

Qualifying Facilities (“QF”) of capacity over five megawatts. These proposed tariff sheets set forth PSE’s implementation of the new Chapter WAC 480-106, Electric Companies —Purchases of Electricity from Qualifying Facilities.

These substitute tariff sheets reflect the results of stakeholder review and the discussions between PSE and stakeholders: the Commission Staff (“Staff”), the Northwest and Intermountain Power Producers Coalition (“NIPPC”), and the Renewable Energy Coalition (“REC”); since PSE’s initial filing on August 9, 2019. Specifically, the changes proposed in this filing address all Staff’s concerns regarding PSE’s current implementation of WAC 480-106 and most of the issues raised by NIPPC and REC as noted in their comments filed with the Commission on November 15, 2019.

The following list highlights some of the proposed revisions based upon the stakeholder review:

- Expanding of Schedule 91 availability for the purchase of QF’s Net Output that is delivered to either PSE’s distribution system or PSE’s transmission system;
- Additional section in Schedule 91 about the contracting procedures for perspective Schedule 91 QFs;
- Schedule 91 avoided capacity value calculation for years 2019 through 2022 taking into consideration the projected fixed costs of a simple-cycle combustion turbine as identified in the integrated resource plan as the avoided capacity cost of the market purchases per WAC 480-106-040(b)(ii);
- Schedule 91 avoided capacity value calculation based upon the total hours in a year for which the resource type is projected to operate; and
- Placeholder in Schedule 92 for PSE’s forthcoming petition filing of the large QF avoided cost rate methodology for consideration and approval by the Commission, consistent with WAC 480-106-050(5).

PSE is aware of that NIPPC and REC would like to have other contracting options included in Schedule 91. However, because several existing small qualifying facilities are interested in signing a new Schedule 91 standard power purchase agreement (“PPA”) when their current PPAs expire at the end of this calendar year, PSE is hoping that the proposed Schedule 91 and associated standard PPAs can be reviewed and approved before the end of the year.

Nevertheless, PSE is committed to work with NIPPC, REC, and the Staff in 2020 on the new Net Output purchase offering design. Potentially, any small QFs with demonstrated unique contracting terms and conditions that are outside of the standard purchase offering outlined in the proposed Schedule 91 may be considered under WAC 480-106-002, Application of Rules, subsection (2):

*“(2) Nothing in this chapter prohibits a utility or a qualifying facility from agreeing to voluntary contracts with rates, terms, or conditions that differ from the provisions in this chapter.”*

As provided for in WAC 480-106-040(A), the estimated avoided cost of energy for this filing is based on PSE's most current forecast of market prices for electricity in PSE's 2019 Integrated

Resource Plan (“IRP”) Progress Report<sup>1</sup>, which is the key input to Schedule 91 standard fixed rates and the Schedules of Estimated Avoided Costs. In responding to the specific comments of NIPPC and REC in their letter to the Commission on November 14, 2019, about PSE’s avoided energy cost approach and energy pricing changes between the forecasts in PSE’s 2017 Integrated Resource Plan (“IRP”)<sup>2</sup> and 2019 IRP Progress Report. Attached to this letter as Exhibit A is a document outlining the key assumptions of PSE avoided energy costs. Exhibits B<sup>3</sup> and C<sup>4</sup> of this letter provide an overview and updates to PSE’s electric power price forecast and pertaining to PSE’s 2019 IRP Progress Report. In the filing of the Schedule 92 large QF avoided cost rate methodology petition that PSE is committed to make on or before December 31, 2019, PSE will address these specific comments of NIPPC and REC again in that future filing.

The tariff sheets described herein reflect an issue date of August 9, 2019, and an effective date of December 7, 2019. Notice and posting of proposed tariff changes, as required by law and the Commission’s rules and regulations, is being completed through web, telephone and mail access in accordance with WAC 480-100-193. The tariff changes proposed in the filing do not increase recurring charges nor restrict access to the optional services under Schedules 91 and 92.

PSE will also post at its web site the information on how to obtain draft and executable contracts and the nonbinding term sheets with limited contract provisions for qualifying facilities with capacities of greater than five megawatts per WAC 480-106-030. Attached as Exhibit A to this filing is a copy of the most current draft of the nonbinding information and term sheets.

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<sup>1</sup> PSE filed the 2019 IRP Progress Report with the Commission on November 9, 2019:  
[https://oohpseirp.blob.core.windows.net/media/Default/Action\\_Items/UE-180607-UG-180608-2021-IRP-Progress-Report\\_11-15-19.pdf](https://oohpseirp.blob.core.windows.net/media/Default/Action_Items/UE-180607-UG-180608-2021-IRP-Progress-Report_11-15-19.pdf)

<sup>2</sup> PSE’s 2017 IRP was knowledge by the Commission on May 7, 2018:  
[https://www.utc.wa.gov/\\_layouts/15/CasesPublicWebsite/GetDocument.ashx?docID=1744&year=2016&docketNumber=160918](https://www.utc.wa.gov/_layouts/15/CasesPublicWebsite/GetDocument.ashx?docID=1744&year=2016&docketNumber=160918)

<sup>3</sup> PSE’ IRP stakeholder meeting on October 11, 2018, where PSE presented the modeling scenarios including carbon prices, gas prices, power prices, portfolio sensitivities, and gas resource alternatives:  
<https://www.pse.com/-/media/PDFs/001-Energy-Supply/001-Resource-Planning/02-IRP-10-11-18-TAG-Meeting-2-Slide-Deck-10-11-18-FINAL.pdf>

<sup>4</sup> PSE’ IRP stakeholder meeting on September 19, 2019, where PSE presented updates to the modeling scenarios and overview of electric and gas portfolio model, scenario power prices, and flexibility analysis results :  
[https://oohpseirp.blob.core.windows.net/media/Default/19\\_Sept\\_TAG\\_8/02\\_IRP\\_TAG\\_Meeting\\_8\\_Slide\\_Deck\\_FINAL.pdf](https://oohpseirp.blob.core.windows.net/media/Default/19_Sept_TAG_8/02_IRP_TAG_Meeting_8_Slide_Deck_FINAL.pdf)

Mr. Mark L. Johnson  
November 22, 2019  
UE-190665 (Advice No. 2019-30)  
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Please contact Mei Cass at (425) 462-3800 or Eric Englert at (425) 456-2312 for additional information about this filing. If you have any other questions please contact me at (425) 456-2142.

Sincerely,

*/s/ Jon Piliaris*

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Attachments:

- Electric Tariff Sheets, listed above
- Attachment A – Distribution System
- Attachment B – Transmission System
- Exhibit A – Key Analytical Assumptions
- Exhibit B – IRP 10-11-18 TAG Meeting Presentation
- Exhibit C – IRP 09-19-19 TAG Meeting Presentation
- Exhibit D – DRAFT Schedule 92 Non-Binding QF PPA Term Sheets

27<sup>th</sup> Revision of Sheet No. 91  
Canceling 26<sup>th</sup> Revision  
of Sheet No. 91

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**PUGET SOUND ENERGY**  
**Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (C)**

(Single Phase or Three Phase)


1. **AVAILABILITY:** This schedule applies to any Qualifying Facility (“QF”) that meets all the following conditions: (T) (C)
  - A. The Net Output of the QF is offered to the Company pursuant to WAC 480-107-095(2) and nameplate capacity of which is of five (5) MW or less. |
  - B. The QF is required to enter into a written Power Purchase Agreement for the sale of Net Output from the QF in the form set forth in Attachment A or Attachment B or Attachment C to this Schedule (the “Power Purchase Agreement”). |
  - C. The QF has requested to interconnect or has interconnected the facility to the Company's electric distribution system or the QF has established the delivery of Net Output to the Company's electric transmission system. (C)
  
2. **MONTHLY RATE:** A basic charge equal to the basic charge or minimum Demand charge of an electric service schedule as listed below will be paid by the Customer-Generator QF to the Company. This will be in addition to the basic charge for electric service at the Customer-Generator's QF as specified in the Company's applicable tariff. The Voltage of Connection is the same as the voltage at the Point of Delivery. (T) (C)

Nameplate Size of Generator	Voltage of Connection	Basic Charge equal to
50 kW or less	less than 600 V	Schedule 24 basic charge
51 kW to 350 kW	less than 600 V	Schedule 25 basic charge
More than 350	less than 600 V	Schedule 26 basic charge
0 kW or more	600 V to 49,999 V	Schedule 31 basic charge
0 kW or more	50,000 V or more	Schedule 49 minimum Demand

(Continued on Sheet No. 91-A)

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**PUGET SOUND ENERGY**  
**Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS** (Continued) (C)  
(Single Phase or Three Phase)

3. **STANDARD FIXED RATES FOR PURCHASE OF NET OUTPUT:** For the term of the Power Purchase Agreement, the monthly rate per MWh which the Company will pay for Net Output supplied to the Company by the QF will be the standard Fixed Rates per MWh as specified in the applicable tables in the section 4 below. (T) (C) I I (C)

These standard Fixed Rates shall apply during each respective year for the term of the Power Purchase Agreement regardless of any revision in this schedule. The standard Fixed Rates in effect on the date the Power Purchase Agreement is fully executed shall be attached as an exhibit to the Power Purchase Agreement to reflect the rates to be paid during each year of the term of the Power Purchase Agreement. (D) (N) I I I I I I I I (D)

(Continued on Sheet No. 91-B)

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Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (Continued) (C)**  
(Single Phase or Three Phase)

**4. STANDARD FIXED RATES FOR PURCHASE OF NET OUTPUT FOR AGREEMENTS ENTERED ON AND AFTER DECEMBER 7, 2019: (D) (N)**

Net Output Rate – dollars per MWh– to be paid monthly:

A. Standard Fixed Rates for agreements with a new QF per Schedule 91 Attachment "A":

Resource Year of Delivery	DELIVERED TO THE COMPANY'S DISTRIBUTION SYSTEM			DELIVERED TO THE COMPANY'S TRANSMISSION SYSTEM		
	Base Load- RCW 80.80.040- Compliant	Wind	Solar	Base Load- RCW 80.80.040- Compliant	Wind	Solar
12/7/2019- 12/31/2019	\$30.23	\$26.67	\$23.19	\$26.65	\$23.08	\$19.60
2020	\$30.99	\$27.34	\$23.77	\$27.31	\$23.66	\$20.09
2021	\$31.76	\$28.02	\$24.36	\$28.00	\$24.25	\$20.59
2022	\$32.56	\$28.72	\$24.97	\$28.69	\$24.86	\$21.11
2023	\$33.37	\$29.44	\$25.60	\$29.41	\$25.48	\$21.64
2024	\$34.21	\$30.18	\$26.24	\$30.15	\$26.12	\$22.18
2025	\$35.06	\$30.93	\$26.89	\$30.90	\$26.77	\$22.73
2026	\$35.94	\$31.70	\$27.56	\$31.67	\$27.44	\$23.30
2027	\$36.84	\$32.50	\$28.25	\$32.47	\$28.13	\$23.88
2028	\$37.76	\$33.31	\$28.96	\$33.28	\$28.83	\$24.48
2029	\$38.70	\$34.14	\$29.68	\$34.11	\$29.55	\$25.09
2030	\$39.67	\$35.00	\$30.42	\$34.96	\$30.29	\$25.72
2031	\$40.66	\$35.87	\$31.19	\$35.84	\$31.05	\$26.36
2032	\$41.68	\$36.77	\$31.96	\$36.73	\$31.82	\$27.02
2033	\$42.72	\$37.69	\$32.76	\$37.65	\$32.62	\$27.70
2034	\$43.79	\$38.63	\$33.58	\$38.59	\$33.43	\$28.39
2035	\$44.88	\$39.59	\$34.42	\$39.56	\$34.27	\$29.10

(Continued on Sheet No. 91-C)

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**PUGET SOUND ENERGY**  
**Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (Continued)** (C)  
(Single Phase or Three Phase)

**4. STANDARD FIXED RATES FOR PURCHASE OF NET OUTPUT FOR AGREEMENTS** (D) (N)  
**ENTERED ON AND AFTER DECEMBER 7, 2019 :** (Continued) | |

Net Output Fixed Rate – dollars per MWh – to be paid monthly: | |


**B. Standard Fixed Rates for agreements with an existing QF per Schedule 91 Attachment “B” :** | |

Resource Year of Delivery	DELIVERED TO THE COMPANY'S DISTRIBUTUON SYSTEM			DELIVERED TO THE COMPANY'S TRANSMISSION SYSTEM		
	Base Load- RCW 80.80.040- Compliant	Wind	Solar	Base Load- RCW 80.80.040- Compliant	Wind	Solar
12/7/2019- 12/31/2019	\$30.63	\$26.95	\$23.35	\$27.04	\$23.35	\$19.75
2020	\$31.40	\$27.62	\$23.93	\$27.71	\$23.94	\$20.24
2021	\$32.18	\$28.31	\$24.53	\$28.40	\$24.53	\$20.75
2022	\$32.99	\$29.02	\$25.14	\$29.11	\$25.15	\$21.27
2023	\$33.81	\$29.75	\$25.77	\$29.84	\$25.78	\$21.80
2024	\$34.66	\$30.49	\$26.42	\$30.59	\$26.42	\$22.35
2025	\$35.53	\$31.25	\$27.08	\$31.35	\$27.08	\$22.90
2026	\$36.41	\$32.03	\$27.75	\$32.14	\$27.76	\$23.48
2027	\$37.32	\$32.84	\$28.45	\$32.94	\$28.45	\$24.06
2028	\$38.26	\$33.66	\$29.16	\$33.76	\$29.16	\$24.67
2029	\$39.21	\$34.50	\$29.89	\$34.61	\$29.89	\$25.28
2030	\$40.19	\$35.36	\$30.63	\$35.47	\$30.64	\$25.91

(Continued on Sheet No. 91-D)

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**PUGET SOUND ENERGY**  
**Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (Continued) (C)**  
(Single Phase or Three Phase)

**4. STANDARD FIXED RATES FOR PURCHASE OF NET OUTPUT FOR AGREEMENTS ENTERED ON AND AFTER DECEMBER 7, 2019: (Continued) (K) (N)**

Net Output Fixed Rate – dollars per MWh – to be paid monthly: | |

**C. Standard Fixed Rates for Base Load- NON-RCW 80.80.040-Compliant resource agreements with a QF per Schedule 91 Attachment "C": | |**

	DELIVERED TO THE COMPANY'S DISTRIBUTION SYSTEM	DELIVERED TO THE COMPANY'S TRANSMISSION SYSTEM	(K)
Resource			(K)
Year of Delivery	Base Load-NON-RCW 80.80.040-Compliant	Base Load-NON-RCW 80.80.040-Compliant	
12/7/2019-12/31/2019	\$31.53	\$27.93	
2020	\$32.31	\$28.63	
2021	\$33.12	\$29.34	
2022	\$33.95	\$30.08	
2023	\$34.80	\$30.83	
2024	\$35.67	\$31.60	

**D. Standard Fixed Rates consistent with avoided costs currently in effect for agreements with a QF for purchases of Net Output delivered to the Company distribution system from at the time of delivery are as follow: | |**

a. Standard Fixed Rates for purchase of both Energy and Capacity for the current time of delivery (year 2020): | |

- i. Baseload RCW 80.80.040-Compliant: \$29.82/MWh | |
- ii. Wind Resource: \$25.98/MWh | |
- iii. Solar Resource: \$22.21/MWh | |
- iv. Baseload Non-RCW 80.80.040-Compliant: \$29.82/MWh (K) |

b. Standard Fixed Rates for purchase of Energy only for the current time of delivery (year 2020): |


- v. Baseload RCW 80.80.040-Compliant: \$21.58/MWh |
- vi. Wind Resource: \$21.58/MWh |
- vii. Solar Resource: \$21.58/MWh (N)
- viii. Baseload Non-RCW 80.80.040-Compliant: \$21.58/MWh

(K) Transferred to Sheet No. 91-E and 91-F, Respectively

(Continued on Sheet No. 91-E)

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**PUGET SOUND ENERGY**  
**Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (Continued)** (C)  
(Single Phase or Three Phase)

- 5. **DEFINITIONS:** (K) (M) (T)
  - A. The term "Qualifying Facility" ("QF") as used in this schedule shall have the same meaning as in Chapter 480-106-007 of the Washington Administrative Code. I (M) (C)
  - B. The term "Baseload" as used in this schedule shall have the same meaning as in Chapter RCW 80.80.010(4) of the Revised Code of Washington where "Baseload electric generation" means electric generation from a power plant that is designed and intended to provide electricity at an annualized plant capacity factor of at least sixty percent.. I (N)
  - C. The term "Net Output" means all of the electrical capacity and energy produced by the QF that QF is committed to sell to the Company, reduced by (i) any amounts of electrical capacity and energy, if any, used in connection with the operation of the QF (e.g. station and other onsite use), and (ii) any transformation and transmission losses incurred between the QF and the Point of Delivery. I I
  - D. The term "Point of Delivery" means the point on the Company electric system where Net Output from the QF is to be delivered to the Company, as indicated in the Power Purchase Agreement. I (T)
- 6. **TERMS AND CONDITIONS:** I (M)
  - A. The QF will be required to enter into a written Power Purchase Agreement. The minimum term of the Power Purchase Agreement shall be five (5) years. (K) I (C)
  - B. A new RCW 80.80.040-Compliant Qualifying Facility will execute a Power Purchase Agreement with Fixed Rates with a term of fifteen (15) years; the Power Purchase Agreement term will not be less than twelve (12) years from the commercial operation date. (K) (M) (N)
  - C. As appropriate, the Power Purchase Agreements may be used by the Company in its compliance with its Clean Energy Implementation Plan. I
  - D. With respect to the Fixed Rates in effect in a Power Purchase Agreement, there will be no amendments nor additions to those Fixed Rates during the term of the Power Purchase Agreement. I (N)


(M) Transferred From Sheet No. 91-D

(K) Transferred to Sheet No. 91-F, 91-G and 91-K, Respectively

(Continued on Sheet No. 91-F)

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Original Sheet No. 91-F

**PUGET SOUND ENERGY**  
**Electric Tariff G**

<b>SCHEDULE 91</b>		(N)
<b>PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS</b> (Continued)		I
(Single Phase or Three Phase)		(N)
<b>6. TERMS AND CONDITIONS:</b> (Continued)		(T)
E. All costs of interconnection of the Customer-Generator's QF with the Company's system will be borne by the Customer-Generator. Such costs will include the initial cost of interconnection and those costs incurred by the Company from time to time with respect to the Customer-Generator's facilities and the interconnection with the Company's system. Interconnection shall comply with the Company's standards of interconnection. To the extent that interconnection of the QF is provided for in Schedule 80 of this tariff, the terms and provisions of such Schedule shall govern and control.	(M)	(T)
	I	
	I	
	I	
	I	(T)
	(M)	
F. All costs associated with a QF's delivery of its Net Output to the Company's transmission system will be borne by the QF.		(N)
		(N)
G. The QF shall indemnify and hold harmless the Company from any and all liability arising from the operation and, if applicable, interconnection of the QF. The Company will require evidence of insurance to this effect.	(M)	(T)
	I	(T)
	I	
H. The Customer-Generator's QF shall provide a lockable disconnect switch to isolate the Customer-Generator's generation from the Company's system. Such switch shall be accessible to the Company and the Company shall have the right to lock such disconnect switch open whenever necessary to maintain safe electrical operating conditions, or whenever the Customer-Generator's QF adversely affect the Company's system.		(T)
	I	
	I	
	I	(T)
I. Except for the metering, the Customer-Generator QF shall own and maintain all facilities on the Customer-Generator's side of a single point of delivery as specified in the Power Purchase Agreement or parallel operation agreement. The Customer-Generator's system, including interconnecting equipment, shall be inspected and approved by the state electrical inspector and any other public authority having jurisdiction before any connection is made to the Company's system.		
	I	
	I	
	I	
	I	(M)

(M) Transferred From Sheet No. 91-D

(Continued on Sheet No. 91-G)

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Original Sheet No. 91-G

**PUGET SOUND ENERGY**  
**Electric Tariff G**

<b>SCHEDULE 91</b>		(N)
<b>PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS</b> (Continued)		I
(Single Phase or Three Phase)		(N)
<b>6. TERMS AND CONDITIONS:</b> (Continued)		(M) (T)
J.	In the event that the Customer-Generator's QF does not provide for separate metering of deliveries to the Company, the Customer-Generator's QF will not be compensated for unmetered incidental flows to the Company. The service meter in this instance shall be ratcheted to prevent reverse registration, and no additional monthly basic charge will be applied.	I (D) (T) I I (C) I I I I I I
K.	For Customer-Generator's QF, individual generator units larger than 7.5 KW shall be three phase unless otherwise agreed to by the Company.	I (D) (T) I
L.	The QF shall provide the Company with verification that QF's facility has secured Qualifying Facility status from the Federal Energy Regulatory Commission.	I (C) (T) I
M.	Pursuant to the Power Purchase Agreement, the QF may offer the Company the right to purchase of the Renewable Energy Credits (as defined in Schedule 135 of this tariff) associated with the energy produced by the QF.	I (C) (T) I I (C)
N.	When the s fixed rates are based on the avoided capacity costs of an eligible renewable resource as defined in RCW 19.285.030, the Company shall receive all the renewable energy certificates produced by the QF at no additional cost to the Company.	I (N) I I I (N) (M)

(M) Transferred From Sheet No. 91-E

(Continued on Sheet No. 91-H)

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**PUGET SOUND ENERGY**  
**Electric Tariff G****SCHEDULE 91****PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (Continued)**

(Single Phase or Three Phase)

7. **SCHEDULE OF ESTIMATED AVOIDED COST:** This Schedule of Estimated Avoided Cost, as prescribed in WAC 480-106-040, identifies the estimated avoided cost and does not provide a guaranteed contract price for electricity. The standard Fixed Rates for purchases from qualifying facilities under this schedule are in section 4. The Schedule only identifies general information to potential bidders about the avoided costs. The Schedule of Estimated Avoided includes the following two tables:

- A. Table No. 1: 2019-2039 Avoided Energy Costs based on the Company's forecast of market prices for the Mid-C Market in PSE's 2019 Integrated Resource Plan Progress Report as of November 15, 2019, pursuant to WAC 480-106-040(a).

2019-2039 Avoided Energy Costs based on the Company's forecast of market prices for the Mid-C Market in PSE's 2019 Integrated Resource Plan Progress Report as of November 15, 2019, pursuant to WAC 480-106-040(a) (Nominal \$/MWh)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg. Annual
2019	32.32	32.31	23.64	19.78	13.31	16.52	22.66	24.54	25.87	24.56	24.79	27.48	23.98
2020	25.94	26.26	21.04	17.86	13.07	14.56	20.47	23.30	24.06	23.82	23.61	24.97	21.58
2021	23.41	24.05	19.17	15.62	10.92	12.37	19.40	22.33	23.71	24.41	23.52	24.65	20.30
2022	22.37	23.22	17.52	14.61	9.40	9.94	17.85	21.53	23.04	23.15	22.14	24.19	19.08
2023	21.22	22.30	15.50	13.99	10.21	9.65	17.91	21.41	23.38	23.10	21.97	24.02	18.72
2024	21.38	23.73	15.65	14.99	8.37	10.02	18.22	22.43	25.39	25.22	23.81	25.65	19.57
2025	22.18	24.74	15.64	16.00	9.01	11.43	18.30	24.12	27.54	26.57	24.81	27.13	20.62
2026	23.48	26.52	17.43	17.39	10.22	11.45	19.42	26.02	28.95	28.87	26.17	28.65	22.05
2027	25.07	27.79	17.62	17.30	10.09	11.08	21.51	27.23	30.92	30.70	28.12	30.59	23.17
2028	25.21	27.81	16.86	17.36	10.26	11.59	22.96	27.96	31.49	30.87	27.71	31.63	23.48
2029	24.36	29.53	17.06	19.66	10.30	10.95	22.08	29.15	33.17	29.94	25.99	32.39	23.72
2030	25.09	29.38	16.58	18.18	9.85	11.24	22.29	28.79	33.89	32.34	28.98	33.05	24.14
2031	25.49	29.93	17.28	18.10	10.51	11.78	23.12	30.02	35.11	31.46	28.03	33.80	24.55
2032	25.67	30.75	17.65	20.12	12.56	11.98	25.41	31.25	34.87	34.97	31.55	36.27	26.09
2033	26.83	32.50	18.68	19.59	12.34	12.72	28.22	32.20	37.21	37.65	35.36	38.45	27.65
2034	28.59	34.47	19.43	20.56	13.72	13.79	31.58	34.50	40.27	39.42	35.53	42.03	29.49
2035	30.76	38.55	20.22	24.47	15.43	15.35	33.43	38.87	44.40	39.88	34.61	42.97	31.58
2036	31.01	39.11	20.78	22.75	13.80	14.85	32.56	40.71	45.64	43.11	38.46	45.97	32.39
2037	32.88	41.05	21.12	22.42	14.17	15.15	33.71	41.55	47.79	43.60	36.45	48.28	33.18
2038	35.52	43.49	23.28	25.76	16.86	15.78	37.41	43.41	51.69	47.17	40.27	50.54	35.93
2039	36.88	45.29	22.84	24.74	15.37	15.77	38.15	42.47	53.51	51.72	43.46	52.70	36.91

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**PUGET SOUND ENERGY**  
**Electric Tariff G****SCHEDULE 91****PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS** (Continued)

(Single Phase or Three Phase)

- B. Table No. 2: 2019-2038 incorporates the avoided capacity costs as estimated in the Company's 2017 Integrated Resource Plan ("IRP") by resource type with the January 12, 2018 correction filed with WUTC under Dockets UE-160918 and UG-160919. The 2017 IRP was acknowledged by WUTC on July 8, 2019. Pursuant to WAC 480-106-040(b)(ii), the 2017 IRP results for 2019-2022 is replaced with the "projected fixed costs of a simple-cycle combustion turbine".

2019-2039 Avoided Capacity Costs pursuant to WAC 480-106-040(b)(ii) (Nominal \$/MW)			
	Baseload Resource	Wind Resource	Solar Resource
2019	\$8.26	\$4.41	\$0.64
2020	\$8.26	\$4.41	\$0.64
2021	\$8.24	\$4.40	\$0.63
2022	\$8.26	\$4.41	\$0.64
2023	\$8.26	\$4.41	\$0.64
2024	\$10.62	\$5.66	\$0.82
2025	\$10.59	\$5.65	\$0.81
2026	\$9.13	\$4.87	\$0.70
2027	\$9.13	\$4.87	\$0.70
2028	\$9.19	\$4.90	\$0.71
2029	\$9.16	\$4.89	\$0.70
2030	\$9.19	\$4.90	\$0.71
2031	\$9.19	\$4.90	\$0.71
2032	\$9.61	\$5.12	\$0.74
2033	\$9.58	\$5.11	\$0.74
2034	\$9.61	\$5.12	\$0.74
2035	\$10.08	\$5.38	\$0.78
2036	\$10.08	\$5.38	\$0.78
2037	\$10.37	\$5.53	\$0.80
2038	\$10.40	\$5.55	\$0.80
2039	\$10.40	\$5.55	\$0.80

(Continued on Sheet No. 91-J)

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**Electric Tariff G**

**SCHEDULE 91**

(N)

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS** (Continued)  
(Single Phase or Three Phase)

**8. CONTRACTING PROCEDURES:**

- A. To initiate the contracting processes for a Schedule 91 Power Purchase Agreement (“PPA”), QF must provide in writing (i) general project information reasonably required for the development of a PPA and (ii) sufficient evidence of a mature QF project, including, but not limited to:
  - i. Generation technology or fuel type(s).
  - ii. Proposed site location with indication both point of interconnection specified by latitude and longitude (e.g. 47°36’48” N, 122°11’38”W).
  - iii. Evidence of adequate control of proposed site such as fee ownership, land lease, option to purchase or option to lease.
  - iv. Demonstration of ability to obtain QF status.
  - v. Demonstration of reasonable ability to secure financing.
  - vi. Quantity and timing of monthly energy and capacity deliveries (including project ability to respond to dispatch orders from the Company).
  - vii. Two separate electronic spreadsheets (in Excel format) with projected amount of capacity (kW) and energy (kWh): (i) first spreadsheet representing total KW, monthly and annual kWh output; and (ii) second spreadsheet representing all 8,760 hours of generation to be delivered to the Company’s electric system.
  - viii. Status of interconnection and transmission arrangements.
  - ix. Proposed on-line date and outstanding permitting requirements.
  - x. Timelines for obtaining any necessary governmental permits, approvals or authorizations.
  - xi. Anticipated timelines for completion of key project milestones.
  - xii. Evidence that any necessary interconnection studies have been completed or are being conducted and assurance that the necessary interconnection arrangements have been executed or are under finalizing.

(N)

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**PUGET SOUND ENERGY**  
**Electric Tariff G**

**SCHEDULE 91**

**PURCHASES FROM QUALIFYING FACILITIES OF FIVE MEGAWATTS OR LESS (Continued)**


(Single Phase or Three Phase)

- |   |                |
|---|----------------|
| 8. <b>CONTRACTING PROCEDURES:</b> (Continued)   | (N)            |
| B. In connection with such PPA contracting finalization, the Company:   | I              |
| i. Will not unreasonably delay finalizing a PPA and will respond in good faith to any written amendment to a draft PPA that are proposed by the QF.   | I              |
| ii. May request to visit the site of the proposed project if such a visit has not previously occurred.  | I              |
| iii. Will update the proposed project or proposed terms in a draft PPA to accommodate any subsequent WUTC-approved changes to the Company's Schedule 91 at appropriate intervals, prior to the finalization of the PPA.   | I              |
| iv. May request any additional information from the QF necessary to finalize the terms of the PPA and satisfy the Company's due diligence regarding the QF project.   | I              |
| C. Within 15 business days following receipt of all information required by the Company, the Company will provide the QF (i) a written notice acknowledging (a) receipt of the required identification and (b) the date of the formal presentation of an executable version of PPA by Company and (ii) an executable version of the PPA. This PPA will contain terms and conditions in addition to indicative pricing. The Company will make mutually-agreeable changes, if needed, to the PPA within 15 business days. | I              |
| D. Prices and other terms and conditions in the PPA will not be final and binding until the agreement has been executed by both parties.  | I              |
| E. If parties are not in full agreement with respect to a PPA within 45 business days from the date of written notice of section C(i) above, the power purchase offer is expired.   | (N)            |
| 9. <b>GENERAL RULES AND PROVISIONS:</b> Service under this schedule is subject to the General Rules and Provisions contained in this tariff.  | (M) (T)<br>(M) |

(M) Transferred From Sheet No. 91-E

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**PUGET SOUND ENERGY  
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**SCHEDULE 92**

(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

1. **AVAILABILITY:** This schedule applies to any Qualifying Facility ("QF") that meets all the following conditions:
  - A. The Net Output of which is offered to the Company pursuant to WAC 480-106-020(1) and the nameplate capacity of the QF is of more than five (5) megawatts ("MW").
  - B. The QF is required to enter into a negotiated written power purchase agreement ("Negotiated Agreement") for the sale of energy produced by the QF to the Company per the procedures and timelines prescribed in this Schedule.
  - C. The QF must comply with all of the Terms and Conditions contained in this Schedule.
  
2. **NEGOTIATED RATES FOR PURCHASE OF NET OUTPUT:** For the term and the rates of a Negotiated Agreement, the monthly rate per MWh, which the Company will pay for Net Output supplied to the Company by the QF, will be established considering the following factors:
  - A. The data the Company provided to the Washington Utilities and Transportation Commission ("UTC") pursuant to WAC 480-106-040 Schedules of estimated avoided costs, and the UTC's evaluation of the data;
  - B. The availability of energy, capacity, and ancillary services from the QF during the system daily and seasonal peak periods, including:
    - i. The Company's ability to dispatch the QF;
    - ii. The QF's expected or demonstrated reliability;
    - iii. The terms of any proposed contract or other legally enforceable obligation;
    - iv. The extent to which the Company and the QF can usefully coordinate respective scheduled outages;
    - v. The usefulness of energy, capacity, or both, supplied from the QF during system emergencies, including the QF's ability to separate QF's load from its generation;
    - vi. The individual and aggregate value of energy and capacity from qualifying facilities on the Company's system; and
    - vii. The smaller capacity increments and the shorter lead times available, if any, with additions of capacity from qualifying facilities.

(N)

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**PUGET SOUND ENERGY  
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**SCHEDULE 92**

(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

**2. NEGOTIATED RATES FOR PURCHASE OF NET OUTPUT:** (Continued)

- C. The relationship of the availability of energy, capacity, or both, from the QF to the ability of the Company to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and
- D. The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a qualifying facility.

**3. CONTRACTING PROCEDURES:**

- A. The QF may request indicative negotiated prices. To obtain an indicative pricing proposal for a proposed project, the QF must provide in writing, general project information reasonably required for the development of indicative pricing, including, but not limited to:
  - i. Demonstration of ability to obtain QF status.
  - ii. Design capacity, station service requirements, and net amount of Net Output to be delivered to the Company's electric system.
  - iii. Generation technology and other related technology applicable to the site.
  - iv. Quantity and timing of monthly Net Output deliveries (including project ability to respond to dispatch orders from the Company).
  - v. Proposed site location and electrical interconnection point.
  - vi. Status of interconnection and transmission arrangements.
  - vii. Proposed on-line date and outstanding permitting requirements.
  - viii. Motive force or fuel plan consisting of fuel type(s) and source(s).
  - ix. Proposed contract term and pricing provisions.

(N)

(Continued on Sheet No. 92-B)

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**SCHEDULE 92**

(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

(Single Phase or Three Phase)

**3. CONTRACTING PROCEDURES: (Continued)**

- B. The Company will not be obligated to provide an indicative pricing proposal until all the information described above has been received in writing from the QF. Within 30 business days following receipt of all required information, the Company will provide the QF with an indicative pricing proposal, which may include other terms and conditions, tailored to the individual characteristics of the proposed project. Such proposal may be used by the QF to make determinations regarding project planning, financing and feasibility. However, such prices are indicative and are not final and binding. Prices and other terms and conditions are only final and binding to the extent contained in Negotiated Agreement, once executed by both parties. The Company will provide with the indicative prices a description of the methodology used to develop the prices.
- C. The specific factors established in the section 3 of this schedule to the extent practicable, will be taken into account.
- D. If the QF desires to proceed with negotiations after reviewing the Company's indicative price proposal, the QF must request in writing that the Company prepare a draft Negotiated Agreement to serve as the basis for negotiations between the parties. In connection with such request, the QF must provide the Company with any additional project information that the Company reasonably determines to be necessary for the preparation of the Negotiated Agreement, which may include, but will not be limited to:
  - i. Updated information for the project information listed above in section 4.A.
  - ii. Evidence of adequate control of proposed site.
  - iii. Timelines for obtaining any necessary governmental permits, approvals or authorizations.
  - iv. Assurance of fuel supply or motive force.
  - v. Anticipated timelines for completion of key project milestones.

(N)

(Continued on Sheet No. 92-C)

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(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

**3. CONTRACTING PROCEDURES:** (Continued)


- E. Within 25 business days following receipt of updated information required by the Company, the Company will provide the QF with a draft Negotiated Agreement. The draft agreement will contain proposed terms and conditions in addition to indicative pricing. The draft agreement is not binding; however, it will serve as the basis for subsequent negotiations.
- F. After reviewing the draft Negotiated Agreement, the QF will notify the Company in writing of its intent to proceed with negotiations. The QF may prepare an initial set of written comments and proposals regarding the agreement and forward them to the Company. The Company will not be obligated to begin negotiations with a QF until the Company has received an initial set of written comments. After the Company's receipt of comments and proposals, the QF may contact the Company to schedule contract negotiations at such times and places as are mutually agreeable to the parties. In connection with such negotiations, the Company:
  - i. Will not unreasonably delay negotiations and will respond in good faith to any additions, deletions or modifications to the draft Negotiated Agreement that are proposed by the QF.
  - ii. May request to visit the site of the proposed project if such a visit has not previously occurred.
  - iii. Will update its pricing proposals at appropriate intervals to accommodate any changes to the Company's avoided-cost calculations, the proposed project or proposed terms of the draft Negotiated Agreement.
  - iv. May request any additional information from the QF necessary to finalize the terms of the Negotiated Agreement and satisfy the Company's due diligence regarding the QF project.

(N)

(Continued on Sheet No. 92-D)

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(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

**3. CONTRACTING PROCEDURES:** (Continued)

G. When both parties are in full agreement as to all terms and conditions of the draft Negotiated Agreement, the Company will provide the QF (i) a written notice acknowledging (a) receipt of the required identification and (b) the date of the formal presentation of an executable version of PPA by Company and (ii) an executable version of the agreement within 15 business days. The Company will make mutually-agreeable changes, if needed, to the PPA within 15 business days. Prices and other terms and conditions in the Negotiated Agreement will not be final and binding until the agreement has been executed by both parties.

H. If parties are not in full agreement within 45 business days from the date of section 3.G.i written notice, the power purchase offer is expired and the QF may file a complaint with the Commission asking the Commission to adjudicate the disputed contract terms.

**4. AVOIDED COST RATE METHODOLOGY:** The methodology used to calculate avoided cost rates for QFs with capacities greater than five MWs will be filed by the Company on or before December 31, 2019, for consideration and approval by the Commission, consistent with WAC 480-106-050(5). Interested parties may search for and review the docket on the Commission's website when filed, and the Commission's website will have approval status and other information regarding that proceeding.

**5. DEFINITIONS:**

A. The term "Qualifying Facility" ("QF") as used in this schedule shall have the same meaning as in Chapter 480-106-007 of the Washington Administrative Code.

B. The term "Net Output" means all of the electrical capacity and energy produced by the QF, reduced by (i) any amounts of electrical capacity and energy, if any, used in connection with the operation of the QF (e.g. station and other onsite use), and (ii) any transformation and transmission losses incurred between the QF and the Company's system.

(Continued on Sheet No. 92-E) (N)

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(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

**6. TERMS AND CONDITIONS:**

- A. The QF will be required to enter into a written Negotiated Agreement prior to interconnection of Company and QF's facilities. The term of the Negotiated Agreement for a new Qualifying Facility will be no more than fifteen (15) years; and the term of the Negotiated Agreement for an existing Qualifying facility will be ten (10) years.
- B. All costs of interconnection of the QF's facilities with the Company's system will be borne by the QF. Such costs will include the initial cost of interconnection and those costs incurred by the Company from time to time with respect to the QF's facilities and the interconnection with the Company's system. Interconnection shall comply with PSE's standards of interconnection. To the extent that interconnection of the Project is provided for in Schedule 80 of this tariff, the terms and provisions of such Schedule shall govern and control.
- C. The QF shall indemnify and hold harmless the Company from any and all liability arising from the operation and interconnection of the QF's facilities. The Company will require evidence of insurance to this effect.
- D. The QF shall provide a lockable disconnect switch to isolate the QF's generation from the Company's system. Such switch shall be accessible to the Company and the Company shall have the right to lock such disconnect switch open whenever necessary to maintain safe electrical operating conditions, or whenever the QF's facilities adversely affect the Company's system.
- E. Except for the metering, the QF shall own and maintain all facilities on the QF's side of a single point of delivery as specified in the Negotiated Agreement or parallel operation agreement. The QF's system, including interconnecting equipment, shall be inspected and approved by the state electrical inspector and any other public authority having jurisdiction before any connection is made to the Company's system.
- F. The Company will purchase the entire output from the QF's facility, or if the QF wishes to reduce his net delivery and billing from the Company, the Company will purchase the net output from the QF's facility. The metering configuration to measure such purchases will be specified in the Negotiated Agreement. The Company may apply an adjustment factor to compensate for losses if the metering is installed at the QF's facility.

(N)

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(N)

**PURCHASES FROM QUALIFYING FACILITIES OF GREATER THAN FIVE MEGAWATTS**

**6. TERMS AND CONDITIONS:** (Continued)

- G. In the event that the QF does not provide for separate metering of deliveries to the Company, the QF will not be compensated for unmetered incidental flows to the Company. The service meter in this instance shall be ratcheted to prevent reverse registration, and no additional monthly basic charge will be applied.
- H. Individual generator units larger than 7.5 KW shall be three phase unless otherwise agreed to by the Company.
- I. The QF shall provide the Company with verification that the QF has secured Qualifying Facility status from the Federal Energy Regulatory Commission.
- J. Pursuant to the Negotiated Agreement, the QF may offer the Company the right to purchase of the Renewable Energy Credits (as defined in Schedule 135 of this tariff) associated with the energy produced by QF's generating facility.

**7. GENERAL RULES AND PROVISIONS:** Service under this schedule is subject to the General Rules and Provisions contained in this tariff.


**8. INFORMATION AND TERM SHEETS FOR QUALIFYING FACILITIES WITH CAPACITIES GREATER THAN FIVE MEGAWATTS:** The information required to obtain draft and executable Negotiated Agreement is posted on the Company's web site (PSE.com), including nonbinding term sheets with limited provisions.

**9. OFF SYSTEM POWER PURCHASE AGREEMENT:** A QF that interconnects with an electric system other than the Company's electric system may enter into a power purchase agreement with the Company after following the applicable negotiated contract guidelines and making the arrangements necessary for transmission of power to the Company's system.

(N)

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