BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Regulated Utility Response to the COVID-19 Pandemic

DOCKET U-200281

ATTACHMENT A

TO

COMMENTS OF THE ENERGY PROJECT

April 30, 2021

Highlights: Top Zip Code Analysis Puget Sound Energy (PSE) Residential Arrearages & Public and Environmental Health Disparities

as of December 2020

193/225

zip codes had arrearages that grew > **50**% from Dec. 2019 to Dec. 2020

The vast majority of PSE's 225 zip codes have experienced **substantial growth in residential arrearages** since prior to the pandemic in December 2019, however...

21%

of **all** residential arrearages are from the **Top 10** zip codes 25%

of **known low-income** residential arrearages are from the **Top 10** zip codes

A significant portion of residential and known low-income arrearages are **concentrated in a few zip codes**.

- PSE's top 5 zip codes have the highest correlation with *people of color* and *social vulnerability to COVID-19* of any of the IOUs.
- All five zip codes have areas designated as Highly Impacted Communities (HIC).

Summary of Tables

Of PSE's 225 zip codes, the top five zip codes with the highest total residential arrearages and highest known low-income (KLI) residential arrearages account for 12% and 12%, respectively, of the entire total for December 2020. The corresponding 90+ day arrearages for these zip codes also account for 12% and 12% of the entire total for December 2020. All five zip codes include areas classified as "Highly Impacted Communities" by the Washington State Department of Health (DOH).

Table 1. Top 5 Zip Codes with Highest Arrearages (of 225 Zip Codes)¹ as of December 2020

	ZC 1		ZC 2	ZC3	ZC 4		ZC 5	Sum & % of Dec.
Puget Sound Energy	98003		98023	98032	98002	98312		2020 Residential
Communities Served	Federal W	/ay	Federal Way	Kent	Auburn Bremerton (or KI		(or KLI) Total	
Total Residential Arrearages	\$ 1,015	5,983	\$ 944,294	\$ 772,834	\$ 733,719	\$	719,028	\$4.19M (12%)
Per Capita Arrearages	\$	258	\$ 310	\$ 233	\$ 255	\$	276	N/A
90+ Day Arrearages	\$ 706	5,844	\$ 682,428	\$ 518,486	\$ 579,193	\$	546,380	\$3.03M (12%)
KLI Arrearages	\$ 228	3,656	\$ 181,301	\$ 165,358	\$ 156,509	\$	148,886	\$0.88M (12%)
90+ Day Arrearages	\$ 154	4,025	\$ 124,465	\$ 109,040	\$ 120,043	\$	105,163	\$0.61M (12%)

Sources: U-200281, PSE Arrearage Data through December 2020, (Feb. 9, 2021), Sheets 7 & 8; UTC Staff Residential Arrearage Map Tool (per capita data).

Table 2. Highly Impacted Communities & DOH Social and Health Vulnerability Measure
Rankings in Top 5 Zip Codes

Top 5 Zip		Number of		Range of DOH Disparities Ranks								
Codes with Highest Arrears	Communities Served	Census Tracts per Zip Code	% Growth in Arrearages (2019-2020)	People of Color	Unemployed	Social Vulnerability to COVID-19	Pop. In Poverty ≤ 185% FPL	Highy Impacted Community				
98003	Federal Way	15	212	8-10	3-9	6-10	4-9	Yes				
98023	Federal Way	10	219	7-10	2-10	6-9	4-7	Yes				
98032	Kent	13	146	8-10	4-10	7-10	5-10	Yes				
98002	Auburn	8	314	7-9	2-9	8-10	6-10	Yes				
98312	Bremerton	13	104	2-8	2-9	2-8	1-9	Yes				

Sources: WA Dept. of Health (DOH) Environmental Health Disparities (EHD) Mapping tool. ² <<https://fortress.wa.gov/doh/wtn/WTNIBL>>; Washington Tracking Network Mapping tool ³; Geography Division, U.S. Census Bureau, Geocorr 2018 (census tracts within zip codes).

⁻Darker shading within a row indicates a higher value.

⁻Highlighted cells indicate zip codes with a census tract that ranked 9 or 10 by DOH, on a scale of 1-10, or have been designated as HIC.

⁻Highly Impacted Communities (HIC) meet one of two criteria: 1) a census tract is at least partially covered by Tribal Lands, or 2) a census tract ranks 9 or 10 on the DOH Environmental Health Disparities Map.

⁻The percent growth data excludes arrearages from 1-30 days that PSE initially reported.

¹ The 30/60/90 residential vintage data totals \$34.86M, which is the total past due amount shown in Table 1. The residential 'total arrearages' reported by PSE are \$59.155M, but PSE has stated that total includes balances owed for less than 30 days. E-mail from Andrew Sellards of UTC Staff, April 2, 2021.

² DOH Environmental Disparities Mapping Tool. POC (OFM Data, sum of all ethnicities categories except White/Non-Hispanic), Unemployed (ACS Data, population age 16+ registered as unemployed), Pop. In Poverty (ACS Data, population living at or below 185% FPL).

³ DOH Washington Tracking Network Mapping Tool. Social Vulnerability to COVID-19 (DOH summary of household composition & disability, housing type & transportation, race/ethnicity & language, and socioeconomic determinants).

Highlights: Top Zip Code Analysis Avista Residential Arrearages & Public and Environmental Health Disparities

as of December 2020

59/96

zip codes had arrearages that grew > **50%** from Dec. 2019 to Dec. 2020

The vast majority of Avista's 96 zip codes have experienced **substantial growth in residential arrearages** since prior to the pandemic in December 2019, however...

57%

of **all** residential arrearages are from the **Top 10** zip codes 64%

of **known low-income** residential arrearages are from the **Top 10** zip codes

A significant portion of residential and known low-income arrearages are **concentrated in a few zip codes**.

- The highest DOH Environmental Health Disparities (EHD) map rankings align well
 with the zip codes with highest arrearages. The higher the arrearage, the higher that
 zip code ranks for the selected disparities (e.g. higher percent of population in
 poverty, unemployment, etc.).
- All five zip codes have areas designated as Highly Impacted Communities (HIC).

Summary of Tables

Of Avista's 96 zip codes, the top five zip codes with the highest total residential arrearages and highest known low-income residential arrearages account for 36% and 43%, respectively, of the entire total for December 2020. The corresponding 90+ day arrearages for these zip codes also account for 36% and 43% of the entire total for December 2020. All five zip codes include areas classified as "Highly Impacted Communities" by the Washington State Department of Health (DOH).

Table 1. Top 5 Zip Codes with Highest Arrearages (of 96 Zip Codes) as of December 2020

		ZC 1		ZC 2	ZC 3		ZC 4		ZC 5	Sum & % of Dec.
Avista	99207		99208		99205		99202	99223		2020 Residential
	1	North-central		North-central						(or KLI) Total
Communities Served	Spokane			Spokane	NW Spokane		East Spokane		SE Spokane	
Total Residential Arrearages	\$	750,177	\$	721,752	\$ 718,694	\$	366,957	\$	356,265	\$2.91M (36%)
Per Capita Arrearages	\$	304	\$	259	\$ 282	\$	286	\$	243	N/A
90+ Day Arrearages	\$	593,961	\$	487,139	\$ 522,162	\$	292,729	\$	234,105	\$2.13M (36%)
KLI Arrearages	\$	461,659	\$	320,024	\$ 366,483	\$	222,081	\$	139,756	\$1.51M (43%)
90+ Day Arrearages	\$	407,272	\$	272,286	\$ 319,732	\$	199,389	\$	114,001	\$1.31M (43%)

Sources: U-200281, Avista Arrearage Data through December 2020, (Feb. 1, 2021), Sheets 7 & 8; UTC Staff Residential Arrearage Map Tool (per capita data).

Table 2. Highly Impacted Communities & DOH Social and Health Vulnerability Measure
Rankings in Top 5 Zip Codes

Top 5 Zip		Number of	% Growth	Census Tract Range of DOH Disparities Ranks									
Codes with Highest Arrears	Communities Served	Census Tracts per Zip Code	in Arrearages (2019-2020)	People of Color	Unemployed	Social Vulnerability to COVID-19	Pop. In Poverty ≤ 185% FPL	Highy Impacted Community					
00207	North-central		467	F.6	6.40	6.40	40						
99207	Spokane North-central	9	167	5-6	6-10	6-10	10	Yes					
99208	Spokane	16	88	1-4	4-10	1-9	1-10	Yes					
99205	NW Spokane	13	105	2-5	5-10	2-7	5-10	Yes					
99202	East Spokane	12	171	1-7	4-10	4-10	6-10	Yes					
99223	SE Spokane	12	65	1-5	1-8	1-7	1-7	Yes					

Sources: WA Dept. of Health (DOH) Environmental Health Disparities (EHD) Mapping tool. 1 << https://fortress.wa.gov/doh/wtn/WTNIBL>>; Washington Tracking Network Mapping tool 2; Geography Division, U.S. Census Bureau, Geocorr 2018 (census tracts within zip codes).

⁻Darker shading within a row indicates a higher value.

⁻Highlighted cells indicate zip codes with a census tract that ranked 9 or 10 by DOH, on a scale of 1-10, or have been designated as HIC. -Highly Impacted Communities (HIC) meet one of two criteria: 1) a census tract is at least partially covered by Tribal Lands, or 2) a census tract ranks 9 or 10 on the DOH Environmental Health Disparities Map.

¹ DOH Environmental Health Disparities Mapping Tool. POC (OFM Data, sum of all ethnicities categories except White/Non-Hispanic), Unemployed (ACS Data, population age 16+ registered as unemployed), Pop. In Poverty (ACS Data, population living at or below 185% FPL). ² DOH Washington Tracking Network Mapping Tool. Social Vulnerability to COVID-19 (DOH summary of household composition & disability, housing type & transportation, race/ethnicity & language, and socioeconomic determinants).

Highlights: Top Zip Code Analysis PacifiCorp Residential Arrearages & Public and Environmental Health Disparities

as of December 2020

32/33

zip codes had arrearages that grew > **50**% from Dec. 2019 to Dec. 2020

The vast majority of PacifiCorp's 33 zip codes have experienced **substantial growth in residential arrearages** since prior to the pandemic in December 2019, however...

82%

of **all** residential arrearages are from the **Top 10** zip codes 85%

of **known low-income** residential arrearages are from the **Top 10** zip codes

A significant portion of residential and known low-income arrearages are **concentrated in a few zip codes**.

- PacifiCorp has very high percent growth in arrearages for each zip code compared to other IOUs.
- 3 of the 5 zip codes have areas designated as Highly Impacted Communities (HIC) and all 5 zip codes have areas that rank highest by DOH in each of the social and health measures shown in Table 2: people of color, unemployment, social vulnerability to COVID-19, and percent of population in poverty.

Summary of Tables

Of PacifiCorp's 33 zip codes, the top five zip codes with the highest total residential arrearages and highest known low-income residential arrearages account for 58% and 46%, respectively, of the entire total for December 2020. The corresponding 90+ day arrearages for these zip codes also account for 56% and 45% of the entire total for December 2020. Three of five zip codes include areas classified as "Highly Impacted Communities" by the Washington State Department of Health (DOH).

Table 1. Top 5 Zip Codes with Highest Arrearages (of 33 Zip Codes) as of December 2020

PacifiCorp	ZC 1 98902		ZC 2 98901		ZC3 98908		ZC 4 99362		ZC 5 98903	Sum & % of Dec. 2020 Residential
Communities Served	Yakima	NE Yakima		W Yakima		Walla Walla		SW Yakima		(or KLI) Total
Total Residential Arrearages	\$ 1,336,010	\$	969,627	\$	823,156	\$	715,241	\$	649,402	\$4.49M (58%)
Per Capita Arrearages	\$ 308	\$	365	\$	301	\$	249	\$	387	N/A
90+ Day Arrearages	\$ 746,346	\$	576,363	\$	443,248	\$	377,057	\$	350,334	\$2.49M (56%)
KLI Arrearages	\$ 154,362	\$	128,198	\$	38,315	\$	108,132	\$	67,064	\$0.49M (46%)
90+ Day Arrearages	\$ 99,953	\$	86,848	\$	24,507	\$	65,983	\$	39,104	\$0.32M (45%)

Sources: U-200281, PacifiCorp Arrearage Data through December 2020, (Feb. 24, 2021), Sheets 7 & 8; UTC Staff Residential Arrearage Map Tool (per capita data).

Table 2. Highly Impacted Communities & DOH Social and Health Vulnerability Measure
Rankings in Top 5 Zip Codes

Top 5 Zip		Number of			Range of	DOH Disparitie	es Ranks	
Codes with Highest Arrears	Communities Served	Census Tracts per Zip Code	% Growth in Arrearages (2019-2020)	People of Color	Unemployed	Social Vulnerability to COVID-19	Pop. In Poverty ≤ 185% FPL	Highy Impacted Community
98902	Yakima	10	116	6-10	1-10	5-10	5-10	Yes
98901	NE Yakima	10	297	4-10	3-10	4-10	4-10	Yes
98908	W Yakima	14	114	5-9	1-9	5-9	4-9	No
99362	Walla Walla	11	330	3-10	1-10	1-10	1-10	No
98903	SW Yakima	8	119	3-10	1-10	5-10	4-10	Yes

Sources: WA Dept. of Health (DOH) Environmental Health Disparities (EHD) Mapping tool. 1 << https://fortress.wa.gov/doh/wtn/WTNIBL>>; Washington Tracking Network Mapping tool 2; Geography Division, U.S. Census Bureau, Geocorr 2018 (census tracts within zip codes).

⁻Darker shading within a row indicates a higher value.

⁻Highlighted cells indicate zip codes with a census tract that ranked 9 or 10 by DOH, on a scale of 1-10, or have been designated as HIC.
-Highly Impacted Communities (HIC) meet one of two criteria: 1) a census tract is at least partially covered by Tribal Lands, or 2) a census tract ranks 9 or 10 on the DOH Environmental Health Disparities Map.

¹ DOH Environmental Health Disparities Mapping Tool. POC (OFM Data, sum of all ethnicities categories except White/Non-Hispanic), Unemployed (ACS Data, population age 16+ registered as unemployed), Pop. In Poverty (ACS Data, population living at or below 185% FPL). ² DOH Washington Tracking Network Mapping Tool. Social Vulnerability to COVID-19 (DOH summary of household composition & disability, housing type & transportation, race/ethnicity & language, and socioeconomic determinants).

Highlights: Top Zip Code Analysis Cascade Natural Gas (CNG) Residential Arrearages & Public and Environmental Health Disparities

as of December 2020

15/74

zip codes had arrearages that grew > **50%** from Dec. 2019 to Dec. 2020

Twenty percent of CNG's 74 zip codes have experienced **substantial growth in residential arrearages** since prior to the pandemic in December 2019, however...

43%

of **all** residential arrearages are from the **Top 10** zip codes N/A

of **known low-income** residential arrearages are from the **Top 10** zip codes

A significant portion of residential arrearages are **concentrated in a few zip codes** (CNG's December data filing did not include known low-income data).

- Compared to the other IOUs, fewer zip codes have a very high percent growth in arrears from 2019 to 2020.
- 4 of the 5 zip codes have areas designated as Highly Impacted Communities (HIC).

Summary of Tables

Of CNG's 74 zip codes, the top five zip codes with the highest total residential arrearages account for 26% of the entire total for December 2020. The corresponding 90+ day arrearages for these zip codes also account for 28% of the entire total for December 2020. Four of the five zip codes include areas classified as "Highly Impacted Communities" by the Washington State Department of Health (DOH).

Table 1. Top 5 Zip Codes with Highest Arrearages (of 74 Zip Codes)¹ as of December 2020

	ZC 1	ZC 2	ZC 3	ZC 4	ZC 5	Sum & % of Dec.
Cascade (CNG)	98902	99301	99362	98312	98225	2020 Residential
Communities Served	SW Yakima	W Pasco	Walla Walla	Bremerton	Bellingham	(or KLI) Total
Total Residential Arrearages	\$ 250,801	\$ 221,554	\$ 152,983	\$ 128,978	\$ 119,730	\$0.87M (26%)
Per Capita Arrearages	\$ 277	\$ 258	\$ 219	\$ 236	\$ 230	N/A
90+ Day Arrearages	\$ 114,911	\$ 88,004	\$ 60,281	\$ 58,050	\$ 49,523	\$0.37M (28%)
KLI Arrearages	unk.	unk.	unk.	unk.	unk.	unk.
90+ Day Arrearages	unk.	unk.	unk.	unk.	unk.	unk.

Sources: U-200281, CNG Arrearage Data through December 2020, (Feb. 16, 2021), Sheets 7 & 8 1; UTC Staff Residential Arrearage Map Tool (per capita data).

Table 2. Highly Impacted Communities & DOH Social and Health Vulnerability Measure
Rankings in Top 5 Zip Codes

Top 5 Zip		Number of		es Ranks				
Codes with Highest Arrears	Communities Served	Census Tracts per Zip Code	% Growth in Arrearages (2019-2020)	People of Color	Unemployed	Social Vulnerability to COVID-19	Pop. In Poverty ≤ 185% FPL	Highy Impacted Community
98902	SW Yakima	10	6	6-10	6-10	5-10	5-10	Yes
99301	W Pasco	11	-37	6-10	1-9	3-10	2-10	Yes
99362	Walla Walla	11	22	3-10	2-10	1-10	1-10	No
98312	Bremerton	13	13	2-8	2-9	2-8	1-9	Yes
98225	Bellingham	11	11	1-7	2-10	2-9	4-10	Yes

Sources: WA Dept. of Health (DOH) Environmental Health Disparities (EHD) Mapping tool. ² <<https://fortress.wa.gov/doh/wtn/WTNIBL>>; Washington Tracking Network Mapping tool ³; Geography Division, U.S. Census Bureau, Geocorr 2018 (census tracts within zip codes).

⁻Darker shading within a row indicates a higher value.

⁻Highlighted cells indicate zip codes with a census tract that ranked 9 or 10 by DOH, on a scale of 1-10, or have been designated as HIC.
-Highly Impacted Communities (HIC) meet one of two criteria: 1) a census tract is at least partially covered by Tribal Lands, or 2) a census tract ranks 9 or 10 on the DOH Environmental Health Disparities Map.

¹ The residential customer data (8b) and Known Low-Income (KLI) residential customer data (8c) are identical due to an SQL scripting issue. Andrew Sellards (UTC) stated that CNG will submit corrected KLI data with the next data filing (April 1, 2020).

² DOH Environmental Disparities Mapping Tool. POC (OFM Data, sum of all ethnicities categories except White/Non-Hispanic), Unemployed (ACS Data, population age 16+ registered as unemployed), Pop. In Poverty (ACS Data, population living at or below 185% FPL).

³ DOH Washington Tracking Network Mapping Tool. Social Vulnerability to COVID-19 (DOH summary of household composition & disability, housing type & transportation, race/ethnicity & language, and socioeconomic determinants).

Highlights: Top Zip Code Analysis Northwest Natural Gas (NWNG) Residential Arrearages & Public and Environmental Health Disparities

as of December 2020

20/22

zip codes had arrearages that grew > **50**% from Dec. 2019 to Dec. 2020

The vast majority of NWNG's 22 zip codes have experienced **substantial growth in residential arrearages** since prior to the pandemic in December 2019, however...

77%

of **all** residential arrearages are from the **Top 10** zip codes 87%

of **known low-income** residential arrearages are from the **Top 10** zip codes

A significant portion of residential and known low-income arrearages are **concentrated in a few zip codes**.

- 4 of the 5 zip codes have areas designated as Highly Impacted Communities (HIC).
- The top 5 zip codes also rank highly in the DOH Environmental Health Disparities (EHD) map, in terms of social and health metrics (e.g. higher percent of population in poverty, unemployment, etc.).

Summary of Tables

Of Northwest Natural Gas's 22 zip codes, the top five zip codes with the highest total residential arrearages and highest known low-income residential arrearages account for 49% and 54%, respectively, of the entire total for December 2020. The corresponding 90+ day arrearages for these zip codes also account for 48% and 55% of the entire total for December 2020. Four of five zip codes include areas classified as "Highly Impacted Communities" by the Washington State Department of Health (DOH).

Table 1. Top 5 Zip Codes with Highest Arrearages (of 22 Zip Codes) as of December 2020

		ZC 1		ZC 2	ZC3		ZC 4		ZC 5	Sum & % of Dec.
Northwest Natural Gas	98682		98662		98684		98661		98604	2020 Residential
Communities Served		E Five Corners		Five Corners	Evergreen		E Vancouver Battle Ground (or		(or KLI) Total	
Total Residential Arrearages	\$	162,858	\$	76,259	\$ 75,411	\$	70,295	\$	69,751	\$455K (49%)
Per Capita Arrearages	\$	124	\$	124	\$ 135	\$	130	\$	141	N/A
90+ Day Arrerages	\$	61,544	\$	36,664	\$ 33,063	\$	38,518	\$	27,886	\$198K (48%)
KLI Arrearages	\$	2,768	\$	911	\$ 1,096	\$	1,001	\$	582	\$6.4K (54%)
90+ Day Arrerages	\$	1,534	\$	425	\$ 889	\$	403	\$	345	\$3.6K (55%)

Sources: U-200281, NWNG Arrearage Data through December 2020, (Feb. 1, 2021), Sheets 7 & 8; UTC Staff Residential Arrearage Map Tool (per capita data).

Table 2. Highly Impacted Communities & DOH Social and Health Vulnerability Measure
Rankings in Top 5 Zip Codes

Top 5 Zip		Number of		Range of DOH Disparities Ranks							
Codes with Highest Arrears	Communities Served	Census Tracts per Zip Code	% Growth in Arrearages (2019-2020)	People of Color	Unemployed	Social Vulnerability to COVID-19	Pop. In Poverty ≤ 185% FPL	Highy Impacted Community			
98682	E Five Corners	16	91	3-7	1-9	3-9	3-10	Yes			
98662	Five Corners	11	174	1-7	1-10	2-9	3-10	Yes			
98684	Evergreen	7	128	5-7	2-8	3-9	3-8	Yes			
98661	E Vancouver	16	230	4-9	2-10	4-10	5-10	Yes			
98604	Battle Ground	11	76	1-3	2-9	1-5	1-7	No			

Sources: WA Dept. of Health (DOH) Environmental Health Disparities (EHD) Mapping tool. 1 << https://fortress.wa.gov/doh/wtn/WTNIBL>>; Washington Tracking Network Mapping tool 2; Geography Division, U.S. Census Bureau, Geocorr 2018 (census tracts within zip codes).

⁻Darker shading within a row indicates a higher value.

⁻Highlighted cells indicate zip codes with a census tract that ranked 9 or 10 by DOH, on a scale of 1-10, or have been designated as HIC. -Highly Impacted Communities (HIC) meet one of two criteria: 1) a census tract is at least partially covered by Tribal Lands, or 2) a census tract ranks 9 or 10 on the DOH Environmental Health Disparities Map.

¹ DOH Environmental Health Disparities Mapping Tool. POC (OFM Data, sum of all ethnicities categories except White/Non-Hispanic), Unemployed (ACS Data, population age 16+ registered as unemployed), Pop. In Poverty (ACS Data, population living at or below 185% FPL). ² DOH Washington Tracking Network Mapping Tool. Social Vulnerability to COVID-19 (DOH summary of household composition & disability, housing type & transportation, race/ethnicity & language, and socioeconomic determinants).