7<sup>th</sup> Revision of Sheet No. 150-A Canceling 6<sup>th</sup> Revision

of Sheet No. 150-A WN U-60

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

## **SCHEDULE 150 NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS**

(Rider to standard rate schedules 7 through 49)

DEFINITIONS:	(K)(M)
1. Aggregated Meter – a Company electric service meter that is not a Designated Meter,	I I (C)(D)
measuring electric energy consumption that is eligible to receive credits under a Meter	I I I (D)
Aggregation arrangement as described in RCW 80.60.030. A Customer-Generator may	I I (C)(N)
aggregate a Designated Meter with one additional Aggregated Meter located on the same	e I I (N)(D)
parcel as the Designated Meter or a parcel that is contiguous with the parcel where the	1 1 1 1
designated meter is located.	1 1 1 1
2. Approval to Energize – Written electronic communication provided to the Customer, or	1 1 1 1
installer on Customer's behalf, after the Company has reviewed and approved the as-buil	lt IIII
specifications of the system per the approved interconnection application, and completed	lany IIII
inspecting, testing, meter installation and on-site commissioning as needed. This	
communication will represent final approval and agreement by the Company for the Custo	omer I I I I
to operate the system as described on their application and for the Company to implemen	nt the I I I (D)
Net Metering terms of this Schedule. Once an Approval to Energize has been granted, it	will
apply to the Net Metering System, even if the electric service is transferred to a new custo	omer I I
of the Company. Any modifications to an approved Net Metering System must be reported	ed to     (D)
the Company and may require the Customer to re-apply to the Company and obtain a ne	w IIII
Approval to Energize.	I I (N) I
3. Customer-Generator – A Customer that operates a Net Metering System that is	I I (C) I
Interconnected to the Company's Electric System as defined in Schedule 152, at a premis	se     Î
where the Customer receives Electric Service from the Company.	I I (C) I
4. Designated Meter – The Company meter at the service of a Net Metering System, throug	jh II(N) I
which the Net Metering System is Interconnected to the Company's distribution Electric	
System.	(K) I   I
5. Meter Aggregation – The administrative combination of billing net energy consumption from	om a `´
Designated Meter and an eligible Aggregated Meter.	1   1
6. Nameplate Capacity - For a Generating Facility that uses an inverter to change DC energy	gy to I I (D)
AC energy, the Nameplate Capacity will be the manufacturer's AC output rating for the	1
inverter(s), listed in kilowatts (kW).	I (D)
7. Net Metering - Measuring the difference between the electricity supplied by the Company	and     i
the excess electricity generated by a Customer-Generator's Net Metering System over th	ie
applicable billing period.	I (N)(D)
(K) Transferred to Sheet No. 150	(M)
(M) Transferred from Sheet No. 150-B	, ,
the state of the s	

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

#### **SCHEDULE 150**

# **NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS**

(Rider to standard rate schedules 7 through 49)

<b>DEFINITIONS</b> (Continued):	(K) (I	<b>VI)</b>
8. Net Metering System – a fuel cell, a facility that produces electricity and used and useful	- 1	I
thermal energy from a common fuel source, or a facility that generates Renewable Energy, that:	- 1	I (C)
(a) Has an electrical generating Nameplate Capacity of not more than 100 kW AC;	- 1	l I
(b) Is located on the Customer-Generator's Premises;	I	I (C)
(c) Operates in Parallel with the Company's transmission and distribution facilities; and is	- 1	I
connected to the Company's distribution system; and	- 1	I (C)
(d) Is intended primarily to offset part or all of the Customer-Generator's requirements for	1	I (C)
electricity.	I	I
9. Good Utility Practice – (a) any of the practices, methods, and acts that when engaged in are	I	I
commonly used in prudent electric utility engineering and operations during the relevant time	- 1	I (T) (D)
period to operate and maintain electric equipment lawfully and with safety, reliability,	- 1	l I
efficiency, and expedition; or (b) if no such practices, methods, and acts exist, then those	1	I I
practices, methods, and acts that, in the exercise of reasonable judgment considering the	- 1	I I
facts known when engaged in, could have been expected to achieve the desired result	- 1	l I
consistent with applicable law, safety, reliability, efficiency, and expedition. Good Utility	- 1	I I
Practice is not intended to be limited to the optimum practice, method, or act to the exclusion	- 1	l I
of all others, but rather to be a spectrum of possible practices, methods, or acts.	- 1	I I
10. Renewable Energy – energy generated by a facility that uses water, wind, solar energy, or	- 1	I (N) I
biogas as a fuel.	- 1	1 1 1
11. Contiguous Parcel – parcels are considered contiguous if they share a common property	1	I I (D)
boundary, but may be separated only by a road or rail corridor.	1	I (N)
	I	I
	- 1	I
	- 1	I
	- 1	I
	- 1	I
	1	I
	1	I
	- 1	I
	1	I
	- 1	I
	(K) (N	M)

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#### PUGET SOUND ENERGY Electric Tariff G

#### **SCHEDULE 150**

#### **NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS**

(Rider to standard rate schedules 7 through 49)

MC	ITNC	HLY RATES & ADJUSTMENTS: The rates for Electric Service through the Designated Meter	(K) (N	Л) (D)
sha	all be	e equal to the basic charge in the schedule under which the Customer-Generator would	1 1	l I
no	rmal	ly receive service. Rates in this schedule are subject to adjustment by such other schedules		l I
in t	his t	ariff as may apply.	I (N	И)
				(D)
ΤE	RMS	S AND CONDITIONS:	I (N	<b>/</b> I)
1.	CA	LCULATION OF BILLED CHARGES - As described in RCW 80.60.30, billed charges for		(N)
	kilc	watt-hour consumption, and credit for excess kilowatt-hour generation by a Net Metered		
	Sys	stem, will be calculated in the following manner:	(K)	- 1
	a.	The Company will measure the net amount of electricity delivered during the billing period.	(D)	I
	b.	If the electricity supplied by the Company exceeds the electricity generated by the Customer-	I	- 1
		Generator's Net Metering System and fed back to the Company during the billing period, the	I	I
		Customer-Generator shall be billed for the net electricity supplied by the Company.	I	
	C.	If excess electricity generated by the Net Metering System during a billing period exceeds	I	
		the electricity supplied by the Company during the same billing period, the Customer-	I	I
		Generator will be credited for the excess kilowatt-hours generated during the billing period,	I	1
		making the kilowatt-hours available to offset electricity consumption during following bill	I	I
		periods.	I	1
	d.	If a Customer-Generator requests, the Company will provide such a Customer-Generator	I	I
		Meter Aggregation under the following additional terms:	(D)	I
		i. For a Customer-Generator participating in Meter Aggregation, credits for kilowatt-hours	(K)	I
		earned by the Customer-Generator's Net Metering System during the billing period first	I	I
		will be used to offset electricity supplied by the Company at the Premise of the Customer-	I	I
		Generator's Designated Meter.	I	I
		ii. A Customer-Generator may aggregate a Designated Meter with one additional	I	I
		Aggregated Meter, with service to the same Customer-Generator, located on the same		I
		parcel as the Designated Meter or a parcel that is contiguous with the parcel where the	I	I
		Designated Meter is located and;	I	I
			(K)	I
				(N)

(K) Transferred to Sheet No. 150-B

(M) Transferred from Sheet Nos. 150-D and 150-E, respectively

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

#### **SCHEDULE 150**

#### **NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS**

(Rider to standard rate schedules 7 through 49)

TERMS A	AND CONDITIONS: (Continued)	(D)(M)
1.d. (Co	ontinued)	I (N)
iii.	Credits for excess kilowatt-hours earned by the Net Metering System at the site of a	1 1
	Designated Meter during a billing period will be applied to electricity consumption at	1 1
	the Aggregated Meter during the same billing period.	(D) I
iv.	If credits generated in any billing period exceed total consumption for that billing period	(K) I
	at both meters that are part of an aggregated arrangement, excess kilowatt-hours will	1 1
	be available to offset electricity consumption during following bill periods.	1 1
V.	Credits carried over from one billing period to the next will be applied in subsequent	1 1
	billing periods in the same manner.	1 1
vi.	Meters so aggregated shall not change rate classes due to meter aggregation under	1 1
	this section.	(K) I
e. C	On March 31st of each calendar year, any remaining unused kilowatt-hour credits	I
а	ccumulated during the previous year will be granted to the Company, without	1
С	ompensation to the Customer-Generator.	(D)
f. T	he owner of a multi-family residential facility may install a Net Metering System assigned	1 1
to	a single designated meter located on the Premises of the multi-family residential facility	1 1
W	here the tenants are not individually metered Customers of the Company and	1 1
d	istributing any benefits of the Net Metering to tenants of the facility where the Net	1 1
N	letering System is located. The Company will measure the net energy produced and	(D) I
р	rovide credit to the single designated meter to which the Net Metering System is	- 1
а	ssigned. The distribution of benefits to tenants of such a system, if any, is the	- 1
re	esponsibility of the owner of the Net Metering System and not the responsibility of the	1
C	Company.	(N)

(K) Transferred to Sheet No. 150-C

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3<sup>rd</sup> Revision of Sheet No. 150-E Canceling 2<sup>nd</sup> Revision of Sheet No. 150-E

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#### PUGET SOUND ENERGY Electric Tariff G

#### **SCHEDULE 150**

#### **NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS**

(Rider to standard rate schedules 7 through 49)

TERMS AND CONDITIONS (Continued):		(T)
<ul> <li>2. OTHER CHARGES &amp; COSTS – <ul> <li>a. Application Fee: Beginning January 1, 2020, a fee in the amount of \$1 will be charged for review and processing of Interconnection applications for UL listed, inverter-based systems eligible for Net Metering under this schedule.</li> <li>b. Aggregation Set-Up Charge: A one-time charge of \$100 shall be charged to any Customer-Generator using Meter Aggregation under the terms of this schedule.</li> <li>c. Excess Site Visit Fee: If the Company arrives at a requested appointment to inspect, test or install equipment for the operation of the Net Metering System and the Customer-Generator has not complied with specifications on the approved application or the Net Metering System is not correctly configured for commissioning, the</li> </ul> </li> </ul>		(C) (N)             
Customer-Generator may be assessed a charge of \$240.  d. Costs:  i. The Customer-Generator shall pay for the Company's standard watt-hour meter electrical hook-up, if not already present.  ii. The Customer-Generator shall reimburse the Company for any and all losses, costs, expenses, damages, claims, penalties, and liabilities the Company incurs as a result of or related to the Customer-Generator's failure to obtain or maintain any governmental authorizations and permits required for constructing and operating the Customer-Generator's Generating Facility or failure to maintain the Customer-Generator's Generating Facility.  iii. The Customer-Generator shall pay for designing, installing, inspecting, operating, and maintaining the electric Generating Facility in accordance with all applicable laws and regulations. The Customer-Generator is responsible for costs associated with any future upgrade or modification to its Generating Facility that may be required due to future modifications in the Company's Electric System or changes in safety, power quality, or Interconnection	(K)	(C) (T)
requirements.  (K) Transferred to Sheet No. 150-E	l (K)	

(K) Transferred to Sheet No. 150-F

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# **PUGET SOUND ENERGY Electric Tariff G**

# **SCHEDULE 150 NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS**

(Rider to standard rate schedules 7 through 49)

<b>TERMS</b>	AND	CONDIT	TIONS	(Continu	ied).

3.	INDEMNITY AND LIABILITY - The Company shall have no liability (whether arising in contract, tort,	(D) (M)
	strict liability, warranty, or otherwise) for permitting or continuing to allow the Interconnection of the	1 1
	Customer-Generator to the Company's Electric System. Further, the Company shall not be liable for	1 1
	the acts or omissions of the Customer-Generator that cause loss or injury, including death, to any third	1 1
	party.	1 1
		1 1
	The Customer-Generator assumes the risk of all damages, losses, costs, and expenses and agrees to	1 1
	indemnify the Company, its successors and assigns, and their respective directors, officers,	1 1
	employees, and agents, from and against any and all claims, losses, costs, expenses, liabilities,	1 1
	damages, and penalties caused by or arising out of any electrical disturbance initiated by or migrating	1 1
	through the Customer-Generator's Generating Facility. The Customer-Generator assumes the risk of	1 1
	all damages, losses, costs, and expenses and agrees to indemnify the Company, its successors and	1 1
	assigns, and their respective directors, officers, employees, and agents, from and against any and all	1 1
	claims, losses, costs, expenses, liabilities, damages, and penalties, including reasonable attorneys'	1 1
	fees, resulting from the death or bodily injury to any person, including the officers, employees, agents,	1 1
	and subcontractors of either the Customer-Generator or the Company, to the extent arising out of the	1 1
	Customer-Generator's negligence or willful misconduct. The Customer-Generator waives any	1 1
	immunity, defense, or other protection that may be afforded by any workers' compensation, industrial	1 1
	insurance, or similar laws (including the Washington Industrial Insurance Act, Title 51 RCW) in	1 1
	connection with any action to enforce the Customer-Generator's obligations under this Section 10 with	1 1
	respect to any claim arising out of bodily injury (including death) of any employee of Customer-	1 1
	Generator. This Section 10 will not be interpreted or understood as a waiver of Customer-Generator's	1 1
	right to assert any such immunity, defense, or protection directly against any of its own employees or	1 1
	such employee's estate or other representatives.	1 1
		(D) I
	The provisions of this Section 10 shall not be interpreted as relieving any insurer of its obligations to	\ /
	pay any insurance claims in accordance with the provisions of any insurance policy.	I
		ī
	The Company shall have no liability or responsibility for the Customer-Generator's electric Generating	I
	Facility or its Interconnection with the Company's Electric System, regardless of what the Company	ī
	knows or should know about the Customer-Generator's electric Generating Facility or its	ī
	Interconnection. The Company shall not be deemed to have any ownership interest in or control of	Ī
	the Customer-Generator's Generating Facility.	(M)
(M)	Transferred from Sheet No. 150-J	` '

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#### PUGET SOUND ENERGY Electric Tariff G

# SCHEDULE 150 NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS

(Rider to standard rate schedules 7 through 49)

#### TERMS AND CONDITIONS (Continued):

4.	<ol> <li>ACCESS TO PREMISES – The Customer-Generator shall permit the Company to</li> </ol>	to enter the	(D) (M
	Customer-Generator's Premises or property to:		1 1
	a. inspect, at all reasonable hours, the Customer-Generator's Generating Facili	ity's	1 1
	protective devices;		1 1
	b. read any meter; and		1 1
	c. disconnect at the Company's meter or transformer the Generating Facility if,	in the	I
	Company's determination, a hazardous condition exists and such action is no	ecessary to	I
	protect persons, or the Company's facilities, or the property of others from da	amage or	I
	interference caused by (i) the operation of the Customer-Generator's electric	Generating	I
	Facility, (ii) the lack of properly operating protective devices at the Generating	g Facilities,	I
	or (iii) the facilities are not able to be inspected.		I I
	The Company's inspection or other action shall not constitute any approval or en	idorsement	Į I
	by the Company. The Customer-Generator remains solely responsible for the sa	afe, reliable,	Į I
	and adequate operation of its Generating Facility.		[ (M)
			I
			1
			1
			(D)

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#### PUGET SOUND ENERGY Electric Tariff G

# SCHEDULE 150 NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS

(Rider to standard rate schedules 7 through 49)

EL	ECTRONIC APPLICATION PROCESS: (Continued)	(D)	(N)
2.	The Company will review complete applications and respond with either a request for		I
	revisions/corrections or Approval to Construct. Once the system installation is complete,		I
	including the passage of electrical inspection and finalization of permits obtained through the		I
	local electrical permitting jurisdiction, the Customer, or agent on their behalf, will notify the		I
	Company.		I
3.	The Company will test that the system is installed according to the specified plans, and if so		I
	install new metering equipment if necessary to execute the billing described in Schedule 150.	- 1	I
4.	The Company will issue Approval to Energize to Customer for the Net Metering System,	- 1	I
	signifying that Company approves of the system for interconnection and Net Metering under	1	I
	the terms of Schedule 150.	I	I
5.	Once issued, an Approval to Energize will apply to the Net Metering System, itself. A new	I	I
	Customer that establishes Electric Service at the Premise of an existing Net Metering	I	I
	System, is not required to apply for Interconnection or obtain a new Approval to Energize for	I	I
	the Net Metering System in order to begin service under the terms of Schedule 150.	I	I
6.	Any modifications to an approved Net Metering System must be reported to the Company	I	I
	and may require the Customer to re-apply to the Company and obtain a new Approval to	I	I
	Energize.	I	I
7.	For all other systems, including those that qualify for the terms of this Schedule but do not	I	I
	include a UL listed inverter based technology, Schedule 152 Attachment B must be	I	I
	completed and submitted.	I	- 1
8.	The Company is available to assist by telephone with the completion of applications for any	I	i
	Customers unable to utilize the online application.	1	(N)
		I	, ,
GE	ENERAL RULES AND PROVISONS: Service under this schedule is subject to the General	1 (	(M)
Ru	les and Provisions contained in this tariff (Schedule 80), as they may be modified from time to	1 (	(M) (N)
tim	e, and to other schedules of the tariff that may from time to time apply to this Schedule.	I	(N)
		I	
		I	
		(D)	
		(D)	

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#### PUGET SOUND ENERGY Electric Tariff G

# SCHEDULE 150 NET METERING SERVICES FOR CUSTOMER-GENERATOR SYSTEMS

(Rider to standard rate schedules 7 through 49)

OV	<b>ERVIEW</b> : Schedule 150 applies to Net Metering available to electric Customers that generate	(D)(M)(C)	
SOI	me or all of their electricity with a fuel cell, a facility that produces electricity and used and	1 1 1	
us	eful thermal energy from a common fuel source, or a facility that generates electrical energy	1 1 1	
usi	using water, solar, wind, or biogas as fuel, in accord with RCW 80.60. Schedule 152 of this tariff		
an	d WAC 480-108, having to do with the requirements of Interconnection of a Generating Facility	1 1 1	
ap	oly to all Net Metering Systems including, but not limited to, those accomplished through the	1 1 1	
ap	plication process described in Schedule 150.	I I (C)	
		1 1	
A۷	AILABILITY:	1 1	
1.	Service under this schedule is limited to Customer-Generators who are, as Customers of the	1 1	
	Company, eligible to take service under one of the Schedules for Electric Service numbered 7	1 1	
	through 49 of this tariff and is subject to the provisions of Schedule 152 in this tariff.	(D) I (C)	
2.	This schedule applies to Customer-Generators that operate a Net Metering System and	I (C)	
	Interconnect, per one of the processes described in this schedule.	1 1	
3.	A Customer-Generator's Net Metering System must be Interconnected to the Company's	I (C)	
	distribution system and is intended to offset part or all of the Customer-Generator's electricity	I (C)	
	requirements.	1 1	
4.	Service under this schedule shall be limited in accordance with Chapter 80.60 RCW and will	I (C)	
	be available to eligible Customer-Generators on a first-come, first-served basis, until the	I (N)	
	earlier of either June 30, 2029 or the first date upon which the cumulative generating capacity	1	
	of Net Metering Systems equals four percent of the Company's peak demand during 1996 (or	1 1	
	179.2 MW). Not less than one-half of this 179.2 MW available for Net Metering Systems shall		
	be reserved for the cumulative generating capacity attributable to Net Metering Systems that	1 1	
	generate Renewable Energy. The Company may restrict or prohibit new or expanded Net	(N)	
	Metered Generating Facilities on any feeder, circuit, or network if engineering, safety, or		
_	reliability studies establish a need for such restriction or prohibition.		
5.	A Customer taking service under this schedule will not be eligible for Schedule 171, Optional	(M) (N)	
_	Non-Communicating Meter Service.	(D)	
6.	Any Customer-Generator with an existing arrangement for Meter Aggregation entered into	(D)	
	prior to July 28, 2019, or any Customer who submits a written request for Meter Aggregation		
	on or before July 1, 2019, may maintain the terms of an aggregation arrangement that is		
	other than a Designated Meter aggregated with one additional Aggregated Meter located on		
	the same parcel or a Contiguous Parcel where the Designated Meter is located.	(N)	

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#### **PUGET SOUND ENERGY**

Attachment "A-1" Procedures, Terms & Conditions- Tier 1 Generating Facilities

# SCHEDULE 152 PROCEDURES, AND TERMS AND CONDITIONS FOR INTERCONNECTING A CERTIFIED INVERTER-BASED GENERATING FACILITY ELIGIBLE FOR TIER 1 ("TIER 1 PROCESS")

- 1. 0 The Interconnection of Generating Facilities eligible for Tier 1 and eligible for Schedule 150 as a Net-Metering System requires an application fee and Electronic Application Process described in Schedule 150. For all others, the following requirements apply:
- 2.0 The Interconnection Customer completes an Application in the form of Attachment B to Schedule 152, and submits it to the Company with the non-refundable application fee.
- 3.0 Upon receipt, the Company stamps the Application with the date and time of receipt and within five Business Days the Company sends notice of receipt to the Interconnection Customer.
- 3.01 The Company evaluates the Application for completeness and notifies the Interconnection Customer within 10 Business Days of receipt that the Application is or is not complete and, if not, advises what information is missing.
- 4.0 The Interconnection Customer must submit all information required for a complete Application or request an extension of time within 15 Business Days of receiving notice from the Company that the Application is incomplete. The Company is not obligated to grant a request to extend time to complete the Application. If the Interconnection Customer does not provide the required information or request an extension of time that is granted by the Company within such15-Business Day period, the Application expires.
- 4.01 The Company verifies that the Generating Facility can be Interconnected safely and reliably and in compliance with the technical standards established in WAC 480-108-020 and the Codes and Standards. The Company has 20 Business Days after acceptance of a complete Application to complete the verification process and, based on the results of such verification process, shall accept, accept with conditions, or reject the Application with written justification. For Interconnection Customers who do not complete the application process for Net-Metering Systems outlined in the Electronic Application Process in Schedule 150, the notice shall include the Interconnection Agreement in the form of in Attachment I to Schedule 152. If delays result from unforeseen circumstances, Interconnection Customer variance requests, or other incentive program approval requirements, the Company shall promptly notify the Interconnection Customer.
- 4.02 The Interconnection Customer must Interconnect and operate the Generating Facility within one (1) year from the date the Company accepts the Application, or the Application expires, unless the Company, in its sole discretion, grants an extension in writing.
- The Interconnection Customer who has not executed an Application via the Electronic Application Process outlined in Schedule 150 executes and returns the Interconnection

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#### **PUGET SOUND ENERGY**

#### Attachment "A-1" Procedures, Terms & Conditions- Tier 1 Generating Facilities

Agreement (in the form of in Attachment I to Schedule 152) within 30 Business Days of the notice that the Company has accepted the Application and prior to physical Interconnection.

- 6.0 After installation, the Interconnection Customer returns the Certificate of Completion to the Company. Prior to Parallel Operation, the Company will inspect the Generating Facility for compliance with Company standards, the Company's inspection will include a witness test, and the Company may schedule appropriate metering replacement, if necessary.
- 7.0 The Company notifies the Interconnection Customer in writing that Interconnection of the Generating Facility is authorized once the Company has completed its inspection and a witness test (if required). If the witness test is not satisfactory, the Company has the right to disconnect the Generating Facility. The Interconnection Customer has no right to Operate in Parallel until a witness test has been performed or previously waived on the Application. The Company may waive the requirement of a witness test by so indicating on the Application.

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#### **PUGET SOUND ENERGY**

Attachment "A-2" Procedures, Terms & Conditions - Tier 2 Generating Facilities

# SCHEDULE 152 PROCEDURES, AND TERMS AND CONDITIONS FOR INTERCONNECTING A CERTIFIED INVERTER-BASED GENERATING FACILITY ELIGIBLE FOR TIER 2 ("TIER 2 PROCESS")

- 1.0 The Interconnection of Generating Facilities eligible for Tier 2 and eligible for Schedule 150 as a Net Metering System requires an application fee and Electronic Application Process described in Schedule 150. For all others, the following requirements apply:
- 2.0 The Interconnection Customer completes an Application in the form of (i) Attachment C to Schedule 152 and submits it to the Company with the non-refundable application fee.
- 3.0 Upon receipt, the Company stamps the Application with the date and time of receipt and within five Business Days the Company sends a notice of receipt to the Interconnection Customer.
- 3.01 The Company evaluates the Application for completeness and notifies the Interconnection Customer within 10 Business Days of receipt that the Application is or is not complete and, if not, advises what information is missing.
- 4.0 The Interconnection Customer must submit all information required for a complete Application or request an extension of time within 15 Business Days of notice from the Company that the Application is incomplete. The Company is not obligated to grant an extension to complete the Application. If the Interconnection Customer does not provide the required information or request an extension of time that is granted by the Company within such 15-Business Day period, the Application expires.
- 4.01 The Company verifies that the Generating Facility can be Interconnected safely and reliably and is in compliance with the technical standards established in WAC 480-108-020 and the Codes and Standards. Within 30 Business Days of notifying the Interconnection Customer that the Application is complete, the Company shall accept, accept with conditions, or reject the Application with written justification. Based on the complexity of the proposed Interconnection, the conditions of acceptance by the Company may include requirements for the completion of a feasibility study, a system impact study, and/or a facilities study prior to Interconnection. Information about the time and costs for each study is available in Attachment L to this Schedule. If delays result from unforeseen circumstances, Interconnection Customer variance requests, or other incentive program approval requirements, the Company shall promptly notify the Interconnection Customer.
- 4.02 For Interconnection Customers who complete an Application in the form of Attachment C to Schedule 152: Within five Business Days of accepting the Application as complete and no additional studies are required or within five Business Days of accepting the Application as complete after additional studies, the Company shall offer the Interconnection Customer an executable Interconnection Agreement in the form of Attachment J to Schedule 152.

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#### **PUGET SOUND ENERGY**

#### Attachment "A-2" Procedures, Terms & Conditions - Tier 2 Generating Facilities

- 4.03 The Interconnection Customer must Interconnect and operate the Generating Facility within one (1) year from the date the Company accepts the Application, or the Application expires, unless the Company, in its sole discretion, grants an extension in writing.
- 5.0 For Interconnection Customers who complete an Application in the form of Attachment C to Schedule 152: The Interconnection Customer shall execute and return the Company-prepared Interconnection Agreement within 30 Business Days of being notified that the Company has accepted the Application and prior to Commissioning of Customer Owned Protection Systems (commonly called the witness test) and physical Interconnection.
- After installation, the Interconnection Customer returns the Certificate of Completion to the Company. Prior to Parallel Operation, the Company may inspect the Generating Facility for compliance with standards, which typically includes a witness test, and the Company may schedule appropriate metering replacement, if necessary.
- 7.0 The Company notifies the Interconnection Customer in writing that Interconnection of the Generating Facility is authorized once the Company has completed its inspection and a witness test (if required). If the witness test is not satisfactory, the Company has the right to disconnect the Generating Facility. The Interconnection Customer has no right to Operate in Parallel until a witness test has been performed or previously waived on the Application. The Company may waive the requirement of a witness test by so indicating on the Application.

1<sup>st</sup> Revision of Sheet No. 152-A

**Canceling Original** of Sheet No. 152-A

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

## SCHEDULE 152 **INTERCONNECTION WITH ELECTRIC GENERATORS** (Continued)

(Part of Schedule 80, General Rules And Provisions)

- 1) Introduction: Eligible electric generators that are capable of being Interconnected with the Company's Electric System and satisfy the Company's Interconnection requirements shall be Interconnected under the provisions of this Schedule 152. The requirements for Interconnection generally fall into three (3) tiers, as follows:
  - Tier 1 includes the requirements for interconnecting the smallest and easiest-to-connect projects;
  - Tier 2 includes the requirements for interconnecting mid-sized and mid-complexity projects; and
  - Tier 3 includes the requirements for interconnecting larger or more complex projects.

If an Application does not meet the requirements of a particular tier, Interconnection will be subject to the requirements of the next higher tier. Summaries of the Interconnection procedures for each tier are appended to this schedule as Attachments A-1 (for Tier 1), A-2 (for Tier 2), and A-3 (for Tier 3).

This Schedule 152 is based on state laws and rules regulating Electric Service including Washington Administrative Code (WAC) Chapter 480-108 and the Revised Code of Washington (RCW) Chapter 80-60.

The provisions of Schedule 152 apply to all Interconnections, including without limitation Net Metering Interconnections, but the Interconnection Application Process specifically for Net Metering Systems is described in the Electronic Application Process described in Schedule 150.

(C) (C)

2) Attachments: The attachments listed in the table of contents contain additional information. procedures, applications, requirements and agreements and are, by this reference, incorporated into this Schedule 152.

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Advice No.: 2019-29

**Issued By Puget Sound Energy** 

Jon Piliaris Title: Director, Regulatory Affairs

By: Julia

1<sup>st</sup> Revision of Sheet No. 152-B **Canceling Original** of Sheet No. 152-B

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

# **SCHEDULE 152 INTERCONNECTION WITH ELECTRIC GENERATORS (Continued)**

(Part of Schedule 80, General Rules And Provisions)

- 3) Definitions: The following capitalized terms used in this schedule have the meanings set forth below. Other terms used in this schedule, whether or not capitalized, have the meanings set forth in Schedule 80 or WAC 480-108.
  - a. Agreement the Interconnection agreement using one of the forms appended to this Schedule: Attachment I for Tier 1 Interconnections or Attachment J for Tier 2 and Tier 3 Interconnections.
  - b. Application the written notice that the Interconnection Customer provides to the Company to start the Interconnection process. The form of Application for a Generation Facility eligible for Tier 1 is set forth in Attachment B to Schedule 152. The form of Application for a Generating Facility eligible for Tier 2 or Tier 3 is set forth in Attachment C to Schedule 152. For Tier 1 or Tier 2 interconnections of Net Metering Systems eligible under Schedule 150 that use UL-listed inverter based technologies, Customers shall use the Electronic Application Process described in Schedule 150.

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- c. **Business Day** Monday through Friday, excluding official federal and state holidays.
- d. Certificate of Completion the form that must be completed by the Interconnection Customer's electrical inspector and accepted by the Company indicating the Interconnection Customer has completed, installed, and inspected the Interconnection. The form of Certificate of Completion is set forth in Attachment H to Schedule 152. The Company may choose not to require a Certificate of Completion if the Interconnection is accomplished under the provisions of Schedule 150.

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1<sup>st</sup> Revision of Sheet No. 152-S Canceling Original of Sheet No. 152-S

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#### PUGET SOUND ENERGY Electric Tariff G

# SCHEDULE 152 INTERCONNECTION WITH ELECTRIC GENERATORS (Continued)

(Part of Schedule 80, General Rules And Provisions)

- 6) Application For Interconnection (Continued):
  - a. **Standard Application.** Standard Applications for Interconnection are included as attachments to, or described in, Schedules 91, 150, and 152 of this tariff as follows: (C)
    - i. Tier 1: Each Interconnection Customer must have entered into an Agreement or must enter into the Company's current Interconnection Agreement. The Interconnection Agreement may be modified to accommodate terms and conditions specific to individual Interconnections, subject to the conditions set forth in this Schedule 152 and in WAC 480-108.

If the Interconnection Customer desires to participate in the Company's Net Metering and/or production metering programs (see Schedules 150 and 151, respectively), the Interconnection Customer shall complete the Electronic Application Process described in Schedule 150, as applicable. If the Interconnection Customer does not intend to participate in the Net Metering program, the Interconnection Customer must submit a completed Application in the form set forth in Attachment B to this Schedule 152 and must enter into an Interconnection Agreement in the form set forth in Attachment I to this Schedule 152.

ii. Tier 2: If the Interconnection Customer desires to participate in the Company's Net Metering and/or production metering programs (and is eligible to participate), the Interconnection Customer shall complete the Application Process described in the Electronic Application Process described in Schedule 150. If the Interconnection Customer does not intend to participate in the Net Metering program, the Interconnection Customer must submit a completed Application in form set forth in Attachment C to this Schedule 152 and must enter into an Interconnection Agreement in the form set forth in Attachment J to this Schedule 152 (or in such other form as may be acceptable to the Company) prior to Interconnection.

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By:

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Issued: June 28, 2019 Effective: July 28, 2019 Attachment "B" to Schedule 152, Page 1

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#### **PUGET SOUND ENERGY**

# Attachment "B" Application Tier 1

#### **SCHEDULE 152** APPLICATION FOR INTERCONNECTING AN INVERTER-BASED GENERATING FACILITY **ELIGIBLE UNDER TIER 1**

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required. Certain terms in this Application are defined in Schedules 80 and 152.

In order to be eligible to interconnect an inverter-based Generating Facility under Tier 1, the proposed Generating Facility must meet the criteria in Section 4(b)(i) of Schedule 152.

#### **Application Fee**

A non-refundable fee of (if applicable) must accompany this Application. For UL 1741 Inverter-based Generating Facilities of 0 kW to 25 kW

145.00

nterconnection Customer					
Name:					
Contact name if Interconne	ction Customer i	s a business:			
Address:					
City:					
Геlephone (Day):		(Evening):			
-ax:		E-Mail Addres	ss:		
Contact or Consultant (if dif	ferent from Inter	connection Custom	<u>er)</u>		
Name:					
Address:					
City:					
Геlephone (Day):		(Ever	ning):		
-ax:		E-Mail Addres	ss:		
Owner(s) of the facility (incloy any entity owned by either				•	
Generating Facility Informat	tion_				
ocation (if different from ab	oove):				
City:					
PSE Account Number:					
nverter Manufacturer:					
Nameplate Rating:	(kW)	(kVA)	(AC Volt)		

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Attachment "B" to Schedule 152, Page 2

#### **PUGET SOUND ENERGY**

Attachment "B" Tier 1 Application
Single Phase Three Phase
System Design Capacity: (kW) (kVA)
Prime Mover: Photovoltaic Reciprocating Engine Fuel Cell Turbine
Other
Energy Source: Solar Wind Hydro Diesel Natural Gas Fuel Oil  Other (describe)
s the equipment UL®1741 listed? Yes No
If Yes, attach manufacturer's cut-sheet showing UL®1741 listing
Estimated Installation Date: Estimated In-Service Date:
ist components of the Generating Facility equipment package that are currently certified:
Equipment Type Certifying Entity
1
2
3 4
5
Notification of Potential Voltage Irregularities: The Company Electric System voltage may be routinely at the upper limits of the range described in WAC 180-100-373, and this may limit the ability of a Generating Facility to export power to the PSE Electric System. For example, for a nominal 240-volt service the voltage could range up to 252 volts.  Interconnection Customer Signature  Thereby certify that, to the best of my knowledge, the information provided in this Application is true and correct. I agree to abide by the General Rules and Provisions for Interconnecting a Tier  Generating Facility and to return the Certificate of Completion when the Generating Facility has
peen installed, but prior to actual Interconnection.
Signed:
Title: Date:
Contingent Approval for Interconnection of the Generating Facility
For Company use only)
Interconnection of the Generating Facility no larger than 25 kW is authorized contingent upon compliance with the General Rules and Provisions for Interconnection with Electric Generators, including return of the Certificate of Completion and execution of an Interconnection Agreement prior to Interconnection and inspection by the Company.

PSE Representative's Signature:

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Title:	Oate:
Company waives inspection/witness test?	Yes No

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#### **PUGET SOUND ENERGY**

#### Attachment "C" Application - Tier 2 and Tier 3

#### **SCHEDULE 152** APPLICATION FOR INTERCONNECTING A GENERATING FACILITY **TIER 2 OR TIER 3**

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required. Certain terms in this Application are defined in Schedules 80 and 152.

#### Application Fee

A non-refundable fee must accompany this Application.

For Generating Facilities of 0 kW to 25 kW, the fee is \$100.00

For Generating Facilities of greater than 25 kW to 500 kW that do not qualify for the Interconnection process outlined in Schedule 150, the fee \$500.00

For Generating Facilities of greater than 500 kW to 20 MW, the fee is \$1000.00

For Generating Facilities of greater than 2 MW or up to 20 MW the fee is \$1000.00. psei.

Puget Sound Energy ("PSE" o		
		this form to an Interconnection Customer.]
Designated Contact Per	son:	
Address:		
Fax:		
E-Mail Address:		
Preamble and Instructions		
An Interconnection Customer who delivery, mail, e-mail, or fax to the	•	on must submit this Application by hand
Interconnection Customer Info	ormation	
Legal Name of the Interconnecti	on Customer (or, if an ind	ividual, individual's name)
Name:		
Mailing Address:		
City:	State:	Zip:

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Attachment "C" to Schedule 152. Page 2

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#### **PUGET SOUND ENERGY**

A	ttachment "C" Application - Tier 2 and Tier 3
Facility Location (if different	from above):
Telephone (Day):	Telephone (Evening):
Fax:	E-Mail Address:
Alternative Contact Informat	tion (if different from the Interconnection Customer)
Contact Name:	
Title:	
Address:	
Telephone (Day):	Telephone (Evening):
Fax:	E-Mail Address:
Application is for:	New Generating FacilityCapacity addition to Existing Generating Facility
If capacity addition to existin	ng facility, please describe:
Will the Generating Facility b	be used for any of the following?
	No the Interconnection Customer? Yes No Others? Yes No
For installations at locations will Interconnect, provide:	with existing electric service to which the proposed Generating Facility
	(Existing PSE Account Number*)
Requested Point of Intercon	nection:
Interconnection Customer's	Requested In-Service Date:

## **Generating Facility Information**

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Information applies only to the Generating Facility, not to the Interconnection Facilities.

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Attachment "C" to Schedule 152. Page 3

# **PUGET SOUND ENERGY**

Attachment "C" Application - Tier 2 and Tier 3	
Energy Source: Solar Wind Hydro Hydro Type (e.g. Run-of-River): Diesel Natural Gas Fuel Oil Other (state type)	
Prime Mover: Fuel Cell Recip Engine Gas Turb Steam Turb Microturbine PV Other	
Synchronous Generators	
Generator Nameplate Rating: kW (Typical) Generator Nameplate kVA:	
Interconnection Customer or Customer-Site Load:kW (if none, so state)	
Typical Reactive Load (if known):	
Maximum Physical Export Capability Requested:kW	
List components of the Generating Facility equipment package that are currently certified:	
Equipment Type	
s the prime mover compatible with the certified protective relay package?YesNo	
Generator: Manufacturer, Model name, & Number:	
Version Number:	
Nameplate Output Power Rating in kW: (Summer) (Winter)	
Nameplate Output Power Rating in kVA: (Summer) (Winter)	
Individual Generator Power Factor:	
Rated Power Factor: Leading: Lagging:	
Direct Axis Synchronous Reactance, Xd: P.U.  Direct Axis Transient Reactance, X' d: P.U.  Direct Axis Subtransient Reactance, X" d: P.U.  Negative Sequence Reactance. X2: P.U.  Zero Sequence Reactance, X0: P.U.  KVA Base: Field Volts: Field Amperes:	

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## **PUGET SOUND ENERGY**

<u> </u>
Attachment "C" Application - Tier 2 and Tier 3
Induction Generators
Generator Nameplate Rating: kW (Typical) Generator Nameplate kVA:
Interconnection Customer or Customer-Site Load: kW (if none, so state)
Typical Reactive Load (if known):
Maximum Physical Export Capability Requested: kW
List components of the Generating Facility equipment package that are currently certified:
Equipment Type  Certifying Entity  1 2 3 4 5
Is the prime mover compatible with the certified protective relay package?YesNo  Generator  Manufacturer, Model name, & Number:  Version Number:  Nameplate Output Power Rating in kW: (Summer) (Winter) or  Nameplate Output Power Rating in kVA: (Summer) (Winter)
Individual Generator Power Factor Rated Power Factor: Leading: Lagging:
Motoring Power (kW):

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#### **PUGET SOUND ENERGY**

Attachment "C" Application - Tier 2 and Tier 3
Inverter Based Generation
Source Nameplate Rating: DC KW (Typical) Inverter Nameplate Rating AC KW
Interconnection Customer or Customer-Site Load: kW (if none, so state) Will site load be a separate service
Reactive Capability :
Maximum Physical Export Capability Requested: kW
List components of the Generating Facility equipment package that are currently certified:
Equipment Type
Is the inverter controller UL1741 listed?Yes No
Generator (or solar collector)  Manufacturer, Model name, & Number:  Version Number:  Inverter Model number:  Output Power Rating in kW: (Summer) (Winter)
List of adjustable set points for the protective equipment, including software adjustable points:  Contact the Company to discuss this item prior to filling out the Application.  Note: A completed Power Systems Load Flow data sheet must be supplied with the Application.
Generating Facility Characteristic Data (for inverter-based machines)
Max design fault contribution current: Instantaneous or RMS?
Harmonics Characteristics:
Start-up requirements:

**Generating Facility Characteristic Data (for rotating machines)** 

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# **PUGET SOUND ENERGY**

Attachment "C" Application - Tier 2 and Tier 3			
<b>Note:</b> Please contact the Company prior to submitting the Application to determine if the specified information below is required.			
RPM Frequency: (*) Neutral Grounding Resistor (If Applicable):			
Synchronous Generators:			
Direct Axis Synchronous Reactance, Xd: P.U.  Direct Axis Transient Reactance, X' d: P.U.  Direct Axis Subtransient Reactance, X'' d: P.U.  Negative Sequence Reactance. X <sub>2</sub> : P.U.  Zero Sequence Reactance, X <sub>0</sub> : P.U.  KVA Base: P.U.  Field Volts:			
Induction Generators			
Motoring Power (kW):			
Excitation and Governor System Data for Synchronous Generators Only			
Provide an appropriate IEEE model block diagram of excitation system, governor system, and power system stabilizer (PSS) in accordance with the regional reliability council criteria. Studies may determine that a PSS is required. A copy of the manufacturer's block diagram may not be substituted.			
Interconnection Facilities Information			
Will a transformer be used between the generator and the Point of Common Coupling (PCC)? YesNo			

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#### **PUGET SOUND ENERGY**

Attachment "C" Application - Tier 2 and Tier 3			
Will the transformer be provided by the Interconnection Customer?YesNo			
Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):			
Is the transformer:single phasethree phase? Size:kVA Transformer Impedance:% onkVA Base			
If Three Phase: Transformer Primary: Volts Delta Wye Wye Grounded Transformer Secondary: Volts Delta Wye Wye Grounded Transformer Tertiary: Volts Delta Wye Wye Grounded			
Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):			
(Attach a copy of the fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)			
Manufacturer: Type: Size: Speed:			
Interconnecting Circuit Breaker (if applicable):			
Manufacturer: Type: Load Rating (Amps): Interrupting Rating (Amps): Trip Speed (Cycles):			
Interconnection Protective Relays (if applicable):			
If Microprocessor-Controlled:			
List of functions and adjustable set points for the protective equipment, including software adjustable points:			
Setpoint Function Minimum Maximum			
1			
2			
3			
4			
5			
6			

**If Discrete Components:** 

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Attachment "C" to Schedule 152. Page 8

# **PUGET SOUND ENERGY**

## Attachment "C" Application - Tier 2 and Tier 3

(Enclose Copy of an	y Proposed Ti	me-Overcurrent Coordina	tion Curves)
Manufacturor	Tymor	Style /Catalog No :	Proposed Setting:
			Proposed Setting:
Current Transform	er Data (if app	licable):	
(Enclose a copy of t	he Manufactui	rer's Excitation and Ratio	Lorrection Curves)
Manufacturer:	Δ	cy Class: Proposed Rat	
Type:	Accura	cy Class: Proposed Rat	io Connection:
Manufacturer:			
Туре:	Accura	cy Class: Proposed Rat	io Connection:
Potential Transforn	ner Data (if ap	plicable):	
Manufacturer:			
Туре:	Accura	cy Class: Proposed Rat	io Connection:
Manufacturer:			
Type:	Accura	cy Class: Proposed Rat	io Connection:
<u>General Informati</u>	on		
deneral informati	<u>on</u>		
equipment, current must be signed and	and potential stamped by a	circuits, and protection ar	ng the configuration of all Generating Facility nd control schemes. This one-line diagram d electrical Professional Engineer if the m enclosed?YesNo
			precise physical location of the proposed agram or documentation).
Proposed location of Interconnection Cu			perty (include address if different from the
		entation that describes and umentation enclosed?\	d details the operation of the protection and YesNo
	nd alarm/mor	nitoring circuits (if applica	control circuits, relay current circuits, relay ble).

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#### **PUGET SOUND ENERGY**

# Attachment "C" Application - Tier 2 and Tier 3

#### **Notification of Potential Voltage Irregularities:**

The Company's Electric System voltage may be routinely at the upper limits of the range described in WAC 480-100-373, and this may limit the ability of a Generating Facility to export power to the PSE Electric System. For example, for a nominal 240-volt service the voltage could range up to 252 volts.

## **Applicant Signature**

I hereby certify that, to the best of my knowleds and correct.	ge, all the information provided in this Application is true
For Interconnection Customer:	Date: