EXH. PKW-40C DOCKETS UE-190529/UG-190530 UE-190274/UG-190275 2019 PSE GENERAL RATE CASE WITNESS: PAUL K. WETHERBEE

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

Docket UE-190529 Docket UG-190530 (Consolidated)

PUGET SOUND ENERGY,

Respondent.

In the Matter of the Petition of

PUGET SOUND ENERGY

For an Order Authorizing Deferral Accounting and Ratemaking Treatment for Short-life IT/Technology Investment Docket UE-190274 Docket UG-190275 (Consolidated)

SIXTH EXHIBIT (CONFIDENTIAL) TO THE PREFILED REBUTTAL TESTIMONY OF

PAUL K. WETHERBEE

ON BEHALF OF PUGET SOUND ENERGY

REDACTED VERSION

JANUARY 15, 2020

Puget Sound Energy
Market Energy Prices
2019 GRC Rebuttal Power Cost Update

2019 GRC Kebuttal Fower Cost Upda REDACTED VERSION

19GRC Rebuttal Power Cost Update, 12/05/19 gas price date

Sumas Linis Mav-20 Imn-20 Jul-30 Summas \$AMMBuu \$1.32 \$1.33 \$1.92 Stanfield \$AMMBuu \$1.22 \$1.33 \$1.92 AECO \$AMMBuu \$1.20 \$1.19 \$1.23 Henry HUB \$AMMBuu \$2.30 \$2.34 \$1.23 Mid C On-Peak \$AWWh \$X.XX \$X.XX \$X.XX Mid C Off-Peak \$MMBu/Mwh \$X.XX \$X.XX \$X.XX Market Heat Rate - Off Peak \$MMBu/mwh \$X.XX \$X.XX \$X.XX Market Heat Rate - Flat \$MMBuw/mwh \$X.XX \$X.XX \$X.XX Namicled \$AMMBu \$1.57 \$1.59 \$1.00 Sumas \$AMMBu \$X.XX \$X.XX \$X.XX Mid C On-Peak \$MMBu/mwh \$X.XX \$X.XX Mid C Flat \$AMMBu \$X.XX \$X.XX Market Heat Rate - Flat \$MBu/mwh \$X.XX \$X.XX Market Heat Rate - Flat \$MBu/mwh \$X.XX	51.92 \$1.92 \$1.89 \$1.22 \$2.39 \$X.XX	20 Sep-20 98 \$1.91 90 \$1.87 25 \$1.26 \$2.39 \$2.38	Oct-20 \$1.84	Nov-20 \$2.59	Dec-20 \$3.26	Jan-21 \$3.14	Feb-21 \$2.82	Mar-21 \$2.40	Apr-21	Average \$2.17
S/MMBtu S1.32 S1.38 S/MMBtu S1.52 S1.53 S/MMBtu S1.20 S1.19 S/MMBtu SX.XX SX.XX S/MWh SX.XX SX.XX S/MWh SX.XX SX.XX TPeak MMBtu/MWh X.XX X.XX TPeak MMBtu/MWh X.XX X.XX TYPeak MMBtu/MWh X.XX X.XX S/MMBtu S1.57 S1.59 S/MMBtu S1.50 S0.95 S/MMBtu S.X.X SX.XX TPeak MMBtu/MWh SX.XX SX.XX S/MWh SX.XX SX.XX TPeak MMBtu/MWh SX.XX SX.XX TPeak MMBtu/MWh SX.XX SX.XX TPeak MMBtu/MWh SX.XX X.XX TPeak MMBtu/MWh SX.XX X.XX S/MMBtu S0.20 S0.23 S/MMBtu S0.20 S0.23 S/MWh SX.XX SX.XX S/M	\$1.92 \$1.89 \$1.22 \$1.22 \$2.39 \$X.XX \$X \$X \$X \$X \$X \$X \$X \$X \$X \$X \$X \$X \$			\$2.59	\$3.26	\$3.14	\$2.82	\$2.40	\$1.50	\$2.17
S/MMBu	\$1.89 \$1.22 \$1.22 \$2.39 \$X.XX \$X.XX \$X.XX XXXX XXXX XXXX				0) i	07:10	
S/MMBu S/L20 S/L19 S/MMBu S/L34 S/L34 S/Mwh S/L34 S/L34 S/Mwh S/L34 S/L34 S/Mwh S/L34 S/L34 S/Mwh S/L34 S/L34 S/MmBu S/L35 S/L35 S/MmBu S/L37 S/L39 S/MmBu S/L37 S/L39 S/MmBu S/L37 S/L39 S/MmBu S/L37 S/L35 S/Mwh S/L34 S/L34	\$1.22 \$2.39 \$X.XX \$X.XX \$X.XX XXXX XXXX XXXX			\$2.16	\$2.38	\$2.46	\$2.41	\$2.26	\$1.61	\$1.98
S/MMBun SX.XX SX.XX S/MWh SX.XX SX.XX S/MWh SX.XX SX.XX S/MWh SX.XX SX.XX TPeak MMBun/Wh X.XX X.XX I MMBun/Wh X.XX X.XX S/MMBun S1.69 S1.76 S/MMBun S0.90 S0.95 S/MWh SX.XX SX.XX	\$239 \$XXX \$XXX \$XXX XXX XXX XXX			\$1.44	\$1.62	\$1.73	\$1.67	\$1.53	\$1.30	\$1.39
SAWWh SX.XX SX.X	SXXX SXXXX XXXX XXXX XXXX			\$2.47	\$2.64	\$2.76	\$2.71	\$2.59	\$2.31	\$2.47
S/MWh SX.XX SX.XMBtu S1.69 S1.59 SX.MMBtu S2.50 S2.53 SX.XX	XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX			\$X.XX	SX.XX	\$X.XX	\$X.XX	SX.XX	\$X.XX	SX.XX
Feak MABBu/Mwh SX.XX X.XX X	XXXX XXXX XXXX XXXX			\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	SX.XX
The cake MMB with with X.XX X	XXXX			XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Treak MMBun/wh X.XX X.MMBun X.1.69 S.1.69 S.1.76 S.MMBun S.2.50 S.2.53 S.MWh S.X.XX S.X.XX S.X.XX S.X.XX S.X.XX S.X.XX S.X.XX X.XX S.MMBun S.0.19 S.MMBun S.0.20 S.0.19 S.MWh S.X.XX	XXXX			XXX	XXX	XXX	XXX	XXX	XXX	XXX
1/31/19 gas price date	X.XX			XXX	XXX	XXX	XXX	XXX	XXX	XXX
Units	0.6			XXX	XXXX	XXX	XXX	XXX	XXX	XXXX XXX
1/31/19 gas price date	96 17									
Linis May-20 Jun-20 S/MMBtu S1.57 S1.59 S/MMBtu S0.90 S0.95 S/MMBtu SX.XX SX.XX SX.XX SX.XX SX.XX SX.XX SX.XX SX.XX XX.XX S/MMBtu S0.25 S0.21 S/MMBtu S0.20 S0.23 S/MMBtu SX.XX S	1-1 30									
Linits	1-1 20									
Units May-20 Jun-20 Jun-8 S.MMBun S.1.57 S.1.59 S.MMBun S.1.67 S.1.59 S.MMBun S.2.50 S.2.53 S.MWh S.X.XX S.MMBun S.M.XX X.X.X X.X.X S.MMBun S.M.XX S.MMBun S.0.18 S.0.23 S.MMBun S.0.30 S.0.23 S.MWh S.X.XX	1.1									Kate Year
S/MMBtu S1.57 S1.59 S/MMBtu S0.90 S0.95 S/MMBtu S2.50 S2.53 S/MWh SX.XX SX.XX S/MWh SX.XX SX.XX S/MWh SX.XX SX.XX TPeak MMBtu/MWh X.XX X.XX It MMBtu/MWh X.XX X.XX S/MMBtu S0.25 S0.21 S/MMBtu S0.25 S0.21 S/MMBtu S0.25 S0.21 S/MMBtu S0.25 S0.23 S/MMBtu S0.25 S0.21 S/MMBtu S0.25 S0.21 S/MMBtu S0.25 S0.21 S/MMBtu S0.25 S0.21 S/MWh SX.XX SX.XX S/M	7 07-INC	91	-	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Average
S/MMBtu S1.69 S1.76	\$1.80			\$2.39	\$2.69	\$2.69	\$2.55	\$2.41	\$1.51	\$2.06
S/MMBtu S0.90 S0.95	\$1.98			\$2.26	\$2.41	\$2.59	\$2.52	\$2.45	\$1.58	\$2.08
S/MMBuu S2.50 S2.53	\$1.01			\$1.24	\$1.46	\$1.64	\$1.55	\$1.40	\$1.12	\$1.20
S/MWh SX.XX SX.XX S/MWh SX.XX S.XX SX.XX S.XX SX.XX	\$2.57			\$2.64	\$2.81	\$2.92	\$2.87	\$2.72	\$2.48	\$2.65
S/MWh SX.XX SX.X	\$X.XX			\$X.XX	SX.XX	\$X.XX	\$X.XX	SX.XX	\$X.XX	SX.XX
S/MWh SX.XX SX.XX Feak MMBus/MWh X.XX X.XX TPeak MMBus/MWh X.XX X.XX Linis Max Jun S/MMBus (\$0.25) (\$0.21) S/MMBus (\$0.18) (\$0.23) S/MMBus (\$0.18) (\$0.23) S/MMBus (\$0.20) (\$0.19) S/MWh SX.XX SX.XX S/M	\$X.XX			\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	SX.XX
Peak MMBu/Mwh X.XX X.XX	\$X.XX			\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	SX.XX
TPeak MMBu/Mwh X.XX X.XX It MMBu/Mwh X.XX X.XX Units May Jun S/MMBtu (\$0.25) (\$0.21) S/MMBtu (\$0.18) (\$0.23) S/MMBtu (\$0.20) (\$0.19) S/Mwh (\$0.20) (\$0.23) S/Mwh (\$0.20) (\$0.20) S/Mwh (X.XX			X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
MAB tu/MWh X.XX X	X.XX			X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	XXX
Units May Jun \$/MMBtu (\$0.25) (\$0.21) \$/MMBtu (\$0.18) (\$0.23) \$/MMBtu (\$0.18) (\$0.23) \$/MMBtu (\$0.20) (\$0.19) \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX	X.XX	X.XX X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Units May Jun \$/MMBtu (\$0.25) (\$0.21) \$/MMBtu (\$0.18) (\$0.23) \$/MMBtu (\$0.20) (\$0.23) \$/MMBtu (\$0.20) (\$0.19) \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX										
Units Max Jun \$\text{AMBftu}\$ (\$0.25) (\$0.21) \$\text{AMBftu}\$ (\$0.18) (\$0.23) \$\text{AVMBftu}\$ (\$0.18) (\$0.23) \$\text{AUB}\$ \$\text{\$NMMBtu}\$ (\$0.20) (\$0.19) On-Peak \$\text{\$NMM}\$ \$\text{\$X.XX}\$ \$\text{\$X.XX}\$ Off-Peak \$\text{\$NMM}\$ \$\text{\$X.XX}\$ \$\text{\$X.XX}\$ Flat \$\text{\$N.XX}\$ \$\text{\$X.XX}\$ \$\text{\$X.XX}\$										
Dnits Max Jun										Rate Year
SAMMBtu (\$0.25) (\$0.21)	Jul			Nov	Dec	Jan	Feb	Mar	Apr	Average
SMMBtu (\$0.18) (\$0.23)	\$0.12			\$0.20	80.57	\$0.45	\$0.28	(\$0.01)	(\$0.01)	\$0.11
S/MMBtu \$0.30 \$0.23 HUB \$\text{S/MMBtu}\$ \$(\$0.20) \$(\$0.19) On-Peak \$\text{S/MWh}\$ \$\text{S.XX}\$ \$\text{X.XX}\$ Off-Peak \$\text{S/MWh}\$ \$\text{S.XX}\$ \$\text{S.XXX}\$ Flat \$\text{S/MWh}\$ \$\text{S.XXX}\$ \$\text{S.XXX}\$	(80.08)			(\$0.10)	(\$0.03)	(\$0.13)	(\$0.11)	(\$0.19)	\$0.03	(\$0.11)
\$/MMBtu (\$0.20) (\$0.19) \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX \$/MWh \$X.XX \$X.XX	\$0.21			\$0.20	\$0.16	\$0.09	\$0.13	\$0.13	\$0.19	\$0.20
\$X.XX \$X.XX \$x.xx \$X.XX \$x.xx \$X.XX \$x.xx \$X.XX \$x.xx \$X.XX	(\$0.19)			(\$0.16)	(\$0.17)	(\$0.17)	(\$0.15)	(\$0.14)	(\$0.17)	(\$0.17)
S/MWh SX.XX SX.XX S/MWh S/MWh	\$X.XX	XX.XX \$X.XX	XX.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	8X.XX
s/wwh	\$X.XX			\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	SX.XX
	\$X.XX			\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	\$X.XX	SX.XX
XXX	X.XX			X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	XXX
X.XX	X.XX			X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	XXX
X.XX	X.XX			X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	XXX

Rate year: May 2020 through April 2021 Gas price date: 12/05/2019