? 8 MW 20 MW



Proposed: State of Clarity





^{*}If a customer on Schedule G/HVG/CP/NLL grows by more than 10 aMW, it will be moved from the existing schedule and placed on individualized contract.

Our Proposals Adhere to Guiding Rate Principles and Addresses Challenges

- Address the need from new large industrial customers
- Minimize cost shifting to existing customers
- Customer who incurs the cost pays for the cost
- Properly align rate classes with cost levels
- Avoid confusion for customers
- Consistent with peer utilities



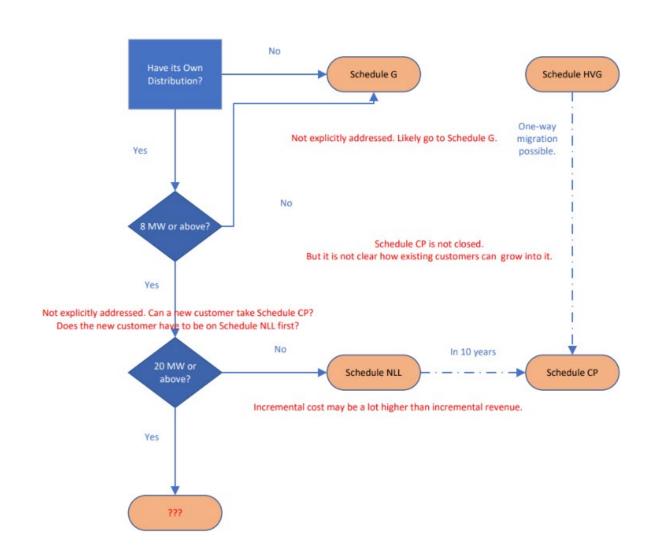
Draft Timeline

- > PUB Presentation: August 23, 2023
- ➤ GPFC Presentation: October 3, 2023 (tentative)
- ➤ PUB Approval: October 11, 2023 (tentative)
- ➤ Council First and Readings: October/November 2023

Appendix

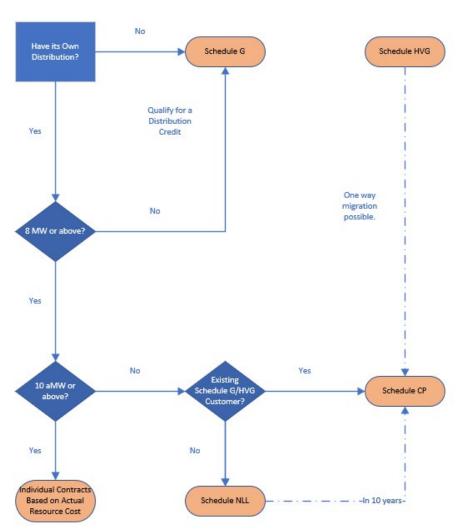
New Customer Placement - Current Status

New Customer Placement Current Status



New Customer Placement - Proposed

New Customer Placement Proposed



Electric Rate & Financial Policy on New Large Loads (2022)

- c. Rates for New Large Loads
 - A New Large Load is a new or expanding existing load greater than 8 MW but less than 20 MW within a twelvemonth period. Rates for new or expanding existing loads greater than 20 MW within a twelve-month period require a negotiated contract to be approved by the Public Utility Board.
 - 2. The execution of a written power service contract with Tacoma Power is required for service under the New Large Load designation.
 - 3. Rates for a New Large Load will be based on:
 - The energy, demand, delivery, customer, and other charges of Tacoma Power's Contract Power (CP) rate, or its successor rate, plus
 - b. a marginal cost adder of 15 percent that will be effective for a period of ten consecutive years from the beginning of service. After ten consecutive years of service, the New Large Load will become a standard Contract Power, or successor rate, customer. The marginal cost adder is based on Tacoma Power's next-resource cost levelized over a ten-year period.

c. Consideration will be given to other factors including but not limited to load factor, energy usage intensity, and customer creditworthiness. These factors may cause Tacoma Power to customize the rate adder and term to address the specific situation of each New Large Load customer.