



General Manager
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TRANSMITTAL MEMORANDUM

TO: The Honorable Mayor and City Council

FROM: Lacey G. Simpson, Acting General Manager

DATE: September 8, 2022

RE: **Vigor Alaska Shipyard Annual Power Rate Adjustment**

At its meeting of August 4, 2005, the City Council adopted a motion approving in second reading Ordinance No. 05-1533, which authorized a thirty (30) year Memorandum of Agreement with the Alaska Industrial Development and Export Authority and the Ketchikan Gateway Borough to exempt certain real property of the Ketchikan Shipyard from property tax. Ordinance No. 05-1533 also authorized a thirty-year Power Sales Agreement (PSA) to set electric utility rates for the Ketchikan Shipyard. Ketchikan Public Utilities and Alaska Ship and Drydock, Inc. (ASD) subsequently entered into the PSA in September of 2005.

Section 4 of the PSA established the initial electric rate charged by KPU at \$.05 per kilowatt-hour plus a demand charge of \$2.72/kVa. Section 5 of the PSA permits KPU to annually adjust the power rate to an indexed rate that is a composite of the electric rates for the shipyards served by Portland General Electric and Seattle City Light. At its meeting of August 7, 2008, the City Council adopted a motion approving Addendum No. 1 to the PSA, which provided a revised methodology to determine the annual power rate adjustment.

As indicated in the attached memorandum from Acting Electric Division Manager Jeremy Bynum, effective October 1, 2022, the composite rate will decrease from \$0.0801 per kilowatt-hour to \$0.0789 per kilowatt-hour and the demand charge in excess of 25 kVA will remain at \$3.37 charge as will the customer service charge of \$61.75. The rate changes were presented to representatives of Vigor Alaska and no objections have been received.

The Acting Electric Division Manager will be attending the City Council meeting of September 15, 2022 in order to address any questions and/or concerns that Councilmembers may have.



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TRANSMITTAL MEMORANDUM

TO: Lacey Simpson, Acting KPU General Manager

FROM: Jeremy T. Bynum PE, Acting Electric Division Manager

DATE: September 2, 2022

SUBJECT: **Vigor Alaska Shipyard – Annual Power Rate Calculation**

Vigor Alaska, by way of a special Power Sales Agreement (PSA) with KPU, has their electric power rate re-calculated each year. The new rate adjustment are schedule to go into effect on October 1, of each year and continues through the following September. Per this PSA, approved September 15, 2005 and the Addendum approved August 7, 2008, and later extended to Vigor Alaska in 2012, the rate follows a calculation based upon the arithmetic average of the current large industrial rates of Portland General Electric and Seattle City Light. The intended purpose of the PSA is to allow the shipyard to compete effectively with other shipyards in the region.

The current rate of **\$0.0801 per kWh** including a **demand charge of \$3.37** in excess of 25kVA per kVA of maximum demand and **Customer Service Charge of \$61.75** was presented to the City Council, item 9b(2) on September 16, 2021.

The new calculated shipyard rate for the 2022-23 period is **\$0.0789 per kWh** including a **demand charge of \$3.37** in excess of 25 kVA per kVA of maximum demand and **Customer Service Charge of \$61.75**; this represents a 1.50% rate decrease, no change in the demand charge, and no change in the customer service charge.

KPU notified Vigor Alaska on September 2, 2022 of the new shipyard rate and the effective date of October 1, 2022.

Attachment: Vigor Alaska Rate Calculation 2022-2023r2.pdf

cc: Mark Adams, Electric Division Operations Manager
Kim Hendricks, Electric Division Administrative Assistant
Michelle Johansen, Finance Director
Kim Simpson, SM&CS Division Manager
GMO, Administrative Assistant

Vigor Alaska Rate Calculation 2022-2023

Section 1 - Vigor Alaska Prior Year Demand & Consumption Data Sheet 2022 - 2023

Average Demand (kVA) (Note 2)	1,324
Annual Peak Demand (kVA)	1,776
On-Peak Demand (Peak) (Note 4)	1,324
Off-Peak Demand (34%) (Note 4)	604
Average Consumption (kWh)	612,478
On-Peak Usage (66%)	404,235
Off-Peak Usage (34%)	208,243
Current Demand Charge per kVA	\$3.37
Current Monthly Service Charge	\$61.75
Average kVAR hours lagging	270,942
Average Power Factor	0.915

Section 2 - Portland General Electric (PGE)

Price Summary E-18 (32th Rev. issued January 13, 2022)

		2022		2021	
Schedule (Note 1)		Sch 85 (P)		Sch 85 (P)	
Basic Charge (Primary)		\$770.00	1	\$770.00	\$470.00
Transmission and Related Service	per kW on-Peak	\$1.75	1,324	\$2,316.35	\$0.76
Distribution Charges	First 200 kW	\$3.21	200	\$642.00	\$3.10
	Over 200 kW	\$2.01	1,576	\$3,167.76	\$1.90
	per kW on-Peak	\$1.46	1,324	\$1,932.49	\$2.53
Energy Charge	On-Peak Period	\$0.04639	404,235	\$18,752.48	\$0.06068
	Off-Peak Period	\$0.03139	208,243	\$6,536.73	\$0.04586
	per kW on-Peak (New)	\$5.15	1,324	\$6,816.68	\$0.00
System Usage	per kWh	\$0.00258	612,478	\$1,580.19	\$0.00088
Total Average Month Primary				\$42,514.69	\$43,057.12

Supplemental Schedules

Schedule 100 for applicable adjustments

SCH 102	N/A	0	\$0.00	N/A	\$0.00
SCH 103	N/A	0	\$0.00	N/A	\$0.00
SCH 105	-\$0.00020	612,478	-\$122.50	-\$0.00040	-\$244.99
SCH 106	0.155%	\$45,203.47	\$70.07	0.146%	\$66.00
SCH 108	1.500%	\$42,514.69	\$637.72	3.000%	\$1,275.44
SCH 109	\$0.00413	612,478	\$2,529.53	\$0.00250	\$1,531.20
SCH 110	\$0.00006	612,478	\$36.75	\$0.00006	\$36.75
SCH 112	\$0.00004	612,478	\$24.50	\$0.00004	\$24.50
SCH 115	\$0.00104	480,769	\$500.00	\$0.00069	\$331.73
SCH 118 (New)	\$0.00023	612,478	\$140.87	\$0.00000	\$0.00
SCH 122	\$0.00000	612,478	\$0.00	\$0.00123	\$753.35
SCH 123	\$0.00010	612,478	\$61.25	\$0.00010	\$61.25
SCH 125	\$0.00000	612,478	\$0.00	\$0.00502	\$3,074.64
SCH 126	\$0.00000	612,478	\$0.00	\$0.00000	\$0.00
SCH 128	N/A	0	\$0.00	N/A	\$0.00
SCH 131	0.000%	\$45,273.53	\$0.00	0.436%	\$197.39
SCH 134	N/A	0	\$0.00	N/A	\$0.00
SCH 135	\$0.00051	612,478	\$312.36	\$0.00070	\$428.73
SCH 136	\$0.00005	612,478	\$30.62	\$0.00005	\$30.62
SCH 137	\$0.00003	612,478	\$18.37	\$0.00041	\$251.12
SCH 138	\$0.00003	612,478	\$18.37	\$0.00000	\$0.00
SCH 142	N/A	0	\$0.00	N/A	\$0.00
SCH 143	-\$0.00015	612,478	-\$91.87	\$0.00000	\$0.00
SCH 145	\$0.00000	612,478	\$0.00	\$0.00011	\$67.37
SCH 146	\$0.00347	612,478	\$2,125.30	\$0.00000	\$0.00
SCH 149	\$0.00000	612,478	\$0.00	\$0.00000	\$0.00
SCH 150 (New)	\$0.00022	612,478	\$134.75	\$0.00000	\$0.00
Total Average Month Supplemental				\$6,426.10	\$7,885.10

Total PGE Average Month	\$48,940.79	\$50,942.22
	Difference	-3.93%

Section 3 - Seattle City Light

Schedule LGC - Large General Service: City (1/1/2022) (Note 3)

		2022		2021	
Energy Charge	On-Peak	\$0.09490	404,235	\$38,361.95	\$0.09130
	Off-Peak	\$0.06250	208,243	\$13,015.16	\$0.06020
Demand Charge	On-Peak	\$4.00000	1,324	\$5,294.51	\$3.85000
	Off-Peak	\$0.28000	604	\$169.08	\$0.27000
Minimum Charge		\$31.47	0.00	\$0.00	\$30.29
PF Charge		\$0.00150	270,942	\$406.41	\$0.00150
Reserved Distribution Charge	Sch - RDC (1/1/2020)	\$0.41000	0	\$0.00	\$0.41000
Discounts	Trans Losses, On-Peak	-\$0.09490	3,778	-\$358.52	-\$0.09130
	Trans Losses, Off-Peak	-\$0.06250	1,806	-\$112.90	-\$0.06020
	Transformer Investment	-\$0.28000	1,324	-\$370.62	-\$0.27000
Total SCL Average Month				\$56,405.07	\$54,297.27
				Difference	3.88%

Vigor Alaska Rate Calculation 2022-2023

Section 4 - Calculate Composite Rate

PGE cost per kWh	\$0.0799
SCL cost per kWh	\$0.0921
Composite Average Rate	\$0.0860

Section 5 - Calculate Effective Rate for October 1 per the Power Sales Agreement (PSA)

Total Revenue: Average Rate x	
Average Monthly Consumption	\$52,673.11
Demand Charge: (Average Demand	
- 25 kVA) x Rate	\$4,376.37
Consumption Charge: Total	
Revenue - Demand Charge	\$48,296.74
2022 - 2023	
Effective Rate Calculation:	
Consumption Charge / Average	\$0.0789
Consumption	
2022 - 2023	
Demand Charge	\$3.37
2022 - 2023	
Service Charge	\$61.75

Comparative Information

Previous Effective Rate	\$0.0801
Change from previous period	-1.50%
Previous Demand Charge	\$3.37
Change from previous period	0.00%
Previous Service Charge	\$61.75
Change from previous period	0.00%

Note 1: PGE Schedule 85 for primary services is used for calculations; this schedule is listed for service with usage 201-4000kW.

Note 2: In accordance with the 2008 PSA addendum, KPU Demand kVA is equal to Demand kW for the purpose of the rate calculation.

Note 3: SCL listed rates include the RSA surcharge and BPA Pass-through.

Note 4: Peak Demand is a measurement of peak kW delivered, averaged over a 5-minute increments and recorded for a given period. The peak demand for the calculation should be the Average Demand for each period. The on-peak is the average demand and the off-peak is calculated to be 1/3 of on-peak demand. Demand cannot be calculated as a percentage and be meaningful for calculations.

PGE Schedules

<https://www.portlandgeneral.com/our-company/regulatory-documents/tariff>

<https://portlandgeneral.com/about/info/pricing-plans/market-based-pricing/pricing-graphs>

SCL Schedules

(LGC) Seattle Municipal Code 21.49.057 and (RDC) Seattle Municipal Code 21.49.085

2022-23 Vigor Alaska Prior Year Demand & Consumption Data Sheet

Customer Vigor Industries
 Folio Number 3-43-663-001 Meter #61013
 3-43-660-001 Meter #14076

Meter # 61013											14076				
Read Date	Reading (kWh)	kWh/Period	kWh/Period x 2400	Rate (\$/kWh)	Electric Amount (\$)	DP (kVA)	DP (kVA x 2400)	Demand Rate (KVA-25KVA)	Demand Amount (\$)	P.F.	Reading kVARh	kVARh/Period	kVARh/Period x 2400	kVAR DP x 2400	kVAR DP x 2400
(Note 1&2)					(Note 3)		(Note 4)								
7/6/21	918										433				
8/4/21	1,062	144	345,600	0.0788	\$ 27,233.28	0.35	840	\$3.32	\$ 2,705.80	0.80	537	104	249,600	0.20	480
9/3/21	1,219	157	376,800	0.0788	\$ 29,691.84	0.48	1,152	\$3.32	\$ 3,741.64	0.81	659	122	292,800	0.26	624
10/4/21	1,406	187	448,800	0.0801	\$ 35,948.88	0.43	1,032	\$3.37	\$ 3,393.59	0.85	768	109	261,600	0.19	456
11/3/21	1,674	268	643,200	0.0801	\$ 51,520.32	0.60	1,440	\$3.37	\$ 4,768.55	0.89	912	144	345,600	0.27	648
12/4/21	1,979	305	732,000	0.0801	\$ 58,633.20	0.60	1,440	\$3.37	\$ 4,768.55	0.92	1,025	113	271,200	0.25	600
1/3/22	2,276	297	712,800	0.0801	\$ 57,095.28	0.62	1,488	\$3.37	\$ 4,930.31	0.95	1,138	113	271,200	0.19	456
2/4/22	2,712	436	1,046,400	0.0801	\$ 83,816.64	0.74	1,776	\$3.37	\$ 5,900.87	0.94	1,274	136	326,400	0.30	720
3/4/22	3,038	326	782,400	0.0801	\$ 62,670.24	0.68	1,632	\$3.37	\$ 5,415.59	0.93	1,405	131	314,400	0.25	600
4/4/22	3,356	318	763,200	0.0801	\$ 61,132.32	0.59	1,416	\$3.37	\$ 4,687.67	0.94	1,517	112	268,800	0.19	456
5/4/22	3,618	262	628,800	0.0801	\$ 50,366.88	0.63	1,512	\$3.37	\$ 5,011.19	0.94	1,610	93	223,200	0.22	528
6/3/22	3,789	171	410,400	0.0801	\$ 32,873.04	0.49	1,176	\$3.37	\$ 3,878.87	0.93	1,683	73	175,200	0.20	480
7/5/22	3,972	183	439,200	0.0801	\$ 35,179.92	0.39	936	\$3.37	\$ 3,070.07	0.86	1,784	101	242,400	0.20	480
Days 364.0															
Average		612,478			\$48,981.01		1,324	\$ 4,368.03		0.915					

(Calculated)

Average Demand (kVA)	1,324
Peak Demand (kVA)	1,776
Average Consumption (kWh)	612,478
Average kVARh lagging	270,942
Current KPU Demand charge (\$/kW)	\$3.37
Current KPU Monthly Service Charge	\$61.75
2022-23 Average Month (Note 5)	\$53,349.04
2022-23 Composite Average Rate (Calculated)	\$0.0871
2021-22 Composite Average Rate	\$0.0873
Comparable Rate Difference	-0.22%

Note 1: A period is defined by read dates and is the time between reads. The average (monthly average) is normalized to 30.4167 days (365/12).

Note 2: The 12 month average is between July 6, 2021 and July 5, 2022.

Note 3: \$/kWh rate increased from \$0.0788 to \$0.801 effective October 1, 2021.

Note 4: KPU Demand charge increased from \$3.32 to \$3.37 effective June 1, 2021; however, the demand charge is not effective for this calculation until October 1, 2021.

Note 5: The monthly service charge is not included in the rate comparison.