

CITY OF SUMAS
Public Works
Net Metering

NET METERING

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What is Net Metering?

For customers who generate their own electricity using small-scale energy systems, net metering measures the difference between the electricity you buy from the City of Sumas and the excess electricity you produce using your own generating equipment.

Your electric meter keeps track of this “net” difference as you generate excess electricity and take electricity from the electric grid.

How exactly does Net Metering work?

Basically, net metering is a special metering and billing arrangement between you and the City of Sumas. Normally, your electric meter runs “forward” as it measures the amount of electricity that the City sends into your home or business.

If your generation system makes more electricity than you need at any given time, net metering allows this electricity to run “backward” through the meter and out into the electric grid. This causes the meter to run in reverse, which means you get full retail value for the electricity you generate.

Net metering can usually be accomplished using the existing meter at your home or business. In some cases, the City of Sumas or the customer may choose to install an additional meter to separately measure the output of your generating system. If this is the case, the electricity generated will be subtracted from the electricity consumed by the customer to determine the net consumption or net excess generation (NEG).

How will I be billed?

Just as we do now, we will continue to read your meter and you will receive electric bills on your normal billing schedule.

If you use more energy than you generate in a given billing cycle, you would be a “net Consumer,” and the net consumption would appear as a charge on the current bill.

If your meter ran backward more than forward in a given billing cycle, you would be a “net generator” for that billing cycle, and the NEG would appear as a credit on your next bill. An annual request, by

December 20th of each year, may be made for payment of a credit balance. Refund of a credit balance will be at **two-thirds** of the applicable retail rate.

In all cases, a monthly minimum customer charge will be applied. This is the same charge that applies to all customers, regardless of whether or not they are net metering customers.

What are the benefits of Net Metering?

By generating your own electricity, you reduce your electricity bills.

With a net metering arrangement, any excess electricity that you generate and do not use can be fed back to the utility, which will again reduce your electricity bill. Your excess electricity now offsets electricity you would otherwise have to buy at full retail prices, and this makes owning your own generating system more cost-effective.

Without net metering, one alternative would be to purchase batteries to store the excess power for later use. Having your own battery storage for electricity is very expensive, and would typically only benefit you during a period when the City's power is off for some reason. We suggest serious consideration be given to this cost/benefit issue before choosing to install a battery backup system.

Another alternative to net metering is to arrange for metering and sale of the electricity you generate as a "qualifying facility" under PURPA rules. Typically, this type of installation is more expensive, since separate metering equipment is required. In addition, all electricity you generate would be credited at the City's "avoided cost," which is usually less than half the retail rate. Net metering allows you to get credit for most of the energy you generate at the retail rate.

Am I eligible for Net Metering?

In Washington, any residential or small commercial electricity customer, in good standing, who generates at least some of their electricity is potentially eligible for net metering.

Solar, hydro, wind or some combination of these resources must power your generating system. It could also be a fuel cell. Other types of generating systems are not eligible for net metering.

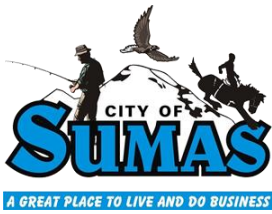
The generating system must not exceed 25 kilowatts of peak AC power output.

What are the technical requirements?

A net metering system used by a home owner or business must include, at the customer's own expense, all equipment necessary to meet applicable safety, power quality, and interconnection requirements established by the National Electrical Code (NEC), national electrical safety code, the Institute of Electrical and Electronics Engineers (IEEE), and Underwriters Laboratories (UL), and any applicable state and local agencies.

City of Sumas must approve your system before you connect to the electric grid.

- Customer Checklist for Utility Interconnection
- Standards for Interconnection with Electric Generators
- Net Energy Metering Interconnection Agreement
- Generating Facility Certificate of Completion



CITY OF SUMAS
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Customer Checklist for Utility Interconnection

1. Assemble and complete an interconnection application packet:
 - a. *Application for Interconnecting a Generating Facility No Larger than 25kW* – fully completed and signed
 - b. *Net Energy Metering Interconnection Agreement* – fully completed and signed
 - c. Documentation demonstrating that the interconnecting inverter is UL 1741 listed
 - d. Electrical schematic drawing
 - e. Check made payable to City of Sumas: actual cost of the net meter.
 - f. To facilitate proper configuration of your power service for net-metering, please attach two photos:

A close-up of the meter

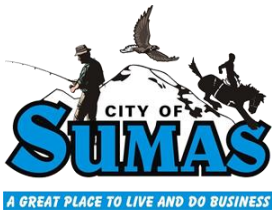
AND A medium shot of the meter and surroundings



2. Send complete packet to:

**City of Sumas
PO Box 9
Sumas, WA 98295**

3. Receive written design approval from the City.
4. Get an electrical permit from Washington State L&I
5. Comply with the National Electric Code (NEC) as required and complete the installation
6. Obtain all required inspections from a state electrical inspector
7. Submit an official *Certificate of Completion* to the City at the address above
8. The City will schedule an on-site visit to verify the installation
9. Begin generating power



CITY OF SUMAS
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Net Energy Metering Interconnection Agreement

**Customer Owned Fuel Cell, Solar, Wind, Biogas,
Combined Heat and Power or Hydropower
Electric Generating Facilities of 25 Kilowatts or Less**

This Net Energy Metering Interconnection Agreement is executed in duplicate this ____ day of _____, 20__ between _____ (hereinafter referred to as “Customer”), and the City of Sumas (hereinafter referred to as “Utility”). Both Parties, who may be herein further referred to collectively as “Parties” and individually as “Party”, agree as follows:

1. Customer Electric Generating Facility

- 1.1. Customer has elected, in accordance with RCW 80.60 et seq., to operate either a net energy metered fuel cell, facility that produces electricity and used and useful thermal energy from a common fuel source, or a facility that uses water, wind, solar energy, or biogas from animal waste as a fuel as set forth in chapter 80.60 RCW with a generating capacity of not more than twenty five (25) kilowatts, in parallel with the utility’s transmission and distribution facilities. The customer’s electric generating facility (generating facility) is intended to offset either part of all of the Customer’s electrical requirements.
- 1.2. The City of Sumas will not provide wheeling for Customer as generation from the net metering electrical generating facility will only be applied to consumption at the location of said electrical generating facility.
- 1.3. Customer’s Application for Interconnecting a Generating Facility No Larger than 25 KW, including the location of the electrical generating installation facility and details on the electrical generating unit(s) is hereby incorporated into this agreement as Attachment A.
- 1.4. The installation is identified by the utility with the following designators: Transformer No. (feeder and phase) _____, Customer Utility Account No. _____.
- 1.5. A separate agreement shall be entered into for each Customer’s electrical service locations(s).
- 1.6. The electrical generating system facility used by the Customer shall be located on the Customer’s premises. It shall include all equipment necessary to meet applicable safety, power quality, and Interconnection requirements established by the National Electrical Code (Articles 690 and 705), National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, underwriters Laboratories, and the utility’s standards for Interconnection With Electric Generators, as set forth in Attachment B, which is attached hereto.
- 1.7. The utility shall have the sole authority to determine which Interconnection requirements set forth herein are applicable to Customer’s proposed generating facility.

2. Payment for Net energy

- 2.1. The utility shall measure the net electricity produced or consumed by the Customer during each billing period, in accordance with normal metering practices.
- 2.2. If the electricity supplied by the utility exceeds the electricity generated by the Customer during the billing period, or any portion thereof, then the Customer shall be billed for the net electricity supplied by the utility together with the appropriate customer charge paid by other customers of the utility in the same rate class.
- 2.3. If the electricity generated by the Customer during the billing period, or any portion thereof, exceeds the electricity supplied by the utility, then the Customer shall be:
 - 2.3.1. Billed for the appropriate customer service charge as other customers of the utility in the same rate class; and
 - 2.3.2. Credited for the net excess kilowatt-hours generated during the billing period, with this kilowatt-hour credit appearing on Customer's bill for the following billing period.
- 2.4. An annual request by December 20th of each year may be made for payment of a credit balance. Refund of the credit balance will be at **two-thirds** of the applicable retail rate. Customers entering into a Power Purchase Agreement for Power Generation Facilities will be paid according to the terms of that agreement.
- 2.5. Customer shall pay any amount owing for electric service provided by the utility in accordance with applicable rates and policies. Nothing in this Section 2 shall limit utility's rights under applicable Rate Schedules, City ordinances, Customer Service Policies, and General Provisions.

3. Interruption or Reduction of Deliveries

- 3.1. The utility may require Customer to interrupt or reduce deliveries as follows:
 - 3.1.1. when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of its equipment or part of its system; or
 - 3.1.2. if it determines that curtailment, interruption, or reduction is necessary because of emergencies, force or compliance with prudent electrical practices.
- 3.2. Whenever possible, the utility shall give Customer reasonable notice of the possibility that interruption or reduction of deliveries may be required.
- 3.3. Notwithstanding any other provision of this Agreement, if at any time the utility determines that either:
 - 3.3.1. the generating facility may endanger utility personnel, or
 - 3.3.2. the continued operation of Customer's generating facility may endanger the integrity of the utility's electric system,
- 3.4. then the utility shall have the right to temporarily or permanently disconnect Customer's generating facility from the utility's electric system. Customer's generating facility shall remain disconnected until such time as the utility is satisfied that the condition(s) referenced in 3.1.1. or 3.1.2 of this section 3 have been corrected.

4. Interconnection

- 4.1. Customer shall deliver the excess energy to the utility at the utility's meter.
- 4.2. Customer shall pay for designing, installing, inspecting, operating, and maintaining the electric generating facility in accordance with all applicable laws and regulations and shall comply with the utility's standards for Interconnection with Electric Generators set forth in Attachment B, which is attached hereto.
- 4.3. Customer shall pay for the utility's standard watt-hour meter electrical hook-up, if not already present.
- 4.4. Customer shall not commence parallel operation of the generating facility until written approval of the Interconnection facilities has been given by the utility. Such approval shall not be unreasonably withheld. The utility shall have the right to have representatives present at the initial testing of Customer's protective apparatus. Customer shall notify the utility when testing is to take place.

5. Maintenance and Permits

- 5.1. Customer shall:
 - 5.1.1. maintain the electric generating facility and Interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, the utility's Interconnection Standards, and
 - 5.1.2. obtain any governmental authorizations and permits required for the construction and operation of the electric generating facility and Interconnection facilities, including electrical permit(s).
 - 5.1.3. reimburse the utility for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer's generating facility or failure to maintain Customer's generating facility as required in 5.1.1. of this Section 5.

6. Access to Premises

- 6.1. The utility may enter Customer's premises or property to:
 - 6.1.1. Inspect, with prior notice, at all reasonable hours, Customer's generating facility's protective devices;
 - 6.1.2. read meter; and
 - 6.1.3. disconnect at the utility's meter or transformer, without notice, the generating facilities if, in the utility's opinion, a hazardous conditions exists and such immediate action is necessary to protect persons, or the utility's facilities, or property of others from damage or interference caused by Customer's electric generating facilities, or lack of properly operating protective devices or inability to inspect the same.
- 6.2. The utility inspection or other action shall not constitute approval by the utility. The customer remains solely responsible for the safe and adequate operation of its facilities.

7. Indemnity and Liability

- 7.1. The Customer assumes the risk of all damages, loss, cost and expense and agrees to indemnify the utility, its successors and assigns, and its respective directors, officers, employees and agents, from and against any and all claims losses, costs liabilities, damages and expenses including, but not limited to, reasonable attorney fees, resulting from or in connection with performance of the agreement or which may occur or be sustained by the Utility on account of any claim or action brought against the utility for any reason including but not limited to loss to the electrical system of the Customer caused by or arising out of an electrical disturbance.
- 7.2. Such indemnity, protection, and hold harmless includes any demand, claim, suit or judgment for damages, death or bodily injury to all persons, including officers, employees or agents, and subcontractors of either Party hereto including payment made under of in connection with any Worker's Compensation Law or under any plan for employees' disability and death benefits or property loss which may be caused or contributed to by the Interconnection, maintenance, operation, use, presence, or removal of Customer's equipment. The only exception will be liability occasioned by the sole negligence or willful misconduct of the utility or its employees acting within the scope of their employment and liability occasioned by a partial negligence of the utility or its employees acting within the scope of their employment to the extent that such partial liability is fixed by a court of competent jurisdiction.
- 7.3. The provisions of the Section 7 shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any insurance policy.
- 7.4. The utility shall have no liability, ownership interest, control or responsibility for the Customer's Electric Generating Facility or its Interconnection with the utility's electric system, regardless of what the utility knows or should know about the Customer's Electric Generating Facility or its Interconnection.
- 7.5. Customer recognizes that it is waiving immunity under Washington Industrial Insurance law, Title 51 RCW, and further agrees that this indemnification clause has been mutually negotiated. This indemnification shall extend to and include attorney's fees and the costs of establishing the right of indemnification hereunder in favor of the utility.

8. Independent Contractors

- 8.1. The Parties hereto are independent contractors and shall not be deemed to be partners, joint ventures, employees, franchisees or franchisers, servants or agents of each other for any purpose whatsoever under or in connection with this Agreement.

9. Governing Law

- 9.1. This Agreement shall be interpreted, governed, and constructed under the laws of the State of Washington as if executed and to be performed wholly within the State of Washington. Venue of any action arising hereunder or related to this agreement shall lie in Whatcom County, Washington.

10. Future Modification or Expansion

- 10.1. Any future modification or expansion of the Customer owned generating facility will require an engineering, safety and reliability review and approval by the utility. The utility reserves the right to deny the modification or expansion or to require the Customer, at Customer's expense, to provide modification or additions to existing electrical devices including, but not limited to protection device and meters, in the event of changes to government or industry regulation and/or standards.

11. Amendments, Modifications or Waiver

11.1. Any amendments or modifications to this Agreement shall be in writing and agreed to by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any Party of the breach of any term or covenant contained in this Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or waiver of the breach of any other term or covenant unless such waiver is in writing.

12. Assignment

12.1. The Customer shall not assign its rights under this Agreement without the express written consent of the utility. The utility may impose reasonable conditions on any such assignment to ensure that all of Customer’s obligations under this Agreement are met and that none of Customer’s obligations under this Agreement are transferred to the utility as a result of default, bankruptcy, or any other cause.

13. Appendices

13.1. The Agreement includes the following appendices attached and incorporated by reference:

13.1.1. Attachment A: Application for Net Metered Electrical Generation to the City of Sumas of Whatcom County.

13.1.2. Attachment B: City of Sumas Net Metering Interconnection Standards for Customer Electric Generating Facilities of 25 Kilowatts or Less.

14. Notices

14.1. All written notices shall be directed as follows:

**City of Sumas
PO Box 9
Sumas, WA 98295**

Customer Name

Address

City, State & Zip

14.1.1. Customer notices to Utility, pursuant to Section 15, shall refer to the Service Address set forth in Appendix A, Application for Net Metered Electrical Generation.

15. Term of Agreement

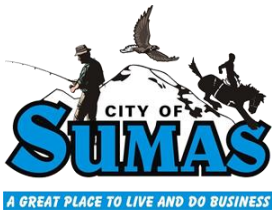
15.1. This Agreement shall be in effect when signed by the Customer and the Utility and shall remain in effect thereafter month to month unless terminated by either Party on thirty (30) days' prior written notice in accordance with Section 14.

16. Signatures

16.1. IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives.

16.2. This Agreement is effective as of the last date set forth below.

Customer: (print Name)	City of Sumas
Signature:	Signature:
	Print name:
Title:	Title:
Date:	Date:



CITY OF SUMAS
Public Works
Net Metering

Application for Interconnecting a Generating Facility No Larger than 25 kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Interconnection Customer

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Contact (if different from Interconnection Customer)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

Owner of the facility (include % ownership by any electric utility): _____

Generating Facility Information

Location (if different from above): _____

Electric Service Company: _____

Account Number: _____

Inverter Manufacturer: _____ Model: _____

Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)

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) _____

Is the equipment UL1741 Listed? Yes ___ No___

If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Estimated Installation Date: _____ Estimated In-Service Date: _____

List components of the Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 25 kW and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: _____

Title: _____ Date: _____

Contingent Approval to Interconnect the Generating Facility

(For Company use only)

Interconnection of the Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Generating Facility No Larger than 25 kW and return of the Certificate of Completion.

Company Signature: _____

Title: _____ Date: _____

Application ID Number: _____

Company waives inspection/witness test? Yes ___ No___