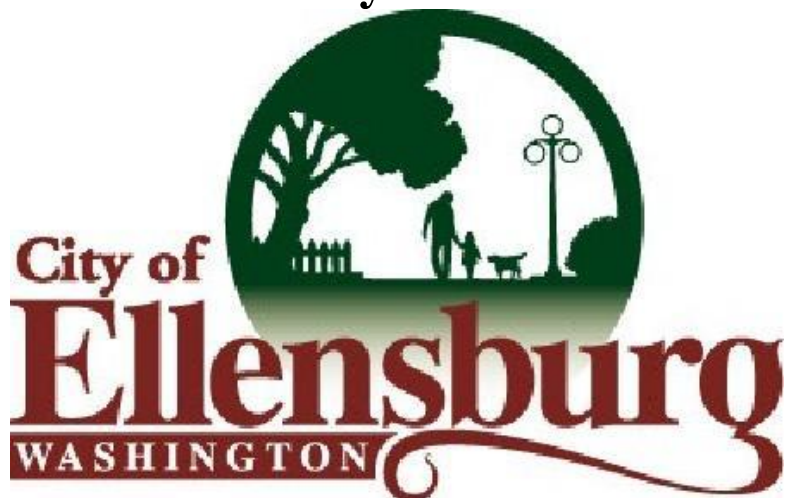


**CUSTOMER GENERATOR
NET METERED
INTERCONNECTION
STANDARDS, APPLICATION &
NET INTERCONNECT
AGREEMENT**



July 2017



Contents

Customer Generator Checklist for Utility Interconnection.....	2
Section 1 - Purpose and Scope.....	3
Section 2 – Definitions.....	3
Section 3 – General Terms and Conditions of Interconnection.	6
Section 4 – Adoption by Reference.....	9
Section 5 – Technical Standards for Interconnection.....	11
Section 6 – Specific Interconnection Requirements.....	12
6.1 Inverter-based Interconnections:	13
6.2 Non-inverter based interconnections:	13
Section 7 – Application for State or Federal Credits.....	13
Section 8 – Interconnection Agreements and Costs.....	14
Section 9 – Generating Facility Certificate of Completion.	14
Section 10 – Filings	14
APPENDIX A – Application for Interconnecting a Generating Facility	1
APPENDIX B – Contingent Approval to Interconnect the Generating Facility	1
APPENDIX C – Net Metering Interconnection Agreement	1
APPENDIX D – Generating Facility Certificate of Completion	1

Customer Generator Checklist for Utility Interconnection

- Submit an application to the Building Department City of Ellensburg, Community Development Dept. 501 N Anderson St., Ellensburg, WA 98926**
- Submit an application (APPENDIX A) to the Utility - City of Ellensburg, Energy Services Dept. 501 N Anderson St, Ellensburg, WA 98926**
- Interconnection inverter must be UL 1741 Listed (IEEE 1547)**
- Electrical one line drawing must be included**
- Receive written design approval (APPENDIX B) from the Utility before starting installation**
- Get an electrical permit from Washington State L&I. Follow the National Electric Code (NEC) as required**
- Complete the installation and get building permit final inspection signed off**
- Production metering, must be outside and accessible by Utility**
- Get inspections from a State electrical inspector and the Utility**
- Applicant must have Net Metering Interconnection Agreement (APPENDIX C) completed and submitted, all associated charges paid in full and the Appendix D – Generating Facility Certificate of Completion prior to final interconnection**
- Utility supplies and installs bi-directional and detented production meter to make interconnection**
- Start generating power**

Section 1 - Purpose and Scope.

The purpose of this standard is to specify the terms, conditions, technical requirements, processes, credits and charges governing the interconnection of a Customer Generator's Generating Facility designed for the production of electricity located on the Customer Generator's premises with a maximum generating capacity of less than or equal to one hundred (100) kilowatts. Customer Generator shall interconnect and operate said facility in parallel with the Utility's distribution facilities, and said facility is intended primarily to offset part or all of Customer Generator's own electrical requirements. The Customer Generator's Generating Facility is described in Appendix A "Application for Interconnecting a Generating Facility" attached hereto, which is hereby incorporated into and made a part of this Agreement.

The specifications and requirements in Appendix C "Net Metering Interconnection Agreement" in these standards are intended to mitigate possible adverse impacts caused by a Customer Generator Generating Facility on Utility equipment and personnel and on other customers of the Utility. They are not intended to address protection of the Customer Generator's Generating Facility, facility personnel, or internal load. It is the responsibility of the Customer Generator and or Third Party Owner, if applicable, to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect the Customer Generator's own facilities, personnel, and loads.

The standards described in sections 1 through 10 of this document do not govern interconnection of standby generators designed and used only to provide power to the customer when the Utility service is interrupted and that operate in parallel with the Utility system for less than 0.5 seconds both to and from emergency service.

As amended from time to time, the Revised Code of Washington ("RCW"), Washington Administrative Code ("WAC"), and Ellensburg City Code ("ECC") are incorporated by reference and regulate these standards. In the event of any conflict between the Net Metering Interconnection Agreement - Appendix C and the RCW, WAC, and the ECC (collectively "Governing Law"), the Governing Law shall control. The City of Ellensburg shall furnish applicable provisions of the RCW, WAC and Ellensburg rates upon request from the Customer Generator.

Section 2 – Definitions.

"Applicant" means any person, corporation, partnership, government agency, or other entity applying to interconnect a generating facility to the Utility's electric system pursuant to this chapter.

"Application" means completion and submittal of Appendix A provided by the applicant to the Utility that initiates the interconnection process.

"Customer Generator" means any customer of the Ellensburg City Light Utility who operates a renewable energy alternating current electric generation system located on an individual's residence, business, or local government's real property. If a system is leased or is located on leased property the applicant needs to be the property owner. The agreement is to ensure the terms of interconnection are maintained regardless of the owner of the system or current occupant of the building.

"Detented Production Meter" means a revenue grade meter that allows measurement of energy to occur in only one direction of energy flow, from the solar system. A standard meter will measure night standby losses of the inverter as if it was solar production.

"Electric Distribution System" means all electrical wires, equipment, and other facilities owned or provided by the Utility that are used to transmit electricity to customers.

"Feeder" means a high voltage circuit, or part of a circuit in the Utilities distribution system that serves distinct areas, customers and or groups of customers.

"Generation Facility" means a source of electricity owned by the Customer Generator that is located on the Customer Generator side of the point of common coupling, and all facilities ancillary and appurtenant thereto, including interconnection facilities, which the applicant requests to interconnect to the Utility's electric distribution system.

"Generating Facility Certificate of Completion" means the Appendix D form completed by the Customer Generator and the electrical inspector having jurisdiction over the installation of the facilities indicating completion of installation and inspection of the interconnection.

"Initial operation" means the first time the Generating Facility is in parallel operation with the electric distribution system.

"In-service date" means the date on which the Customer Generator and any related facilities are complete and ready for service, even if the Customer Generator Generating Facility is not placed in service on or by that date.

"Interconnection" means the physical connection of a generating facility to the electric distribution system so that parallel operation may occur.

"Interconnection facilities" means the electrical wires, switches and other equipment used to interconnect a Customer Generator Generating Facility to the electric distribution system.

"Maximum generating capacity" means the maximum amount of energy that the Customer Generator Generating Facility is capable of producing on an instantaneous basis.

"Net metering" means measuring the difference between the electricity delivered by the Utility and the electricity received from a Customer Generator Generation Facility by the Utility over the applicable billing period.

"Parallel operation" or **"operate in parallel"** means the synchronous operation of a Customer Generator Generating Facility while interconnected with a Utility's electric distribution system.

"Point of common coupling" or **"PCC"** means the point where the Customer Generator Generating Facility's local electric power system connects to the Utility's electric distribution system, such as the electric power revenue meter or at the location of the equipment designated to interrupt, separate or disconnect the connection between the Customer Generator Generating Facility and Utility. The point of common coupling is the point of measurement for the application of IEEE 1547, clause 4.

“Net wholesale power cost” means the annual total cost of power purchased by the City divided by the annual total kilowatt hours purchased.

“Smart Inverter” means an inverter that is designed to help the grid to deal with intermittent generation. They will be able to help the grid stay stable and at the correct voltage and frequency rather than contribute to problems. Smart inverters will ‘randomize’ their time of separation from the grid in the presence of ‘out of tolerance’ voltage or frequency – this will mean that the drop of the solar generation will be a steep slope rather than a cliff if you were to graph it. This makes it easier for the Utility to make up for lost generation if it falls off gradually instead of all at once. IEEE 1547 The Standard for Interconnecting Distributed Resources with Electrical Power Systems is in the update process as of January 2015.

“System Study” means further analysis of the impact to the feeder or circuit caused by the applicant’s proposed customer generator system if interconnected to the Utility. See Section 8.1

“System upgrades” means the additions modifications and upgrades to the Utility electrical distribution system at or beyond the point of common coupling necessary to facilitate the interconnection of the Customer Generator Generating Facility. System Upgrades do not include interconnection facilities.

“Third Party Owner” means an owner of a Generating Facility located on a Utility customer’s premise that is not the property owner. The Third Party may sell power from or lease their Generating Facility to a Utility customer that has met the requirements for interconnection in these standards, has completed an application, and has completed the Net Metering Interconnection Agreement Appendix C. The property owner must have the interconnection agreement not the third party. Other rates, terms and conditions applicable to the Third Party Owner as adopted by the Utility and the State of Washington shall apply.

“Washington Administrative Code or WAC” means the regulations of executive branch agencies which are issued by authority of statutes. Like legislation and the Constitution, regulations are a source of primary law in Washington State. The WAC codifies the regulations and arranges them by subject or agency. The online version of the WAC is updated twice a month and can be found at <http://apps.leg.wa.gov/wac/>

“Washington State Renewable Energy Cost Recovery Credit” means the credit (if any) provided in RCW 82.16.110 through 82-16-130 as amended and can be found at <http://apps.leg.wa.gov/RCW/default.aspx?cite=82.16> Details are described further in WAC 458-20-273.

“Utility” means the City of Ellensburg, which owns and operates the electrical distribution system onto which the applicant seeks to interconnect a Customer Generator Generation Facility.

Section 3 – General Terms and Conditions of Interconnection.

The general terms and conditions listed in this section shall apply to all generating facilities less than or equal to 100kW interconnecting to the Utility under these standards. Any Customer Generator Generating Facility must comply with these rules to be eligible to interconnect and operate in parallel with the Utility's electric system. These standards shall apply to all interconnecting generating facilities that are intended to operate in parallel with the Utility's electric system irrespective of whether the applicant intends to generate energy to serve all or a part of the applicant's load.

In order to ensure system safety and reliability of interconnected operations, all interconnected generating facilities shall be constructed and operated by Customer Generator in accordance with these standards and all other applicable federal, state, and local laws and regulations. If an applicant's generating facility will cause the sum of net metered systems generating capacity on that feeder circuit to exceed 10% of the feeder circuit's capacity, a system study may be required to ensure that system integrity shall be maintained for all customers. Applicants are encouraged to request a quick review of the proposal by the Utility electrical engineering staff to identify potential problems prior to completing the application.

Prior to final interconnection, all Customer Generators must execute a Net Metering Interconnection Agreement, Appendix - C and submit a completed Generating Facility Certificate of Completion Appendix - D to the Utility, and any other agreement(s) required for the disposition of the Customer Generator Generating Facility's electric power output. The Net Metering Interconnection Agreement between the Utility and Customer Generator outlines the interconnection standards, cost allocation and billing agreements, and on-going maintenance and operation requirements.

3.1 Applications:

All applications for interconnecting a generating facility pursuant to this chapter will be processed by the Utility in a non-discriminatory manner. There are two parallel applications for installing a Customer Generator Generating Facility;

- (i) City of Ellensburg Building Permit issued from the Community Development Department.
- (ii) Energy Services Department (UTILITY) Application for Interconnecting a Generating Facility.
- (iii) The applicant seeking to interconnect a generating facility under these rules must fill out and submit a signed Application for Interconnecting a Generating Facility Appendix - A form to the Utility. Information must be accurate, complete, and approved by the Utility. The Net Metering Interconnect Agreement Appendix - C must be signed by the applicant and Utility prior to interconnecting the Customer Generator Generating Facility.
- (iv) Application fees. The non-refundable interconnection application fee is set by the Utility according to facility size consistent with Chapter 9.92.100 of the Ellensburg City Code:
 - 0 – 25 kW -- \$200
 - 26 – 100 kW -- \$500
- (v) Applicant or Customer Generator shall promptly furnish the Utility with copies of such plans, specifications, records, and other information relating to the Customer Generator Generating Facility or the ownership, operation, use, or maintenance of the Customer Generator Generating Facility, as may be reasonably requested by the Utility from time to time.

3.2 Safety & Reliability:

For the purposes of public and working personnel safety, any non-approved generation interconnections discovered will be immediately disconnected from the Utility system. To ensure reliable service to all Utility customers and to minimize possible problems for other customers, the Utility will review the need for a dedicated-to-single-customer distribution transformer. If the Utility requires a dedicated distribution transformer, the applicant or generator shall pay for all costs of the new transformer and related facilities.

3.3 Metering:

- (i) **Net metering** Customer Generator facilities that produce electricity as set forth in RCW Chapter 80.60 as amended: The Utility shall install, own and maintain a revenue grade kilowatt-hour meter, or meters as the installation may determine, capable of registering the bi-directional flow of electricity at the point of common coupling at a level of accuracy that meets all applicable standards, regulations and statutes. The meter(s) may measure such parameters as time of delivery, power factor, voltage and such other parameters as the Utility shall specify. The applicant shall provide space for metering equipment. It will be the applicant's responsibility to provide the current transformer enclosure (if required), meter socket(s) and junction box after the applicant has submitted drawings and equipment specifications for Utility approval. The Utility may approve other generating sources for net metering but is not required to do so.
- (ii) **Production metering:** A detented revenue grade meter is required to record all generation produced for purposes of production credits. The Utility will provide and it will be billed as part of the cost of interconnection. All costs associated with the installation of production metering will be paid by the applicant. Utility shall have access to and will read the production meter once a year to administer any available credits such as the Washington State Renewable Energy Cost Recovery Credit. The production meter is not associated with the net metering the Utility uses to bill consumption and credit generation to the Customer Generator location.

3.4 Charges & Credits:

Customer Generator shall pay the fixed monthly customer charge associated with their rate class as the customer charge is separate from the net energy consumption charges and credits. The net energy measurement shall be calculated in the following manner:

- (i) The electric utility shall measure the net electricity produced or consumed during the billing period, in accordance with normal metering practices.
- (ii) If the electricity supplied by the electric utility exceeds the electricity generated by the Customer Generator and fed back to the electric utility during the billing period, the Customer Generator shall be billed for the net electricity supplied by the electric utility, in accordance with normal metering practices.
- (iii) If electricity generated by the Customer Generator exceeds the electricity supplied by the electric utility, the Customer Generator:
 - (a) Shall be billed for the appropriate customer charges for that billing period, in accordance with RCW 80.60.020; and
 - (b) Shall be credited for the excess kilowatt-hours generated during the billing period, with this kilowatt-hour credit appearing on the bill for the following

billing period.

- (iv) If a Customer Generator requests, an electric utility shall provide meter aggregation.
 - (a) For Customer Generators participating in meter aggregation, kilowatt-hours credits earned by a net metering system during the billing period first shall be used to offset electricity supplied by the electric utility.
 - (b) Not more than a total of one hundred kilowatts shall be aggregated among all Customer Generators participating in a generating facility under this subsection.
 - (c) Excess kilowatt-hours credits earned by the net metering system, during the same billing period, shall be credited equally by the electric utility to remaining meters located on all premises of a Customer Generator at the designated rate of each meter.
 - (d) Meters so aggregated shall not change rate classes due to meter aggregation under this section.
- (v) On April 30th of each calendar year, any remaining unused kilowatt-hour credit accumulated during the previous year shall be purchased from the Customer Generator at the City's net wholesale cost of power.
- (vi) Charges by the Utility to the applicant or generator in addition to the application fee will be compensatory and applied as appropriate. Such charges may include, but are not limited to, transformers, production meters, and Utility testing, qualification, and approval of non-UL 1741 listed equipment. The Customer Generator shall be responsible for any costs associated with any future upgrade or modification to its interconnected system required by modifications in the Utility's electric system.

3.5 Labeling:

Common labeling furnished or approved by the Utility and in accordance with NEC requirements must be posted on meter base, disconnects, and transformers informing working personnel that generation is operating at or is located on the premises.

3.6 Insurance:

No additional insurance will be necessary for a net metered facility that is a qualifying Customer Generator Generating Facility under chapter 80.60 RCW. A qualifying facility under RCW 80.60 is one that is 100 kW or less; and that uses water, wind, solar energy, fuel cells or biogas from animal waste to produce electricity. For other generating facilities permitted under these standards but not a qualifying facility under RCW Chapter 80.60, additional insurance, limitations of liability and indemnification may be required by the Utility.

3.7 Modifications:

Prior to any future modification or expansion of the Customer Generator Generating Facility, the generator will obtain Utility review and approval. The Utility reserves the right to require the generator, at the generator's expense, to provide corrections or additions to existing electrical devices in the event of modification of any government or industry regulations and standards.

3.8 Protection:

For the overall safety and protection of the Utility system, RCW Chapter 80.60 currently limits interconnection of generation for net metering to 0.50 percent of the Utility's peak demand during 1996 (186 kW maximum net metered load for Utility). Additionally, interconnection of generating facilities to individual distribution feeders will be limited to 10-percent of the feeder's peak capacity. However, the Utility may, in its sole discretion, allow additional generation interconnection beyond these stated limits, or, if indicated by engineering, safety or reliability studies, restrict or prohibit new or expanded interconnected generation capacity on any feeder, circuit or network.

It is the responsibility of the generator to protect its facilities, loads and equipment and comply with the requirements of all appropriate standards, codes, statutes and authorities.

3.9 Disconnection, Transfer or Sale:

Customer Generator may disconnect the generating facility at any time; provided that the generator provides reasonable advance notice to the Utility.

Customer Generator shall notify the Utility prior to the sale or transfer of the Customer Generator Generating Facility, the interconnection facilities or the premises upon which the facilities are located. The applicant or generator shall not assign its rights or obligations under any agreement entered into pursuant to these rules without the prior written consent of the Utility, which consent shall not be unreasonably withheld.

Section 4 – Adoption by Reference.

In this chapter, the Utility incorporates by reference all or portions of regulations and standards identified below. They are available for inspection at the Utility's office or as otherwise indicated. The publications, effective date, references within this chapter, and availability of the resources are as follows:

- (i) The National Electrical Code is published by the National Fire Protection Association (NFPA). The National Electrical Code is a copyrighted document. Copies are available from the NFPA at 1 Batterymarch Park, Quincy, Massachusetts, 02169 or at internet address <http://www.nfpa.org>
- (ii) National Electric Safety Code (NESC). Copies of the National Electric Safety Code are available from the Institute of Electrical and Electronics Engineers at <http://standards.ieee.org/nesc>
- (iii) Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems. The Utility adopts the most recent version adopted by IEEE. Copies of IEEE Standard 1547 are available from the Institute of Electrical and Electronics Engineers at <http://www.ieee.org/web/standards/home>
- (iv) Institute of Electrical and Electronics Engineers (IEEE) Standard 929, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems. Copies of IEEE Standard 929 are available from the Institute of Electrical and Electronics Engineers at <http://www.ieee.org/web/standards/home>

- (v) American National Standards Institute (ANSI) Standard C37.90,
- (vi) IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus. Copies of IEEE Standard C37.90 are available from the Institute of Electrical and Electronics Engineers at <http://www.ieee.org/web/standards/home>
- (vii) Institute of Electrical and Electronics Engineers (IEEE) Standard 519, Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems. Copies of IEEE Standard 519 are available from the Institute of Electrical and Electronics Engineers at <http://www.ieee.org/web/standards/home>
- (viii) Underwriters Laboratories (UL), including UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems. UL Standard 1741 is available from Underwriters Laboratory at <http://www.ul.com>.
- (ix) Occupational Safety and Health Administration (OSHA) Standard at 29 CFR 1910.269. Copies of Title 29 Code of Federal Regulations are available from the U.S. Government Online Bookstore, <http://bookstore.gpo.gov/>, and from various third-party vendors.
- (x) Washington Division of Occupational Safety and Health (DOSH) Standard, chapter 296-155 WAC. The DOSH Standard is available from the Washington Department of Labor and Industries at P.O. Box 44000, Olympia, WA 98504-4000, <http://www.lni.wa.gov>

Section 5 – Technical Standards for Interconnection

5.1 Any Customer Generator Generating Facility desiring to interconnect with the Utility's electric system or modify an existing interconnection must meet all applicable minimum technical specifications, in their most current approved version, as set forth in this section.

5.2 A generator 100 kW or smaller must comply with all requirements from Table 1 that are applicable to the interconnection of that Customer Generator Generating Facility.

Table 1 100 kW or Smaller				
Feature	Single-Phase		Three-Phase	
	*Capacity			
	≤ 50 kW Inverter based	≤ 50 kW Non- inverter based	≤ 100 kW Inverter based	≤ 100 kW Non- inverter based
IEEE 1547 compliant	√	√	√	√
UL 1741 listed	√		√	
Interrupting devices (capable of interrupting maximum available fault current)	√ [8]	√	√ [8]	√
Interconnection disconnect device (manual, lockable, visible, accessible)	√ [1]	√	√	√
System Protection		√ [3][4][6]		√ [3][4][5][6]
Over-voltage trip	√ [8]	√	√ [8]	√
Under-voltage trip	√ [8]	√	√ [8]	√
Over/Under frequency trip	√ [8]	√	√ [8]	√
Automatic synchronizing check		√		√
Ground over-voltage or over-current trip for Utility system faults.				√ [2]
Power factor		√ [7]		√ [7]
√ – Required feature (blank = not required) * Capacity of single or aggregate generation [1] – Utility may choose to waive this requirement [2] – May be required by the Utility; selection based on grounding system [3] – No single point of failure shall lead to loss of protection. [4] – All protective devices shall fully meet the requirements of ANSI C37.90 [5] – Utility will specify the transformer connection. [6] – It is the customers' responsibility to ensure that their system is effectively grounded as defined by IEEE Std. 142 at the point of common coupling . [7] – Variance may be allowed based upon specific requirements per Utility review. Charges may be incurred for losses. [8] - UL 1741 listed equipment provides required protection.				

- 5.3** Any single or aggregated Customer Generator Generating Facility with a capacity greater than 50 kW may require a three-phase interconnection. Customer Generator needs to consult with the Utility for what may be needed to interconnect a larger Generating Facility.
- 5.4** The specifications and requirements in this section are intended to mitigate possible adverse impacts caused by the Customer Generator Generating Facility on Utility equipment and personnel and on other customers of the Utility. They are not intended to address protection of the Customer Generator Generating Facility itself, Customer Generator Generating Facility personnel, or its internal load. It is the responsibility of the Customer Generator Generating Facility to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect its own facilities, personnel, and loads.
- 5.5** The specifications and requirements in this section shall apply generally to the Customer Generator electric generation equipment (or any other facilities or equipment not owned by the Utility) to which this standard and Net Metering Interconnection Agreement(s) apply throughout the period encompassing the generator's installation, testing and commissioning, operation, maintenance, decommissioning and removal of said equipment. The Utility may verify compliance at any time, with reasonable notice.
- 5.6** The generator shall comply with the requirements in (i), (ii) and (iii) of this subsection. However, at its sole discretion, the Utility may approve alternatives that satisfy the intent of, and/or may excuse compliance with, any specific elements of these requirements except local, state and federal building codes.
- (i) Code and standards.* Applicant shall conform to all applicable codes and standards for safe and reliable operation. Among these are the National Electric Code (NEC), National Electric Safety Code (NESC), the Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and Underwriters Laboratories (UL) standards, and local, state and federal building codes. The generator shall be responsible to obtain all applicable permit(s) for the equipment installations on its property.
 - (ii) Safety.* All safety and operating procedures for joint use equipment shall be in compliance with the Occupational Safety and Health Administration (OSHA) Standard at 29 CFR 1910.269, the NEC, Washington Administrative Code (WAC) rules, the Washington Division of Occupational Safety and Health (DOSH) Standard, and equipment manufacturer's safety and operating manuals.
 - (iii) Power quality.* Installations will be in compliance with all applicable standards including IEEE Standard 519-1992 Harmonic Limits.

Section 6 – Specific Interconnection Requirements.

Applicant must provide evidence that its generation will never result in reverse current flow through the Utility's network protectors. All instances of interconnection to the Utility distribution systems shall require review and written pre-approval by the Utility prior to interconnection.

6.1 Inverter-based Interconnections:

The purpose of the protection required for Customer Generator Generation Facilities is to prevent islanding and to ensure that inverter output is disconnected when the Utility source of electricity is de-energized. Inverters certified by an independent nationally recognized testing laboratory to meet the requirements of UL1741 must use undervoltage, overvoltage, and over/under frequency elements to detect loss of utility power and initiate shutdown.

An interrupting device must be provided which is capable of safely interrupting the maximum available fault current (typically the maximum fault current is that supplied by the Utility). The Customer Generator Generating Facility must operate within the voltage and power factor ranges specified by the Utility. Variance may be allowed based on specific requirements, and charges may be incurred for losses.

6.2 Non-inverter based interconnections:

In addition to the requirements contained in Section 5, non-inverter based interconnection requests may require more detailed Utility review, testing, and approval, at applicant cost, of the equipment proposed to be installed to ensure compliance with applicable technical specifications, in their most current approved version, including:

- (i) IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, for systems 10 MVA or less.
- (ii) ANSI Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus.
- (iii) Applicants proposing such interconnection may also be required to submit a power factor mitigation plan and/or other studies or plans as appropriate for Utility review and approval.

Section 7 – Application for State or Federal Credits.

Presently the Washington State Department of Revenue administers State credits for renewable energy systems based on what the legislature creates and the Governor signs into law. Information can be found at: <http://dor.wa.gov/Content/Home/Default.aspx> and application form at --- <http://dor.wa.gov/Docs/forms/Misc/RenewEnerSystCustCstRecIncPmtAppl.pdf> Washington State then puts local administration onto the serving utility. Customer Generator is responsible for completing State and/or Federal applications for any and all credits the Generating Facility may be eligible for except energy consumption credits. The Customer Generator is required to provide Utility with all necessary documentation which may include system certification and tax identification numbers to facilitate the Utility's administration of available credits.

Ellensburg City Council adopted a resolution in February 2016 to allow further net metered customers to interconnect to the City. However, new net metered customers will not be eligible to participate in the State Renewable Energy Cost Recovery program as it presently exists because the City's allocation of state energy credits has already been exhausted by existing customers. If the legislature creates a new program after February 2016 new net metered customers may be eligible to participate in a new program as they meet eligibility.

Section 8 – Interconnection Agreements and Costs.

8.1 Application for Interconnecting a Generation Facility Appendix - A when submitted and accepted by the Utility as complete, the Utility shall determine if any additional engineering, safety, reliability or other studies are required. If the Utility determines that additional studies are required, the Utility will provide to the applicant or generator a Study Agreement. The Study Agreement shall include a description of the studies and a good faith estimate of the cost to perform the studies. The applicant or generator shall have thirty (30) business days to return the completed Study Agreement along with any deposit required by the Utility against the estimated costs. Upon completion of the additional studies, the Utility shall provide the applicant or generator with the results of the studies, including any additional interim agreements, such as construction agreements, that may be necessary and a cost estimate to complete the interconnection. If the additional studies determine that the interconnection is denied pursuant to RCW 80.60, the Utility shall provide notice of denial to the applicant and the reasons for the denial.

8.2 Net Energy Metering Interconnection Agreement Appendix - C shall be completed and executed by the applicant within thirty (30) days of the Utility approving the applicants' application for interconnecting a generating facility. Applicant shall also make the payment required by the Utility against the estimated Utility costs to complete the interconnection. Failure to return the completed Net Metering Interconnection Agreement and paying the required fees within 30 days shall result in termination of the application for interconnection of a Generating Facility by the Utility. Terms and conditions for termination of the Net Metering Interconnection Agreement shall be contained within such agreement.

Section 9 – Generating Facility Certificate of Completion.

All generating facilities must obtain an electrical permit and pass electrical inspection before they can be connected or operated in parallel with the Utility's electric system. Customer Generator shall provide the Utility written documentation that the Customer Generator Generating Facility has been installed and inspected in compliance with the local building and State of Washington electrical codes. The Utility must review, approve documentation and complete Appendix D "Generating Facility Certificate of Completion" before the customer's interconnected generating facility may be operated in parallel with the Utility's electrical system. The Utility shall not unreasonably withhold such approval, but shall have the right to inspect and test the interconnection facilities in accordance with IEEE 1547.1, as amended, prior to parallel operation.

Section 10 – Filings

The Utility shall maintain on file for inspection at its place of business, the charges, terms and conditions for interconnections pursuant to these standards. Such filing shall include:

- Appendix A – Application for Interconnecting a Generating Facility
- Appendix B – Contingent Approval to Interconnect Generating Facility
- Appendix C – Net Metering Interconnection Agreement
- Appendix D – Generating Facility Certificate of Completion
- Washington State Renewable Energy System Certification if Applicable

APPENDIX A – Application for Interconnecting a Generating Facility

All applications for a interconnecting a generating facility will be reviewed by the Utility for compliance with the rules of this standard. If the Utility in its sole discretion finds that the application does not comply with this standard, the Utility may reject the application. If the Utility rejects the application, it shall provide the applicant with written notification stating its reasons for rejecting the application.

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

Processing Fee

A non-refundable application fee of \$200 (25kW or less) or \$500 (over 25kW) consistent with Chapter 9.92.100 of the Ellensburg City Code must accompany this Application. Application will be valid for one (1) year after submitting completed application form.

Interconnection Customer

NAME:					
CONTACT PERSON:					
ADDRESS:					
CITY:		STATE:		ZIP:	
PHONE:		CELL:			
EMAIL:					
OTHER CONTACT:					
ADDRESS:					
CITY:		STATE:		ZIP:	
PHONE:		CELL:			
EMAIL:					

OWNERSHIP

Owner of the generation facility (include % ownership by any 3 rd party):	
---	--

Generating Facility Information

LOCATION (if different from above):			
Location ID/Customer ID			
Electrical Service Panel Size in Amps:		Phase	

INVERTER MANUFACTURER:				MODEL:						
RATED POWER OUTPUT OF INVERTER IN WATTS:				x _____ QTY OF INVERTERS = TOTAL WATTS:						
PHASE (circle):		1 PH		3 PH						
SMART INVERTER Y/N										
GENERATOR NAMEPLATE CAPACITY:										
ENERGY SOURCE:		SOLAR		WIND		HYDRO		DIESEL		NATURAL GAS
SOURCE MFG:					MODEL:					
IS EQUIPMENT UL1741 LISTED?				YES				NO		
IF YES ATTACH MFG CUT-SHEET SHOWING UL1741 LISTING										
LIST COMPONENTS OF THE GENERATING FACILITY EQUIPMENT PACKAGE THAT ARE CURRENTLY CERTIFIED:										
EQUIPMENT TYPE					CERTIFYING ENTITY/STANDARD					
ESTIMATED INSTALLATION DATE:					ESTIMATED DATE IN SERVICE:					

Customer Generator Signature:

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to comply with the Customer Generator Net Metered Interconnection Standards.

Signed: _____

Title: _____

Date: _____

APPENDIX B – Contingent Approval to Interconnect the Generating Facility
 (For Utility Use Only)

The application for interconnecting a Generating Facility is approved contingent upon the Customer Generator entering into the Net Metering Interconnection Agreement.

Utility Representative:				
Title:				
Date:				
Signature:				
Application ID / Work Request				
Utility waives inspection / witness test?		YES		NO
Cumulative Capacity of net metering systems is less than 186 Kw?		YES		NO
APPROVED WITH COMMENTS		REJECTED WITH COMMENTS		

COMMENTS

APPENDIX C – Net Metering Interconnection Agreement

Customer Owned Electric Generating Facilities of 100 Kilowatts or Less

This Agreement dated this _____ day of _____, _____ (month, year), by and between the City of Ellensburg Light Department (“Utility”), and _____, (“Customer Generator”), hereinafter referred to collectively as “Parties” and singularly as “Party.”

WHEREAS, Customer Generator is a customer of the Utility who submitted an application for interconnecting a Generating Facility to the Utility electrical distribution system and;

WHEREAS, Per RCW 80.60.20 the Utility Shall offer to make net metering available to eligible customers-generators on a first-come, first served basis until the cumulative generating capacity of net metering systems equal 0.5 percent (eff Jan, 2014) of the utility's peak demand during 1996 (37.21 MW), which equals 186 kW for Utility. Not less than one-half of the utility's 1996 peak demand available for net metering systems shall be reserved for the cumulative generating capacity attributable to net metering systems that generate renewable energy and;

WHEREAS, it is the policy of the Ellensburg City Council to promote renewable energy and does not want to limit the cumulative generating capacity of net metering systems to what is identified in RCW 80.60.20 rather impose a capacity limit based on what the Utility electrical distribution system can interconnect without impacting other Utility customers or the distribution system;

NOW, THEREFORE, the Parties hereby agree, Customer Generator shall not interconnect the Generating Facility to Utility’s system until Utility sends and Customer Generator receives written authority in the form of Appendix D “Generating Facility Certificate of Completion” to this Agreement. The parties understand and agree that interconnection of the Generating Facility by Customer Generator, its agents, or representatives prior to receipt of Utility’s written authorization will create potential safety and reliability issues. Customer Generator hereby agrees to indemnify and hold harmless Utility and its agents, employees and representatives from any and all claims, costs, damages or losses (including without limitation, attorneys’ fees) arising out of any such unauthorized interconnection by Customer Generator.

1. Term and Termination

This Agreement shall commence when signed by both the Utility and Customer Generator and terminate with any change in ownership of the Generating Facility or Customer Generator premises except as noted in Section 13 “Assignment”, or by written agreement signed by both parties. Utility shall have the right to terminate this Agreement as set forth in Section 5, “Disconnection”.

2. Customer Generator, Generating Facility

Customer Generator has elected, in accordance with RCW 80.60 et seq., to operate either a net energy facility that produces electricity and or 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 one hundred (100) kilowatts, in parallel with the Utility's distribution facilities. The Customer Generator electric generating facility is intended to offset either part or all of the Customer Generator electrical requirements.

The Utility will not provide wheeling for a Net Metered Customer Generator as generation from the net metering electrical generating facility **will only be applied to consumption at the location of said electrical generating facility except as provided in paragraph 3.4 below.**

The Application for Customer Generator Net Metered Electrical Generation, including the location of the electrical generating installation facility and details on the electrical generating unit(s) is hereby incorporated into this agreement as Appendix A.

The electrical generating system facility used by the Customer Generator shall be located on the Customer Generator premises. It shall include all equipment necessary to meet applicable safety, power quality, and Interconnection requirements established by the National Electrical Code, National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, and the Utility's Customer Generator Net Metering Interconnection Standards. The Utility shall have the sole authority to determine which Interconnection requirements set forth herein are applicable to Customer Generator proposed generating facility.

3. Payment for Net Energy

- 3.1. The Utility shall measure the net electricity produced or consumed during the billing period, in accordance with normal metering practices and within the limitations of the Utility billing system.
- 3.2. If the electricity supplied by the Utility exceeds the electricity generated by the Customer Generator and fed back to the Utility during the billing period, the Customer Generator shall be billed for the net electricity supplied by the Utility, in accordance with normal metering practices.
- 3.3. If electricity generated by the Customer Generator exceeds the electricity supplied by the Utility, the Customer Generator:
 - (i) Shall be billed for the appropriate customer charges for that billing period, in accordance with RCW 80.60.020; and
 - (ii) Shall be credited for the excess kilowatt-hours generated during the billing period, with this kilowatt-hour credit appearing on the bill for the following billing period.
- 3.4. If a Customer Generator requests, an Utility shall provide meter aggregation.
 - (i) For Customer Generators participating in meter aggregation, kilowatt-hours credits earned by a net metering system during the billing period first shall be used to offset electricity supplied by the Utility.
 - (ii) Not more than a total of one hundred kilowatts shall be aggregated among all Customer Generators participating in a generating facility under this subsection.
 - (iii) Excess kilowatt-hours credits earned by the net metering system, during the same billing period, shall be credited equally by the Utility to remaining meters located on all premises of a Customer Generator at the designated rate of each meter.
 - (iiii) Meters so aggregated shall not change rate classes due to meter aggregation under this section.
 - (vii) On April 30th of each calendar year, any remaining unused kilowatt-hour credit accumulated during the previous year shall be purchased from the Customer Generator at the City's net wholesale cost of power.

4. Interruption or Reduction of Delivery of Energy

The Utility may require Customer Generator to interrupt or reduce energy deliveries. Whenever possible, the Utility shall give Customer Generator reasonable notice of the possibility that interruption or reduction of deliveries that may be required.

- 4.1 When necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of its equipment or part of its utility system; or
- 4.2 If it determines that curtailment, interruption, or reduction is necessary because of emergencies, force or compliance with prudent electrical practices.
- 4.3 Notwithstanding any other provision of this Agreement, if at any time the Utility determines that either:
 - (i) the Generating Facility may endanger Utility personnel, or
 - (ii) the continued operation of Customer Generator Generating Facility may endanger the integrity of the Utility's electric system, then the Utility shall have the right to temporarily or permanently disconnect Customer Generator Generating Facility from the Utility's electric system. Customer Generator Generating Facility shall remain disconnected until such time as the Utility is satisfied that the condition(s) referenced in (4.1) to (4.3) of this section 4 have been corrected.
- 4.4 Utility will not be liable for any reduction of generation output or credits associated with an interruption or reduction of delivery of energy to the Utility.

5. Disconnection

- 5.1 Utility shall have the right to disconnect the Customer Generator Generating Facility from Utility's system at the meter:
 - (i) when necessary to maintain safe electrical operating conditions;
 - (ii) if the Generating Facility does not meet required codes or standards;
 - (iii) if, in Utility's sole judgment, the Generating Facility at any time adversely affects or endangers any person or property, Utility's operation of its electric distribution system, or the quality of Utility's electric service to other customers;
 - (iiii) in the event of Customer Generator's failure to maintain its retail electric service account for the loads served at the Generating Facility as active and in good standing; or (e) in the event of Customer Generator's breach of any provision of this Agreement. In the event that Utility disconnects the Generating Facility due to clauses (i), (ii) or (iii) above, Utility may immediately terminate this Agreement, without liability to the Customer Generator, by delivering written notice to the Customer Generator of the failure to meet the required codes and standards, maintain account good standing or other breach of this Agreement.
- 5.2 The Customer Generator may disconnect the Generating Facility at any time, provided that the Customer Generator provides reasonable advance written notice to Utility.

6. Interconnection

- 6.1 Customer Generator shall interconnect to the Utility at the Utility's bi-directional meter.
- 6.2 Customer Generator 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 Net Metering Interconnection Standards.
- 6.3 Customer Generator shall not commence parallel operation of the generating facility until receiving written approval of the Interconnection facilities in the form of Appendix D 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 Generator's protective apparatus. Customer Generator shall notify the Utility when testing is to take place.

7. Maintenance and Permits

Customer Generator shall:

- 7.1 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 Customer Generator Net Metered Interconnection Standards, and
- 7.2 Obtain any governmental authorizations and permits required for the construction and operation of the electric Generating Facility and Interconnection facilities, including but not limited to electrical permit(s), and
- 7.3 Reimburse the Utility for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer Generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer Generator Generating Facility or failure to maintain Customer Generator Generating Facility as required in 7.1 of this Section 7.

8. Access to Premises

The Utility may enter Customer Generator premises or property to:

- 8.1 Inspect, with prior notice, at all reasonable hours, Customer Generator Generating Facility protective devices,
- 8.2 Read meter(s), and
- 8.3 Disconnect at the Utility's meter or transformer, without notice, the Generating Facility if, in the Utility's opinion, a hazardous condition 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 Generator Generating Facility, or lack of properly operating protective devices or inability to inspect the same.
- 8.4 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.

9. Indemnity and Liability

- 9.1 In no event shall either party be liable to the other party for indirect, special, incidental, or consequential damages, including but not limited to the loss of revenues or profits, cost of substitute services, cost of purchased power, loss of opportunity, loss of

- goodwill, loss of data, governmental sanctions or penalties or claims of third parties, whether such liabilities arise as a result of breach of contract, warranty, indemnity, tort, negligence, strict liability or otherwise; and the Utility and the Customer Generator hereby release each other from any such liabilities; provided that the foregoing limitations of liability and releases shall not apply to the extent any of the foregoing arises as a result of gross negligence, recklessness or willful misconduct of either party.
- 9.2 The Customer Generator 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 Interconnection with performance of the agreement or which may occur or be sustained by Name of Utility on account of any claim or action brought against the Utility for any reason including by not limited to loss to the electrical system of the Customer Generator caused by or arising out of an electrical disturbance.
- 9.3 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 or in Interconnection 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 Generator'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.
- 9.4 The provisions of the Section 9 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.
- 9.5 The Utility shall have no liability, ownership interest, control or responsibility for the Customer Generator Generating Facility or its Interconnection with the Utility's electric system, regardless of what the Utility knows or should know about the Customer Generator Generating Facility or its Interconnection.
- 9.6 Customer Generator 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.

10. Independent Contractors

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 Interconnection with this Agreement.

11. Governing Law

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. Any lawsuit concerning the Agreement or this Amendment must be filed in the Superior Court for Kittitas County, Washington.

12. Future Modifications and Expansions

Any future modification or expansion of the Customer Generator 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 Generator, at Customer Generator's expense, to provide modifications 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.

13. Amendments, Modifications or Waiver

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.

14. Assignments

The Customer Generator 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 Generator's obligations under this Agreement are met and that none of Customer Generator's obligations under this Agreement are transferred to the Utility as a result of default, bankruptcy, or any other cause.

15. Appendices

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

Appendix A: Application for Interconnecting a Generating Facility.

Appendix B: Contingent Approval to Interconnect the Generating Facility

Appendix D: Generating Facility Certificate of Completion

16. Notices

All written notices shall be directed as follows:

City of Ellensburg:

City of Ellensburg
 Energy Services Dept.
 501 N Anderson St
 Ellensburg, WA. 98926

Customer Generator:

Name: _____

Address _____

Ellensburg, WA. 98926

17. Signatures

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

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

CUSTOMER GENERATOR:	CITY OF ELLENSBURG:
Signature	Signature
Print name	Print name
Title	Title
Date	Date

APPENDIX D – Generating Facility Certificate of Completion

CUSTOMER NAME ADDRESS:			
SYSTEM NAMEPLATE CAPACITY IN KW			
DATE UTILITY INSTALLED METER:		BI-DIRECTIONAL METER # READING:	
WORK REQUEST NUMBER:			
GENERATOR INSTALLER:			
METER INSTALLER:			
L&I PERMIT NUMBER:			