PRE-AGENDA
FOR THE REGULAR MEETING OF
CLALLAM COUNTY PUBLIC UTILITY DISTRICT #1
BOARD OF COMMISSIONERS
JUNE 10, 2019

- **Consent Agenda Items**
The Commissioners will consider approving Consent Agenda items.

- **Recommendation Memo for Award of Bid 1No. 90803 to McKaig/Evergreen**
  Staff requests that the Commissioners approve of the award of Bid No. 190803 for six (6) three-phase 15 kV power circuit breakers to McKaig/Evergreen for a not-to-exceed contract price of $94,792.11.

- **RESOLUTION 2149-19 Authorizing the Execution of an Interlocal Agreement with the City of Sequim for Electric Vehicle Charging Stations**
  Staff requests that the Commissioners pass Resolution 2149-19, authorizing the execution of an interlocal agreement with the City of Sequim for electric vehicle charging stations.

- **RESOLUTION 2150-19 Establishing a District Policy on Interconnection of Electric Generating Facilities**
  Staff requests that the Commissioners pass Resolution No. 2150-19, establishing a District policy on interconnection generating facilities and rescinding Resolution No. 2097-18.

- **RESOLUTION 2151-19 Authorizing the Disposal of District Property**
  Staff requests that the Commission pass Resolution No. 2151-19, declaring that upon the installation of Switch #1171, the District's Switch #1170, Pole #2902-241861, and Pole #2902-241862 shall be surplus to the District's needs, and authorizing the General Manager to convey those facilities to PUD No. 1 of Jefferson County at such time as the General Manager determines is appropriate.

- **EXECUTIVE SESSION**
The Commissioners will hold an executive session to consider the acquisition of real estate by purchase.

The Commissioners will also consider the customary business matters associated with approval of payments, minutes of the previous meeting, reports from Commissioners and staff, comments from the public, and other items of information or general business. Items may be added to, or removed from, the agenda at the meeting.
AGENDA
FOR THE REGULAR MEETING OF
CLALLAM COUNTY PUBLIC UTILITY DISTRICT #1
BOARD OF COMMISSIONERS
JUNE 10, 2019

1. CALL TO ORDER

2. APPROVAL OF CONSENT AGENDA
   a. Minutes of the 5/19/19 regular meeting.
   b. Claim vouchers from 5/13/19, 5/20/19, 5/28/19, and 6/3/19 for a total of $4,025,172.68.
   c. Payroll voucher for the period of 5/1/19 through 5/15/19.
   d. Write off of delinquent accounts from the June 2019 active accounts receivable in the total amount of $9,108.11.
   e. Contractor prequalification for Pacific Pole Inspection in the amount of $350,000.00.

3. AGENDA REVISIONS

4. COMMENTS FROM THE PUBLIC
   The purpose of this meeting is to conduct PUD business. It is not a public hearing where public input is required. However, the Commission does value the public’s opinion, so it invites members of the public to provide comment on any topic. Board members and the General Manager will not comment, answer questions, or take action in response. If the Commission feels that an issue requires a response, they may instruct the General Manager to respond appropriately or discuss it at a future meeting. The time limit for comments is 3 minutes per person. The Board President may limit the total time allowed for public comment in order to allow adequate time to conduct PUD business.

5. BUSINESS ITEMS
   a. Recommendation Memo for award of Bid No. 190803
   b. RESOLUTION 2149-19 Authorizing the  John Purvis/Mattias Jarvegren
      Execution of an Interlocal Agreement with the City of Sequim for Electric Vehicle Charging Stations
   c. RESOLUTION 2150-19 Establishing a District Policy on Simon Barnhart
      Interconnection of Electric Generating Facilities
   d. RESOLUTION 2151-19 Authorizing the Disposal of District Property Simon Barnhart

6. CORRESPONDENCE/COMMUNICATIONS

7. COMMISSIONER REPORTS

8. STAFF REPORT
   a. Port Lease/Negotiation
   b. NWPPA safety reward received

Doug Nass and John Purvis
Doug Nass
9. BOARD'S ACTION ITEMS FOR STAFF

10. EXECUTIVE SESSION
    a. The Commissioners will hold an executive session to consider the acquisition of real estate by purchase.

11. ADJOURN
CLALLAM COUNTY PUBLIC UTILITY DISTRICT #1
Minutes of the Regular Meeting of the Board of Commissioners
Carlsborg Main Office | 104 Hooker Road | Sequim, WA 98382
May 13, 2019

Commissioners Present:
Will Purser, President
Jim Waddell, Vice President
Dave Anderson, Secretary

Staff Present:
Doug Nass, General Manager
John Purvis, Assistant General Manager
Simon Barnhart, General Counsel
Sean Worthington, Finance Manager/Treasurer
Lori Carter, Auditing Officer
Bill Decker, Forks Operations Superintendent
Colin Young, Engineer
Travis McClain, Water and Wastewater Systems Coordinator
Brad Teel, Sr. Power Systems Project Coordinator
Nicole Clark, Communications Manager
Teresa Lyn, Executive Assistant
Doug Adams, Transmission and Substation System Manager
Jamie Spence, HR Manager
Erica Gasche, HR Coordinator
Leslie Sommerville, HR & Safety Administrative Assistant
Charlie McCaughan, Procurement & Facilities Supervisor

Others Present
Werner Buehler
Patti Morris

The meeting commenced at 1:30 PM.

EMPLOYEE SERVICE AWARDS
Service awards were presented to PUD employees.

CONSENT AGENDA
Upon recommendation of staff, and upon motion of Commissioner Anderson, seconded by Commissioner Waddell and carried, the Commission approved the following:

- Minutes of the April 22rd meeting;
- Payment of claim vouchers as certified by the Auditing Officer and General Manager for weeks 4/29/19 and 5/6/19 for the combined total amount of $459,258.86;
- Payroll Voucher for the period from 4/18/19 through 4/30/19;
- Write off of Delinquent Accounts from 5/1/19 for the amount of $5,240.86; and
PUBLIC COMMENT
Patti Morris commented on her customer service interaction with PUD CSR Shanee Wimberly. Mrs. Morris was very complimentary and said that Shanee went “way above and beyond” in addressing and following up on her service issue most professionally.

BUSINESS ITEMS
a. Upon recommendation of staff, and upon motion of Commissioner Anderson, seconded by Commissioner Waddell and carried, the Commission authorized the award of Bid Number 191001 to Pacific Pole Inspection, LLC from Kelso, WA for pole inspection, treating, and reporting for 2019, for a not-to-exceed amount of $120,250.00 (not including WSST).

b. Upon recommendation of staff, and upon motion of Commissioner Anderson, seconded by Commissioner Waddell and carried, the Commission authorized the award of Bid Number 191002 to Power Trip Energy Corporation for the Sequim Solar PV Project, for a not-to-exceed amount of $108,350.00 (not including WSST). In response to Commissioner Pursers’ inquiry, Communications Manager Nicole Clark advised that we currently have a subscription rate of 28% for this community project (576 units out of 2000 units). Each customer can buy up to 125 units.

c. Upon recommendation of staff, and upon motion of Commissioner Waddell, seconded by Commissioner Anderson and carried, the Commission adopted RESOLUTION 2147-19 Establishing the Current Schedule of Deposits and Charges and Line Extension Unit Prices.

d. Upon recommendation of staff, and upon motion of Commissioner Anderson, seconded by Commissioner Waddell and carried, the Commission adopted RESOLUTION 2148-19 Authorizing the of Surplus Property consisting of a Topcon Robotic Station and a Topcon Surveying Data Collector for a combined value of $4500.00, as these items are no longer supported by the manufacturer and are not compatible with current computers.

CORRESPONDENCE AND COMMUNICATION
GM Doug Nass reported on a letter from Clallam County Commissioners to State legislators advising them of the detrimental impact that the State’s refusal to pay election costs in even-numbered years is having on the County’s budget. He advised that consequently the District may in the future be asked to bear some of these election costs. GM Nass also referred to a recent PDN article on the recent acceleration of snowpack melting, which is predicted to result in a dry summer on the Peninsula and potentially, a reduced water supply.

COMMISSIONER REPORTS
Commissioner Waddell reported that he attended May’s Public Power Council (PPC). Topics of conversation were the Snake River dams and BPA. Commissioner Waddell said that BPA’s Sr. Vice President of Power Joel Cook feels that the Snake River dams are an asset and that legislation would be required to divest them. Commissioner Waddell stated that if it is proved out that the
dams are not profitable that we should a choice in not investing in them. He believes that the dam’s efficiency ratings are dropping and that BPA is cherry picking the information that they are disseminating regarding the dams. He also said there was still the question if BPA had booked against their reserves the billions that they have spent on Snake River fish mitigation.

Commissioner Purser reported that he attended Energy Northwest meetings. Topics were Board of Director policies, FY20 budget, the pros and cons of public bidding on nuclear projects, recent legislation, compensation, and the decommissioning of the Columbia Generating Station. Additionally there was discussion about the possibility of obtaining renewable status for nuclear, due to its zero-carbon emissions, which could translate into a number of small nuclear projects; and a report from BPA that predicts a dry year. Commissioner Purser said he enjoyed talking with staff and meeting the public while attending the annual PUD employee BBQ at the Irrigation Festival parade site.

**STAFF REPORT**
GM Doug Nass attended PPC and reported that BPA very likely will go into the Energy Imbalance Market (EIM). He gave a brief summary of recent legislation concerning electric vehicles, broadband, utility worker harassment, renewable hydrogen, and the net metering requirement which mandates that utilities expand solar net metering to 4% of their load. He also spoke about the Governor’s bill for 100% clean energy by 2045, saying that the District is probably already there at 98% with a combination of hydro and nuclear RECs. GM Nass also relayed to the Board that the District will be partnering with the League of Women Voters at their request on their upcoming community water education endeavor, with the caveat that the League must obtain prior review and approval before using the District’s logo on any of their materials. He also advised that he is putting together a schedule for a series of commission orientations throughout the summer, to be noticed as public meetings if more than one Commissioner attends at a time.

**BOARD ACTION ITEMS FOR STAFF**
The Board requested follow up on the following issues:

a. Convey information to customers that the Interconnection Requirements Policy has been modified to eliminate the prior requirement to collocate a disconnect with the PUD meter when the PUD meter is remote from the net meter generating source.

**ADJOURNMENT**
There being no further business to come before the Commission, the meeting adjourned at 2:46 PM.

**ATTEST:**

President

Vice President

Secretary

May 13, 2019
SUMMARY VOUCHER APPROVAL
PUBLIC UTILITY DISTRICT #1 OF CLALLAM COUNTY
OPERATING FUND

We certify, under penalty of perjury, that the materials have been furnished, the
services rendered, or the labor performed as described herein, and that the
attached list of claims are a just, due and unpaid obligation against Public
Utility District No. 1 of Clallam County, and that we are authorized to
authenticate and certify said claims.

SIGNED ___________________________ DATE ________5/31/19________
AUDITING OFFICER

GENERAL MANAGER

Vouchers audited and certified by the Auditing Officer and the General Manager have been
recorded on the attached list which has been made available to the Board of Commissioners of
Public Utility District No. 1 of Clallam County. We, the undersigned Board of Commissioners of
Public Utility District No. 1 of Clallam County, approve for payment those vouchers included
on the attached list:

Summary for Voucher Lists Dated 5/13/19-6/3/19

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrants</td>
<td>$1,519,664.54</td>
</tr>
<tr>
<td>Wire Transfers</td>
<td>$2,505,400.40</td>
</tr>
<tr>
<td>Prepays</td>
<td>$ 107.74</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,025,172.68</strong></td>
</tr>
</tbody>
</table>

__________________________
COMMISSIONER

__________________________
COMMISSIONER

__________________________
COMMISSIONER
PUD#1 OF CLALLAM COUNTY, WASHINGTON

JUNE 2019
DELINQUENT ACCOUNTS TO BE REMOVED FROM ACTIVE ACCOUNTS RECEIVABLE

Delinquent accounts listed for electricity and water on the attached pages are approved to be removed from the active accounts receivable. All accounts to be removed are grouped and total as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/03/19</td>
<td>Clallam Bay – Evergreen</td>
<td>$ 43.76</td>
</tr>
<tr>
<td>06/03/19</td>
<td>Forks – Evergreen</td>
<td>$ 2,143.27</td>
</tr>
<tr>
<td>06/03/19</td>
<td>Port Angeles – Evergreen</td>
<td>$ 3,560.48</td>
</tr>
<tr>
<td>06/03/19</td>
<td>Sequim – Evergreen</td>
<td>$ 1,256.63</td>
</tr>
<tr>
<td>06/03/19</td>
<td>All Area-Direct W/O Bankruptcy</td>
<td>$ -</td>
</tr>
<tr>
<td>06/03/19</td>
<td>All Area-Direct W/O Deceased</td>
<td>$ -</td>
</tr>
<tr>
<td>06/03/19</td>
<td>All Area-Direct W/O Small Balance</td>
<td>$ 2.73</td>
</tr>
</tbody>
</table>

SUBTOTAL $ 7,006.87

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/03/19</td>
<td>30% Collection Fee</td>
<td>$ 2,101.24</td>
</tr>
</tbody>
</table>

TOTAL $ 9,108.11

Previous Debt Collected in May 2019 $ 898.47
Previous Debt Collected Year To Date 2019 $ 6,775.10

Dated this ___________ day of ________________, 20__.

________________________________________
President

________________________________________
Secretary

________________________________________
Vice-President

SW:kw

Attachments

These lists comply with our CIS software which removes accounts from the active accounts receivable when placed with a collection agency (classifies them as bad debt). The exceptions are bankruptcies, deceased customers and customer accounts with small balances under $20. These are removed under the categories of All-Area Direct W/O, but not placed with a collection agency.
MEMORANDUM

Date:       June 10, 2019
To:         Doug Nass, General Manager
From:       John Purvis, Assistant General Manager
Re:         CONTRACTOR PREQUALIFICATION APPLICATIONS

The contractor on the following list is requesting approval for prequalification for the upcoming calendar year. Sean Worthington, Treasurer/Finance Manager, has examined the financial data submitted with the application as well as the bonding letter from their surety and/or bonding company and has recommended the prequalification amount as indicated:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Previously Approved Amount</th>
<th>Recommended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Pole Inspection</td>
<td>$350,000</td>
<td>$350,000</td>
</tr>
</tbody>
</table>

Approved by Board of Commissioners at meeting of: June 10th, 2019.

Doug Nass, General Manager
Date: June 10, 2019

Re: APPLICATIONS FOR INCLUSION ON THE PREQUALIFICATION OF ELECTRICAL WORKERS ROSTER

The contractors on the following list are requesting inclusion on the Prequalification of Electrical Workers Roster:

<table>
<thead>
<tr>
<th>Company</th>
<th># of years in business</th>
<th>Performing this work for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Pole Inspection</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>1500 Cloverdale Rd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalama, WA 98625</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. POLE AND WOOD PRODUCT INSPECTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection and Treatment of Poles in Place</td>
<td>X</td>
</tr>
<tr>
<td>Inspection of New Crossarms and Poles</td>
<td>X</td>
</tr>
</tbody>
</table>

Maximum amount of work, expressed in dollars, which you consider you are capable of undertaking: $1,000,000

Requested:
MEMORANDUM

Date: June 10, 2019

To: Doug Nass, General Manager

From: John Purvis, Assistant General Manager
Doug Adams, Transmission & Substation System Supervisor

Re: RECOMMENDATION MEMO
BID OPENING MAY 8, 2019
SIX (6) KV POWER CIRCUIT BREAKERS
BID NUMBER 190803

After evaluation of the bids received, we are recommending that the District award the bid for the above-referenced circuit breakers to McKaig/Evergreen, the lowest responsible bidder.

The material to be purchased are Six (6) three-phase, 15 kV power circuit breakers.

Bid Price: $87,366.00
WSST 8.5%: $ 7,426.11
Total NTE Contract Price $94,792.11

A bid tabulation and Invitation to Bid are enclosed for your information.

Recommendation accepted by Board of Commissioners at meeting of: June 10th, 2019.

Doug Nass, General Manager
INVITATION TO BID

BID NUMBER 190803

Sealed bids will be received by PUBLIC UTILITY DISTRICT NO. 1 OF CLALLAM COUNTY on or before 2:30 p.m., Pacific Daylight Time, Wednesday, May 8, 2019 (hand-delivery: Main Office, 104 Hooker Road, Sequim, Washington; by mail: P.O. Box 1000, Carlsborg, WA 98324; by express delivery (e.g., FedEx, UPS): to Clallam County PUD No. 1 at 100 Hooker Road, Sequim, WA 98382). On that day, at 3:00 p.m. PDT, a public bid opening will take place in the Boardroom at the District’s Main Office at 104 Hooker Road, Sequim, Washington, for the following:

Six (6) three-phase, 15 kV Power Circuit Breakers.

Each bid must be accompanied by a Bid Bond, Certified Check, or Cashier's Check in an amount equal to five percent (5%) of the Bid.

Bid packets may be obtained from the District's website:
https://www.clallampud.net/contractorsprojects/

Information and details of the proposal may be obtained from Karen Abbott, Contracts Coordinator at 360.565.3212 or via e-mail at karena@clallampud.net or Doug Adams, Transmission & Substation Systems Supervisor at 360.565.3277 or via e-mail at dadams@clallampud.net.

PUBLIC UTILITY DISTRICT NO. 1
OF CLALLAM COUNTY

Date: 4/22/19

David Anderson, Secretary
**SIX (6) 15 KV POWER CIRCUIT BREAKERS**

Bid Opening May 8, 2019  
Bid Number 190803

**Bid Tabulation**

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Cost</th>
<th>Bid Bond</th>
<th>8.5% WSST</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>McKaig Evergreen (Siemens)</td>
<td>$87,366.00</td>
<td>Yes</td>
<td>$7,426.11</td>
<td>$94,792.11</td>
</tr>
<tr>
<td>Summit Electric (ABB)</td>
<td>$101,160.00</td>
<td>Yes</td>
<td>$8,598.60</td>
<td>$109,758.60</td>
</tr>
</tbody>
</table>

Washington Sales Tax will be 8.5%

Engineer’s Estimate: $85,200.00
MEMORANDUM TO BOARD OF COMMISSIONERS

TO:                        CLALLAM PUD BOARD OF COMMISSIONERS
FROM:                      JOHN PURVIS, ASSISTANT GENERAL MANAGER

SUBJECT:                  INTERLOCAL AGREEMENT FOR EV CHARGING STATIONS
DATE:                     JUNE 10, 2019

The subject of electric vehicle (EV) charging stations was an agenda topic during the
May 2018 City of Sequim and Clallam PUD interagency coordination meeting. Both
the City and PUD independently reported scoping activities associated with
installation of EV charging infrastructure, respectively near City Hall and at the
former Sequim Substation site.

In view of the many project similarities and mutual interests, an effort was initiate to
develop a more cost effective single project to meet objectives of both City and
PUD. As a result, Proposed Resolution No. 2149-19 and the associated Interlocal
Agreement are before the Commission.

The City is responsible for installation of charging station equipment and
underground electric service, including contract with electrician, as well as to pay for
monthly power bills under the small general service rate.

The PUD is responsible for providing funds for the purchase of two Level 2 charging
stations and make electric connection estimated to total between $6,000 and $7,000.

By mutual agreement, the charging equipment includes communications and network
equipment that will enable retail transaction based on kWh consumption or
connection time.

The agreement term is a minimum of 5 years with provision for extension.

Beyond contractual requirements, staff anticipates addition future costs of up to
$4,000 associated with the project, including:

- Establish a SCADA point to monitor, record and present service activity
- Make provision to incorporate the charging station service into a planned
  future micro grid project that includes the site’s Community Solar project
- Expand video security monitoring of the site to include the charging station
  area
- Announce availability and otherwise promote the project and service.

Attached is a sketch of the proposed EV charging station service.
(2) Conduits (Power)
(1) Conduit (Comms)
Stubout and mark one power conduit for future EV charger location
Protective Posts
Dual EV Charger
Meter

N Govan Ave
E Washington St
A RESOLUTION Authorizing the Execution of an
Interlocal Agreement with the City of Sequim for
Electric Vehicle Charging Stations

WHEREAS, PUD No. 1 of Clallam County (the “District”) and the City of Sequim (the
“City”) have a common interest in developing and maintaining electric vehicle charging
infrastructure; and

WHEREAS, it is in the public interest for the District and the City to cooperate in
providing the necessary property, facilities and support for two electric vehicle charging stations
within the City; and

WHEREAS, the District and the City are authorized under Ch. 39.34 RCW to act jointly
through an interlocal agreement in carrying out any power, privilege or authority that each of
them, acting alone, is capable of exercising; and

WHEREAS, the District and the City desire to enter into an interlocal agreement that sets
forth each party’s responsibilities in placing two Level 2 Electric Vehicle Charging Stations on
District-owned property, to be owned and operated by the City.

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The General Manager of the District is hereby authorized to execute on behalf of
the District the Interlocal Agreement between the City of Sequim and Public
Utility District No. 1 of Clallam County for Electric Vehicle Charging Stations, in
substantially the form attached hereto.

PASSED, by the Board of Commissioners of Public Utility District No. 1 of Clallam County,
Washington, this 10th day of June, 2019.

______________________________
President

ATTEST:

______________________________
Vice President

______________________________
Secretary

Resolution 2149-19
INTERLOCAL AGREEMENT
BETWEEN THE
CITY OF SEQUIM
AND
PUBLIC UTILITY DISTRICT NO. 1 OF CLALLAM COUNTY
FOR
ELECTRIC VEHICLE CHARGING STATIONS

WHEREAS, the undersigned parties are public agencies as defined by Chapter 39.34, Revised Code of Washington and are authorized to enter into cooperative actions and to cooperate with each other for mutual advantage and to provide services and facilities in a manner and pursuant to forms of governmental organization that will accord best with geographic, economic, population and other factors influencing the needs and development of local communities; and

WHEREAS, the City of Sequim ("City") and the Public Utility District No. 1 of Clallam County ("PUD") both desire to improve the availability to the public of electric vehicle (EV) charging infrastructure in Sequim in support of sustainability goals for both agencies as well as to encourage visitors for economic development; and

WHEREAS, both parties desire to work together to place two Level 2 (standard speed) Electric Vehicle Charging Stations in a mutually agreeable location in the southwest corner of an existing parking lot which is PUD property located at the northeast corner of E. Washington and Govan Street in the city of Sequim, Washington;

NOW, THEREFORE, be it agreed in accordance with RCW 39.34:

1. AUTHORIZATION: The undersigned agencies are hereby authorized and directed to achieve the objectives of this Agreement.

2. OBJECTIVE: The primary objective of this Agreement is to provide a facility for charging electric vehicles in the city of Sequim.

3. RESPONSIBILITIES;

3.1 PUD Responsibilities

a. The PUD retains the rights and responsibilities of ownership of the real property.

b. The PUD grants the City and any assigns the right of access to the property for charging station construction and maintenance purposes.

c. PUD also grants the City the exclusive use of the real property on which the charging station infrastructure will be located for no cost other than what is specified in this Agreement.
d. In 2019, the PUD will purchase at its sole expense, two Level 2 EV charging stations agreeable to both agencies. Specs to include: minimum 32A; NEMA 3R, 4 or 4x rating; "universal" plugs; mounting equipment and pedestal(s); and wheel stops.

e. In 2019, the PUD will pay, at its sole expense, the cost of connecting electrical and data network service to the charging stations from its network to the Point of Demarcation (on the south side of the substation fence).

f. The PUD will track electrical demand in 5-minute increments for the charging stations and share findings with the City.

g. The PUD will pay one-half of the cost of the purchase, maintenance and repair of mutually-agreed signage for the EV charging stations.

h. The PUD will inspect and maintain the electrical panel to include torqueing and will maintain the parking lot and premises, including landscaping, in a safe condition and in good repair to the extent that charging station use by the public is feasible. All such maintenance and inspections are at PUD’s sole cost and expense.

3.2 City Responsibilities

a. In 2019, the City will construct and pay for trenching, conduit, and cable installation, at its sole cost and expense, from the Point of Demarcation to the charging station installation location, including landscaping repair.

b. In 2019, the City will perform and pay for permitting and contracting with appropriate entities for installation, electrical connection, testing, and commissioning of the charging station infrastructure purchased under 3.1.d. The City will pay for such activities at its sole cost and expense.

c. The City will paint the pavement and bollards and maintain the paint, at its sole cost and expense, according to mutually agreed plans.

d. The City will own the charging station infrastructure and maintain insurance to cover its replacement value in the event of loss or damage.

e. The City has the option to subscribe with a charging station vendor for payment processing, technical support, and O&M of charging stations, and to charge a fee or charge no fee for station use at its sole discretion. Any fees generated by the charging stations belong solely to the City.

f. The City will pay PUD for electrical service to the charging stations at the regular commercial rate.
g. The City will track costs associated with use of the charging stations and report findings to the PUD upon request.

h. The City will pay one-half of the cost of the purchase, maintenance and repair of mutually-agreed signage for the EV charging stations; the City will pay 100% of the cost of signage installation.

i. The City will maintain the charging station infrastructure in a safe condition, in good repair, and so as not to interfere with PUD’s use of the remaining portion of the property.

4. LIABILITY: Each agency is responsible for the wrongful or negligent actions of its employees as their respective liability appears under the laws of the State of Washington and/or Federal Law. This Agreement applies to the fullest extent of the law and is not intended to diminish or expand such liability.

4.1 To that end, each agency promises to hold harmless and release the other from and against any loss, claim or liability arising from or out of the negligent tortious actions or inactions of its employees, agents, officers and officials. Such liability is apportioned among the parties or other at-fault persons or entities in accordance with the laws of the State of Washington.

4.1.1 Each agency expressly agrees that the indemnification provided here constitutes an express waiver of immunity under RCW 51, Industrial Insurance. This waiver is solely for the purpose of this indemnification. The provisions of this section survive expiration or termination of this Agreement.

City (Initials) ______ PUD (Initials) ______

4.2. Nothing herein is interpreted to:

4.2.1. Limit the ability of an individual or agency to exercise any right, defense, or remedy which a party may have with respect to third parties or the individual(s) whose action or inaction give rise to loss, claim or liability, including but not limited to an assertion that the individual was acting beyond the scope of his or her employment.

4.2.2. Cover or require indemnification or payment of any judgment against any individual or agency for intentionally wrongful conduct outside the scope of employment of any individual or for any judgment for punitive damages against any individual or agency. Payment of punitive damage awards, fines or sanctions will be the sole responsibility of the individual against whom said judgment is rendered and/or his or her municipal employer, should that employer elect to make said payment voluntarily. This Agreement does not require indemnification of any punitive damage awards or for any order imposing fines or sanctions.

5. WAIVER OF SUBROGATION: The City and PUD release and forever discharge each other from and against all claims, losses and liabilities arising from or caused by
any hazard covered by property insurance on or in connection with the Premises. This release applies only to the extent that such claim, loss or liability is covered by insurance.

6. EXECUTION: This Agreement may be executed in any number of counterparts, each of which is deemed to be an original as against any party whose signature appears thereon, and all of which together constitute one and the same instrument. This Agreement becomes binding when one or more counterparts hereof, individually or taken together, bears the signature of all of the parties reflected hereon as the signatories.

7. FILING: As provided by RCW 39.34.040, prior to its entry in force this Agreement must be recorded with the Clallam County Auditor or filed on each agency's web site by subject.

8. AMENDMENTS: This Agreement may only be amended by written agreement of all the undersigned agencies.

9. SEVERABILITY: If any section of this Agreement is adjudicated to be invalid, such action does not affect the validity of any section not so adjudged.

10. TERM AND TERMINATION; SURVIVABILITY OF PROVISIONS: This Agreement is expected to be in force for a minimum of five years and may automatically renew for two 5-year terms unless terminated by giving the other party 60 calendar days' prior written notice.

10.1 If the City initiates termination, the charging station infrastructure becomes the PUD's sole property. If the City terminates this Agreement before the end of the initial five-year term, the City will compensate the PUD for the cost of anticipated power use through the end of the five-year term, based on the average usage from the prior year.

10.2 If the PUD initiates termination, the PUD will remove the charging station infrastructure in a timely and reasonable workmanlike manner as directed by the City at the PUD's sole expense and deliver the charging station infrastructure to the City.

10.3 Termination pursuant to this section relieves both parties of all further obligations under this Agreement except that any liability resulting from any act or omission which occurred during the term will survive the expiration or other termination.

11. DEFINITIONS:

11.1 Charging Station: Equipment supplying electric energy for recharging electric vehicles.

11.2 Charging Station Infrastructure: Includes the equipment and hardware associated with recharging electric vehicles, including pedestals and other mounting components, chargers, plugs, signs, and electrical and data connections on the charger side of the transformer.
11.3 Point of Demarcation: Usually a service meter is the point after which electrical equipment is the property of and maintained by the user, and before which it is the property of and maintained by PUD. For purposes of this Agreement, a secondary transformer/junction box to be paid for and installed by PUD adjacent to the meter will be the Point of Demarcation.

11.4 Premises: The real property upon which the Charging Stations are located.

11.5 Signage: Includes required signs according to City code designating available infrastructure and applicable restrictions on parking as well as directional and informational signs.

12. NOTICE: All notices or other communications required under this contract must be given by registered or certified mail and are complete on the date mailed when addressed to the parties at the following addresses:

CITY:

Clerk’s Office
City of Sequim
152 West Cedar Street
Sequim WA 98382
(360) 681-3428

With a separate copy addressed to the City Attorney.

PUD:

Public Utility District No. 1 of Clallam County
Attn: Mattias Jarvegren
PO Box 1000
Carlsborg, WA 98324
(360) 565-3263

This provision is not intended to apply to informal communications, which are commonly conducted by email.

The effective date of this Interlocal Agreement is the ___ day of _____________, 20__.

CITY OF SEQUIM OF CLALLAM COUNTY

Dennis Smith, Mayor

APPROVED AS TO FORM

Kristina Nelson-Gross
City Attorney

PUBLIC UTILITY DISTRICT NO. 1

APPROVED AS TO FORM

Attorney for Clallam County PUD
ATTEST/AUTHENTICATED:

Karen Kuznek-Reese, MMC, City Clerk

ATTEST/AUTHENTICATED:

Clerk of the Board
MEMORANDUM TO BOARD OF COMMISSIONERS

TO: CLALLAM PUD BOARD OF COMMISSIONERS
FROM: SIMON BARNHART, GENERAL COUNSEL

SUBJECT: REVISIONS TO INTERCONNECTION REQUIREMENTS POLICY
DATE: JUNE 10, 2019

The 2019 legislative session included passage of Engrossed Second Substitute Senate Bill 5223 ("SB 5223"), concerning net metering. The changes in the law are effective July 28, 2019, thereby necessitating revisions to the District’s Interconnection Requirements Policy.

Net metering allows electricity customers to offset their consumption of purchased electricity with electricity generated by their own small-scale, renewable systems. Under current law, the District is required to make net metering available to eligible customer-generators on a first-come, first-served basis until the cumulative generating capacity of net metering systems equals 0.5 percent of the utility’s peak demand during 1996.

The cumulative generating capacity of net metering systems in the District is approximately 1.4 percent of the District’s peak demand during 1996. However, the District continues to make net metering available to all eligible customer-generators.

Under SB 5223, the District must make net metering available to eligible customer-generators on a first-come, first-served basis until the earlier of either June 30, 2029, or the first date upon which the cumulative generating capacity of net metering systems equals 4 percent (up from the current 0.5 percent) of the District’s peak demand during 1996.

The proposed revisions to the Interconnection Requirements Policy (the “Policy”) include changes to the eligibility requirements to reflect the expansion of eligibility under SB 5223. Specifically, the new language is found in Section IX.T, as follows:

T. In accordance with RCW 80.60.020, the Utility will make net metering available to eligible customer-generators on a first-come, first-served basis until the earlier of either June 30, 2029, or the first date upon which the cumulative generating capacity of net metering systems equals four percent of the Utility’s peak demand during 1996 (the “mandatory interconnection deadline”). The date for determining whether the mandatory interconnection deadline is met shall be the date of the Utility’s receipt of a completed Application and full payment of the Application Processing
Charge. After the mandatory interconnection deadline, the Utility may, in its sole discretion, restrict or prohibit new or expanded interconnected net metered generation capacity, and/or the number of net metered customers on any feeder, circuit or network, based upon the results of an Engineering, Safety and Reliability Review performed by the Utility.

The proposed revised Policy also includes minor changes to Sections IV.E and VIII.D.5.c, whereby specific deposit and charge amounts are replaced with general references to the District’s deposits and charges schedule in effect at the time the net metering application is submitted. These changes are intended to promote administrative economy by eliminating the need to update the Interconnection Requirements Policy every time the deposit and charge amounts are adjusted in the Schedule of Deposits and Charges.

Finally, the proposed revised Policy includes an additional requirement at Section IX.P that the production meter shall be a revenue-grade meter that conforms to the requirements of ANSI C12.1. This requirement is intended to satisfy the quality-assurance expectations of Washington State University, who administers the Renewable Energy System Incentive Program, the program that provides incentive payments to customer-generators in accordance with the productivity of their generation systems.

Attached to proposed Resolution No. 2150-19 are two versions of the proposed revised Interconnection Requirements Policy: one version shows the proposed changes in track-changes format; the other version has those changes accepted. The new Policy will be effective July 28, 2019, to align with the effective date of SB 5223.

Staff requests that the Commission pass Resolution No. 2150-19, establishing a District policy on interconnection of electric generating facilities and rescinding Resolution No. 2097-18.
RESOLUTION NO. 2150-19

A RESOLUTION Establishing a District Policy on
Interconnection of Electric Generating Facilities and
Rescinding Resolution No. 2097-18

WHEREAS, through Ch. 80.60 RCW, RCW 82.16.110 and .120, and Ch. 19.285 RCW, the state of Washington has adopted policies and programs encouraging and providing incentives for deployment of distributed generation, and mandating net metering programs; and

WHEREAS, Public Utility District No. 1 of Clallam County has been supportive of and has connected District customers who have installed distributed generation; and

WHEREAS, the District is responsible for protecting and maintaining the reliability and safety of the District’s electrical system; and

WHEREAS, it is in the best interests of the District and its customers to maintain regulations and requirements for the interconnection of distributed energy and net metering; and

WHEREAS, the District’s management staff has reviewed the District’s interconnection standards, and it is appropriate to update and revise those standards to ensure the continued facilitation and support of the interconnection of customer-owned distributed generation and at the same time protect the safety and reliability of the District’s electric system and properly serve all of the District’s ratepayers.

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The attached Interconnection Requirements Policy is hereby adopted for application to the connection of customer generating facilities with a maximum generating capacity of less than or equal to 20 megawatts, effective July 28, 2019.

2. Resolution No. 2097-18 is rescinded effective July 28, 2019.
PASSED, by the Board of Commissioners of Public Utility District No. 1 of Clallam County, Washington, this 10th day of June, 2019.

President

ATTEST:

Vice President

Secretary

Resolution 2150-19
INTERCONNECTION REQUIREMENTS POLICY

I. PURPOSE AND SCOPE

A. The purpose of these Interconnection Requirements is to establish rules for determining the terms, conditions, technical requirements, processes and charges governing the interconnection of electric generating facilities with a nameplate capacity of no greater than 20 Megawatts to the electric distribution system of Public Utility District No. 1 of Clallam County.

B. These rules govern the terms and conditions under which the Applicant's generating facility will interconnect and operate in parallel with the Utility's electric system. These rules apply only to the physical interconnection of a generating facility to a Utility’s electrical system. They do not govern or grant the right to sell, purchase, or deliver any power generated by the Applicant's generating facility.

C. The specifications and requirements herein are intended to mitigate possible adverse impacts caused by a generating facility on Utility equipment and personnel and/or on other Utility customers. These rules are not intended to address protection of the Interconnection Customer’s generating facility, facility personnel, or internal load.
It is the responsibility of the Interconnection Customer to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect their own facilities, personnel, and loads.

II. APPLICATION OF RULES

A. These rules include various requirements applicable to the Utility, the Applicant, the Interconnection Customer and the generating facility.

B. These rules modify, if necessary, any existing interconnection rules of the Utility, including but not limited to, rules implementing chapter 80.60 RCW: Net Metering of Electricity.

C. These rules do not apply to interconnection of standby or backup generators that are not intended to operate in parallel with a Utility’s system. Such generators shall only be interconnected on terms and conditions prescribed by the Utility, negotiated on a case-by-case basis.

III. DEFINITIONS

- **Aggregated Nameplate Capacity** – the total AC nameplate capacity of all inverters used to convert the generating facility’s output to AC power.

- **Applicant** – any person, corporation, partnership, government agency or other entity applying to interconnect a generating Facility to the Utility’s electric system pursuant to these Interconnection Requirements. With final approval, interconnection and operation of a facility, the Applicant becomes the Interconnection Customer, unless otherwise approved by the Utility.

- **Application** – the written notice, on a form prescribed by the Utility, completed by the Applicant and submitted to the Utility, which initiates the interconnection process.

- **Automatic Sectionalizing Device** – equipment which operates to change the topology of the electrical system - usually in response to abnormal conditions - without operator intervention. Generally this does not include fused cutouts on lateral taps serving a few customers.
• **Business Day** – 7:30 AM to 4:00 PM, Monday - Friday, excluding official federal and Washington State holidays.

• **Certificate of Completion** – the form prescribed by the Utility and completed by the Applicant or Interconnection Customer. The Certificate of Completion shall include certification by the electrical inspector having jurisdiction over the installation of the generating facility, and indicate completion of the installation and inspection of the interconnection.

• **Customer-Generator** – per RCW 80.60.010, the user of a Net Metering system.

• **Electric System** – all electrical wires, equipment, and other facilities owned or provided by the Utility that are used to distribute electricity to customers.

• **Engineering, Safety & Reliability Review** – A comprehensive evaluation and analysis to evaluate the impact(s) of the proposed interconnected generating facility on the Utility’s electrical system, particularly as regards engineering, safety and reliability concerns.

• **Generating Facility** – the source of electricity and all ancillary and interconnection facilities, located on the Applicant’s or Interconnection Customer’s side of the point of common coupling, which an Applicant requests to interconnect, or which an Interconnection Customer interconnects to the Utility's electric system.

• **Governing Board** – the Board of Commissioners of the Public Utility District No. 1 of Clallam County.

• **Incomplete Application Period** – a period of 60 days during which the Applicant can rectify issues the Utility identified in a Notice of Incomplete Application. At its discretion, the Utility may extend this time period.

• **Initial Operation** – the first time the generating facility operates in parallel with the Utility’s electric system.

• **Interconnection** – the physical connection of a generating facility to the Utility’s electric system to achieve parallel operation.
• **Interconnection Agreement** – an agreement between the Utility and the Interconnection Customer which outlines the interconnection requirements, costs and billing agreements, as well as on-going inspection, maintenance and operational requirements. A fully executed Interconnection Agreement is required before the generating facility may generate electricity into and operate in parallel with the Utility’s electric system. Contents of the Interconnection Agreement may vary with the tier category of the interconnection.

• **Interconnection Customer** – the person, corporation, partnership, government agency or other entity that has executed an Interconnection Agreement with the Utility and: 1) owns a generating facility interconnected to the Utility’s electric system; 2) for net-metered facilities, is a Customer-Generator; or (3) is otherwise allowed by law. The Interconnection Customer is responsible for the generating facility and may assign rule compliance responsibility to another party only with the prior express written permission of the Utility.

• **Interconnection Facilities** – the electrical wires, switches and other equipment used to interconnect a generating facility to the Utility’s electric system.

• **Islanding** – the condition that occurs when power from the Utility’s electric system is no longer present and the generating facility continues exporting energy into the electric system.

• **Line Section** – that portion of the Utility’s electric system connected to the generating facility and bounded by Automatic Sectionalizing Devices or the end of the distribution line.

• **Maximum Available Fault Current** – the maximum current available in the event of a short circuit, also known as short circuit current.

• **Model Interconnection Agreement** – standardized terms and conditions that govern the interconnection of generating facilities pursuant to these rules. The Utility may establish Model Interconnection Agreement(s) which may be modified to accommodate terms and conditions specific to individual interconnections.
• **Nameplate Capacity** – the manufacturer’s output rating of the generating facility. For a system that uses an inverter to change DC energy supplied to an AC quantity, the nameplate capacity will be the manufacturer’s AC output rating for the inverter(s). The nameplate capacities shall be measured in kilowatts.

• **Net Metering** – per RCW 80.60.010(9): measuring the difference between the electricity supplied by an electric utility and electricity generated by a Customer-Generator over the applicable billing period.

• **Parallel Operation or Operate in Parallel** – the synchronous operation of a generating facility while interconnected with the Utility’s electric system.

• **Point of Common Coupling** – the point where the generating facility's local electric power system connects to the Utility’s electric 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 generating facility and Utility. The point of common coupling is the point of measurement for the Application of Institute of Electrical and Electronics Engineers (IEEE) standard #1547.

• **Radial Distribution Circuit** – a power distribution system with separately wired components that radiate out from a central point; e.g., one power source for a group of customers.

• **Recloser** – a switch or circuit breaker that manually, remotely or automatically closes an electrical circuit after it has been opened by a fault or overload.

• **Reclosing** – the restoration of electrical current by closing a circuit.

• **Shared Secondary** – a utility conductor originating from the secondary side of a transformer and providing power to more than a single service.

• **Spot Network Distribution System** – a power distribution system consisting of two or more primary circuits from one or more substations or transmission supply points, arranged such that they collectively feed a secondary circuit serving a single location (e.g., a large facility or campus) containing one or more Utility customer(s).

• **Spot Network Protectors** – a protective device that monitors the flow of electricity between interconnected systems, disconnecting them automatically should the power begin to flow backwards.
• **Study Agreement** – an Agreement between the Utility and a (typically Tier 3) interconnection Applicant which describes studies required for project approval, their estimated costs and deposit payment(s).

• **Synchronous Generator** – a generator with one or more rotating components that produce AC current.

• **Third Party Owner** – an entity that owns a generating facility located on the premises of an Interconnection Customer and has a contract with that Customer for provision of power from the generating facility. When a third-party owns a generating facility, the Interconnection Customer maintains the entire relationship with the Utility. A Third-Party Owner shall not resell electricity produced from a net-metered generating facility.

• **Tier Category** – one of three categories which outline interconnection parameters for generating facilities up to 20 MW based on capacity and shared characteristics. Initial applicability criteria will determine which tier process the Applicant and Utility will utilize.

• **Transformer Primary Winding** – the coil winding that is directly connected to transformers’ input supply.

• **Utility** – Public Utility District No. 1 of Clallam County, which owns and operates the electrical distribution system with which the Applicant seeks to interconnect a generating facility, and with which an Interconnection Customer has an Interconnection Agreement.

**IV. APPLICATION FOR INTERCONNECTION**

A. A standard Application form shall be posted on the Utility’s website and, where practicable, allow for electronic submission.

B. When the Applicant requests interconnection from the Utility, the Applicant shall be responsible for conforming to the rules and regulations that are in effect and on file with the Utility. The Utility will designate a point of contact and publish a telephone number or website address for the purpose of providing information concerning applicable rules and regulations.
C. The Applicant seeking to interconnect a generating facility must fill out and submit, electronically or otherwise, a signed Application form to the Utility. Information must be accurate, complete, and approved by the Utility; however recognition of the Application as complete does not constitute approval to interconnect.

D. If a project is to be installed in a phased manner, the Applicant may choose to submit an Application for approval of the final project size, or may choose to submit Applications at each stage of the project. Each Application will be evaluated based on the nameplate capacity stated on the Application.

1. If the final project size is applied for and the requirements are met, then the Applicant must notify the Utility as additional units are added.

2. If Applications are submitted for different project stages, the project size may not exceed that approved.

E—Application Processing Charge. The non-refundable Interconnection Application Processing Charge is set by the Utility according to facility capacity (or Tiers under this rule) and shall be charged in accordance with the Utility’s deposits and charges schedule in effect at the time the Application is submitted.:

1. Tier 1: $100 for 0—25 kW facilities.
2. Tier 2: $500 for 26—500 kW facilities.

F. Non-Discrimination. All generating facility Interconnection Applications pursuant to these Interconnection Requirements will be processed by the Utility in a non-discriminatory manner, consistent with other service requests and in a manner that does not delay other service requests.

G. Application Evaluation. All generating facility interconnection requests pursuant to these Interconnection Requirements will be reviewed by the Utility for compliance with these rules. If the Utility in its sole discretion finds that the Application does not comply with these Interconnection Requirements, the Utility may reject the Application. If the Utility rejects the Application, it shall provide the Applicant with written or electronic mail notification stating the reasons for the rejection.
V. PROJECT TIER AND TECHNICAL REQUIREMENTS

A. Because most Utility distribution systems were not originally designed to interconnect with generating facilities, the impacts of such an interconnection, if not carefully managed, can be detrimental to the safe and reliable operation of the system. For example, when the portion of the Utility system serving the generating facility is de-energized, generating facilities shall not be islanding with other Utility customers, unless specifically permitted by the Utility.

B. In order to facilitate the interconnection process for both the Applicant and the Utility, these rules classify interconnections based on shared characteristics. As smaller generating facilities with appropriate interconnection technologies are expected to have a much lower impact on the Utility’s system, they are typically eligible for expedited processes and standardized interconnection requirements. Larger generating facilities using different generating and interconnection technologies can have more significant impacts on the Utility’s system, such that more in-depth review is required and additional technical requirements may apply.

C. Initial applicability criteria will determine which Tier process an Applicant and Utility will utilize. Attachment 1 consists of flow chart tests for identifying which Tier Category applies to the generating facility. Application process descriptions, technical requirements, and completion criteria for each Tier are included in the Tier Category information below. Additionally, all facilities must meet the appropriate requirements outlined in Section IV: General Terms, Conditions, and Technical Specifications, as well as the rules and standards adopted by reference in Section VI: Adoption by Reference. For Tier 3 facilities, additional requirements apply.

Note: the interconnection requirements listed are for protection of the Utility system. The Applicant and Interconnection Customer are responsible for providing protection for their own equipment.
VI. TIER 1 CRITERIA, PROCEDURES, AND TECHNICAL REQUIREMENTS

A. Tier 1 Applicability: Tier 1 processes and technical requirements will apply if the proposed generating facility meets all of the following criteria:

1. Uses inverter-based interconnection equipment which is certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741;

2. Is single phase and has a nameplate capacity of 25 kW or less;

3. Is connected through a single phase transformer on a radial distribution circuit;

4. Is proposed for interconnection at secondary voltages (600 V class);

5. Other than meter changes, does not require new or upgraded Utility facilities;

6. If interconnection on a single-phase shared secondary is proposed, the aggregate generating capacity on the shared secondary, including the proposed generating facility, shall not exceed the lesser of the service wire capability or the nameplate of the transformer;

7. If interconnection on a center tap neutral of a 240 volt service is proposed, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 5 kVA; and

8. The aggregated nameplate capacity of all interconnected generating facilities (including that of the proposed generating facility) on any line section does not exceed:
   a. 15% of the line section annual peak load as most recently measured or calculated for that line section, or
   b. 15% of the circuit annual peak load as most recently measured or calculated for the circuit.
B. **Tier 1 Application Process:** the following Application timelines are intended to be consistent with, and not cause delays in, other service request Applications of the Utility:

1. Applicant shall submit a complete Application to the Utility. The Utility will not issue a notice of receipt.

2. If the Application is incomplete or otherwise deficient, the Utility will issue a Notice of Incomplete Application, identifying the area(s) of deficiency.

3. When a Notice of Incomplete Application is sent to the Applicant, the Applicant shall provide a complete Application to the Utility within 60 business days of the Notice of Incomplete Application. At its sole discretion, the Utility may grant an extension of the 60 day Incomplete Application Period. An incomplete Application expires at the conclusion of the Incomplete Application Period.

4. Within one month after a complete Application has been submitted to the Utility, the Utility shall make its best effort to approve, approve with conditions, or provide the Applicant with written justification for denying the Application. The Applicant will be notified of any delays due to unforeseen circumstances, customer variance requests, or other incentive program approval requirements.

5. The Applicant has **one year** from the date of Application approval to interconnect and begin operation of the generating facility. The Application shall expire one year from its date of approval unless the Utility, at its sole discretion, grants an extension in writing.

6. The Utility may deny the Application for public safety, system reliability or other reasons as stated by the Utility in the Notice of Denial. Denied Applications expire on the date of denial by the Utility.
C. **Tier 1 Technical and Safety Requirements:** the purpose of safety and technical requirements for Tier 1 generating facilities is to prevent islanding and to ensure that inverter output is disconnected when the source of interconnected Utility electricity is interrupted, de-energized, or disconnected. The generating facility must include the following:

1. **Inverter**
   a. Must be certified by an independent nationally recognized testing laboratory to meet UL 1741 requirements.
   b. Must use under voltage, overvoltage and over/under frequency elements to detect loss of Utility power and initiate shutdown.

2. **Interrupting Device**
   a. The generating facility shall include a device capable of safely interrupting the Maximum Available Fault Current (typically supplied by the Utility).

3. **Voltage and Power Factor**
   a. The generating facility must operate within the voltage and power factor ranges specified by the Utility.
   b. At its sole discretion, the Utility may allow variances based on specific requirements, though the Interconnection Customer may incur charges due to voltage losses.

4. **Visible and Lockable Disconnect**
   a. Applicant shall furnish and install on applicant's side of the meter, a UL-approved safety disconnect switch which shall be capable of fully disconnecting the applicant's generating facility from Utility's electric system. The disconnect switch shall be located adjacent to utility meters and shall be of the visible break type in a metal enclosure which can be secured by a padlock. The disconnect switch shall be accessible to Utility personnel at all times.
b. The requirement in IV.C.4.a. of this subsection will be waived by the utility if:
   i. For remote meter pedestals, the disconnect switch proximity requirements will be waived if permanent signage that adequately describes the location of the disconnect is affixed to the Utility meter base. The Utility shall approve sign materials and content;
   ii. Applicant provides interconnection equipment that applicant can demonstrate, to the satisfaction of Utility, performs physical disconnection of the generating equipment supply internally; and
   iii. Applicant agrees that its service may be disconnected entirely if generating equipment must be physically disconnected for any reason.

5. Enhanced Inverter and Control
   a. To protect and ensure the reliability of the distribution feeder, prevent voltage fluctuations, and avoid possible future costs to other Utility customers to upgrade the system, the Utility may, after further review and consideration of system stability and regulatory requirements, specify enhanced inverter characteristics and designate operating parameters for Tier 1 facilities.
   b. The Utility may require enhanced inverters, when industry standard protocols for enhanced inverters are developed and enhanced inverters are commercially available, for:
      i. All new interconnections, and, if system stability requires; and
      ii. Retrofitting existing interconnections.
c. The Utility may require the Applicant and Interconnection Customer, at the Applicant and Interconnection Customer’s expense, to procure and install communications and/or control equipment at the generating facility necessary:
   i. To enable the generating facility to receive control signals from the Utility; and
   ii. For the Utility to remotely disconnect and reconnect the generating facility during any period that the generation facility places the Utility’s systems or personnel at risk (e.g., islanding, voltage regulation, stability, reliability, power quality, system protection, etc.).

D. **Tier 1 Completion Process**: if the following requirements are fully met, the interconnection process is deemed complete, the generating facility can begin operation, and the Applicant becomes the Interconnection Customer:

1. The Applicant and the Utility execute an Interconnection Agreement;
2. The Utility received the Certificate of Completion showing inspection of the generating facility by the electrical inspector having jurisdiction over the installation;
3. All documentation demonstrating compliance with these Interconnection Requirements has been fully and accurately completed, provided to and accepted by the Utility;
4. The Utility completes a site verification of proper interconnection and meter installation;
5. All requirements and conditions of the Interconnection Agreement have been satisfied and approved by the Utility; and
6. The Utility has granted permission to proceed with commercial operation.
VII. TIER 2 CRITERIA, PROCEDURES, AND TECHNICAL REQUIREMENTS

A. Tier 2 Applicability: Tier 2 processes and technical requirements will apply if the proposed generating facility meets all of the following criteria:

1. It does not qualify for Tier 1 interconnection applicability requirements;
2. If an inverter is utilized, the inverter must be certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741;
3. It has a nameplate capacity of 500 kW or less;
4. Is proposed for interconnection to either a radial distribution circuit or a spot network distribution system limited to serving one customer;
5. Is proposed for interconnection to an electric system distribution facility operated at or below 38 kV class;
6. Is not a synchronous generator;
7. If interconnection on a shared secondary is proposed, the aggregate generating capacity on the shared secondary, including the proposed generating facility, shall not exceed the lesser of the service wire capability or the nameplate of the transformer;
8. Is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, and its addition shall not create an imbalance of more than 5 kW between the two sides of the 240 volt service;
9. The aggregated nameplate capacity of all interconnected generating facilities (including that of the proposed generating facility) on any line section does not exceed:
   a. 15% of the line section annual peak load as most recently measured or calculated for that line section; or
   b. 15% of the circuit annual peak load as most recently measured or calculated for the circuit.
10. Any upgrades required for the Utility’s system must fall under subsection (i) of the Tier 2 Technical and Safety Requirements section;
11. For interconnection of a proposed generating facility to the load side of spot network protectors, the proposed generating facility must utilize an inverter-based equipment package which is certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741, and together with the aggregated other inverter-based generating facilities, shall not exceed the smaller of 5% of a spot network distribution system’s maximum load or 50 kW;

12. The aggregated nameplate capacity of existing and proposed generating facilities must not contribute more than 10% to the distribution circuit’s maximum fault current at the point on the primary voltage distribution line nearest the point of interconnection;

13. The generating facility’s point of interconnection must not be on a circuit where the available short circuit current, with or without the proposed generating facility, exceeds 87.5% of the interrupting capability of the Utility’s protective devices and equipment (e.g., substation breakers, fuse cutouts, line reclosers, etc.);

14. If the generating facility is proposed for interconnection at primary (>600 V class) distribution voltages, the connection of the transformer(s) connecting the generating facility to the Utility system must use the Utility’s standard connection(s). This is intended to limit the potential for creating over voltages on the Utility’s system for a loss of ground for the duration of any anti-islanding functions or operations.

   a. For primary-voltage connections to three-phase, three-wire systems, the transformer primary windings must be connected phase to phase.

   b. For primary-voltage connections to three-phase, four-wire systems, the transformer primary windings must be connected effectively grounded, phase to neutral.
B. Tier 2 Application Process: the following Application timelines are intended to be consistent with, and not cause delays in, other service request Applications of the Utility:

1. Applicant shall submit a complete Application to the Utility. The Utility will not issue a notice of receipt.

2. If the Application is incomplete or otherwise deficient, the Utility will issue a Notice of Incomplete Application, identifying the areas of deficiency.

3. When a Notice of Incomplete Application is sent to the Applicant, the Applicant shall provide a complete Application to the Utility within 60 business days of the Notice of Incomplete Application. At its sole discretion, the Utility may grant an extension of the 60 day Incomplete Application Period. An Application expires at the conclusion of the Incomplete Application Period.

4. Within two months after a complete Application is submitted to the Utility, the Utility shall make its best effort to approve, approve with conditions, or provide the Applicant with written justification for denying the Application. The Applicant will be notified of any delays due to unforeseen circumstances, customer variance requests, or other incentive program approval requirements.

5. The Applicant has one year from the date of Application approval to interconnect and begin operation of the generating facility. The Application shall expire one year from its date of approval, unless the Utility at its sole discretion, grants an extension in writing.

6. The Utility may deny the Application for public safety, system reliability or other reasons as stated by the Utility in the Notice of Denial. Denied Applications expire on the date of denial by the Utility.

C. Tier 2 Technical and Safety Requirements: in all cases, the interconnection facilities must isolate the generating facility from the Utility’s electric system when Utility power is interrupted, de-energized and/or disconnected, e.g., before any reclosing (automatic or manual) takes place. The Interconnection Customer shall prevent its generating facility equipment from automatically re-energizing the electric system. For inverter-based systems, this requirement is satisfied by compliance with UL 1741 requirements.
For non-inverter based systems, a separate protection package will be required to meet IEEE 1547 requirements.

1. **Modifications.** If the generating facility fails to meet Tier 2 criteria, but the Utility determines that the generating facility could be interconnected safely with minor modifications to the transmission or distribution system (e.g., changing meters, fuses, or relay settings), then the Utility may offer the Applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications.
   a. If the Applicant agrees to pay the entire cost of the modifications and authorizes the Utility to make them, then the Utility may approve the Application using Tier 2 processes and technical requirements.
   b. Construction of facilities by the Utility on its own system shall not be required to accommodate the Tier 2 generating facility.

2. **Three-phase Connection.** Required for proposed generating facilities of 50 kW and greater.

3. **Three-phase Induction Generator Interconnections.** The Utility may, at its sole discretion, specify that ground fault protection must be provided. Use of ground overvoltage or ground overcurrent elements may be specified, depending on whether the Utility uses three-wire or effectively grounded four-wire systems.

4. **Inverter.** The Interconnection Customer shall:
   a. Operate and maintain the inverter in accordance with the manufacturer’s guidelines;
   b. Annually test the performance of the inverter; and
   c. Retain documentation demonstrating compliance.
   i. To ensure continuous operations and protection capability of the inverter, the Interconnection Customer shall, in the absence of such documentation, and at the Interconnection Customer’s expense, allow the Utility at its sole discretion, to either test the inverter, or require that the inverter be tested. Should the inverter fail the performance test the Utility may:
a) Disconnect the generating facility without notice;
b) Require replacement of the inverter and/or installation of a visible lockable AC disconnect switch accessible to Utility personnel; and
c) Charge the Interconnection Customer for any reconnection and other Utility costs.

5. **Visible and Lockable Disconnect**

a. Applicant shall furnish and install on applicant's side of the meter, a UL-approved safety disconnect switch which shall be capable of fully disconnecting the applicant's generating facility from Utility's electric system. The disconnect switch shall be located adjacent to utility meters and shall be of the visible break type in a metal enclosure which can be secured by a padlock. The disconnect switch shall be accessible to Utility personnel at all times.

b. The requirement in VII.C.5.a. of this subsection will be waived by the utility if:

i. For remote meter pedestals, the disconnect switch proximity requirements will be waived if permanent signage that adequately describes the location of the disconnect is affixed to the Utility meter base. The Utility shall approve sign materials and content.

ii. Applicant provides interconnection equipment that applicant can demonstrate, to the satisfaction of Utility, performs physical disconnection of the generating equipment supply internally; and

iii. Applicant agrees that its service may be disconnected entirely if generating equipment must be physically disconnected for any reason.
6. Enhanced Inverter and Control
   a. To protect and ensure the reliability of the distribution feeder, prevent
      voltage fluctuations, and avoid possible future costs to other Utility
      customers to upgrade the system, the Utility may, after further review
      and consideration of system stability and regulatory requirements,
      specify enhanced inverter characteristics and designate operating
      parameters for Tier 2 facilities.
   b. The Utility may require enhanced inverters, when industry standard
      protocols for enhanced inverters are developed and enhanced inverters
      are commercially available for:
      i. All new interconnections; and
      ii. Retrofitting existing interconnection.
   c. The Utility may require the Applicant and Interconnection Customer, at
      the Applicant and Interconnection Customer’s expense, to procure and
      install communications and/or control equipment at the generating
      facility necessary:
      i. To enable the generating facility to receive control signals from
         the Utility; and
      ii. For the Utility to remotely disconnect and reconnect the
          generating facility during any period that the generation facility
          places the Utility’s systems or personnel at risk (e.g., islanding,
          voltage regulation, stability, reliability, power quality, system
          protection, etc.).

D. Tier 2 Completion Process: if the following requirements are fully met, the
interconnection process is deemed complete; the generating facility can begin
operation; and the Applicant becomes an Interconnection Customer:
   1. The Applicant and the Utility execute an Interconnection Agreement;
   2. The Utility received the Certificate of Completion showing inspection of the
      generating facility by the electrical inspector having jurisdiction over the
      installation;
3. All documentation demonstrating compliance with the technical requirements for interconnection has been fully and accurately completed, provided to and accepted by the Utility;

4. All required agreements with the Balancing Authority having jurisdiction, and all agreements covering the provision of any ancillary services, and/or the purchase, sale or transport of electricity have been completed and signed by all parties;

5. The Utility completes a site verification of proper interconnection and meter installation;

6. All requirements and conditions of the Interconnection Agreement have been satisfied and approved by the Utility; and

7. The Utility has granted permission to proceed with commercial operation.

VIII. TIER 3 CRITERIA, PROCEDURES, AND TECHNICAL REQUIREMENTS

The Tier 3 Application, Approval and Completion Processes and Technical requirements are necessarily different from Tiers 1 and 2 due to the unique and more complex characteristics of these generating facilities and associated interconnection requirements. Neither the Applicant nor the Utility should expect streamlining or certainty in the timelines associated with these processes. However, both should expect to apply due diligence and good faith in arriving at project approval.

A. Tier 3 Applicability: the Utility and Applicant will use Tier 3 processes and requirements to interconnect a generating facility if the proposed generating facility does not qualify for Tier 1 or Tier 2.

B. Tier 3 Application Process: the following Application timelines are intended to be consistent with, and not cause delays in, other service request Applications to the Utility.

1. Applicant shall submit a complete Application to the Utility. The Utility will not issue a notice of receipt.

2. If the Application is incomplete or otherwise deficient, the Utility will issue a Notice of Incomplete Application, identifying the areas of deficiency.
3. When a Notice of Incomplete Application is sent to an Applicant, the Applicant shall provide a complete Application to the Utility within 60 business days of the Notice of Incomplete Application. At its sole discretion, the Utility may grant an extension of the 60 day Incomplete Application Period. The Application expires at the conclusion of the Incomplete Application Period.

4. Within three months after a complete Application is submitted to the Utility, the Utility shall make its best effort to approve, approve with conditions, or provide the Applicant with written justification for denying the Application. The Applicant will be notified of any delays due to unforeseen circumstances, customer variance requests, or other incentive program approval requirements.

5. The Applicant has two years from the date of Application approval to interconnect and begin operation of the generating facility. The Application shall expire two years from its date of approval, unless the Utility at its sole discretion, grants an extension in writing.

6. The Utility may deny the Application for public safety, system reliability or other reasons as stated by the Utility in the Notice of Denial. Denied applications expire on the date of denial by the Utility.

C. Tier 3 Technical and Safety Requirements. In all cases, the interconnection facilities must isolate the generating facility from the Utility’s electric system when Utility power is interrupted, de-energized and/or disconnected, e.g., before any reclosing (automatic or manual) takes place. The Interconnection Customer shall prevent its generating facility equipment from automatically re-energizing the electric system.

1. System Design. Must be such that no single point of failure shall lead to loss of protective functions. This can be achieved by:
   a. Installing multiple discrete-function relays to provide the required functions as a set; or
   b. Installing redundant multi-function devices, each of which provides all of the required functions.
2. **Ground Fault Protection.** Must be provided, unless waived by the Utility in writing.
   
a. Use of ground overvoltage or ground overcurrent elements may be specified, depending on whether the Utility uses three-wire or effectively grounded four-wire systems.

3. **Breaker Failure Detection.** Consistent with Utility practice, breaker failure detection must be provided and secondary action initiated in the event that the interconnection breaker fails to clear for the trip condition. This may require installation of:
   
a. Dual generator breakers tripped by similar interconnection relays, or;
   
b. A main and backup relay with the same functions and zones of protection, one of which trips the generator breaker, and one which trips the main incoming breaker.

4. **Study and Analysis.** The Utility will evaluate the Application and may require, at the Applicant’s expense, any of the studies listed below prior to final approval of the Application. As study results and analyses will provide the basis for the detailed technical requirements for interconnection, Applicant’s acceptance of the findings will be required as a condition of final approval of the Application. Additional studies, beyond those listed below, may be necessary as determined by the Utility.

   *Note: the Applicant may request that studies be combined:*
   
a. Feasibility Study;
   
b. System Impact Study; or
   
c. Facilities Study.
d. These studies are intended to quantify the impacts of the
generating facility on the Utility system, and may include analysis
of the following:
   i. Power Flow;
   ii. Stability;
   iii. Voltage Regulation;
   iv. Metering;
   v. Relay/Protection; and
   vi. Communications/Telemetry.

D. **Tier 3 Technical Review and Additional Studies**

1. **Technical Review.** Once the Utility accepts the Application as
   complete, the Utility will conduct a technical review to determine
   compliance with these Tier 3 technical standards, and whether any
   additional Engineering, Safety, Reliability Review or other studies
   will be required.

2. **Notification.** The Utility will notify the Applicant of the result of
   these determinations within 30 business days of when the
   Application is deemed complete.

3. **Approval: No Additional Feasibility Studies Required.** If the
   Utility determines that the proposal complies with Tier 3 technical
   requirements and requires no additional studies to determine the
   feasibility of the interconnection, the Utility will notify the Applicant
   and provide the following:
      a. An executable Interconnection Agreement within 60 business
         days of such notification;
      b. Any additional interim agreements that may be necessary;
         e.g., construction agreements; and
      c. A good faith estimate of the cost and time necessary to
         complete the interconnection.
4. **Non-Approval: Additional Feasibility Studies Required.** If the Utility determines that additional studies are required, the Utility will provide the Applicant with the following:
   a. A Study Agreement that includes a description of what studies are required;
      i. The Applicant may request that studies be combined.
   b. A good faith estimate of the cost and time necessary to perform the studies.

5. **Cost of Additional Studies and System Upgrades**
   a. **Cost Allocation.** The Applicant is responsible for the following:
      i. All reasonable costs incurred by the Utility to:
         a). Study the proposed interconnection; and
         b). Design and construct any required interconnection facilities or system upgrades.
      ii. All reasonable ongoing operation and maintenance costs for facilities added to the electric system that are dedicated to that Interconnection Customer's use; and
      iii. Meeting the credit requirements of the Utility prior to the start of construction.
   b. **Cost Disputes.** Within 30 business days after receiving a notice that additional studies are required, as described in this subsection, the Applicant may supply an alternative cost estimate from a third-party who is currently officially qualified to perform the studies required by the Utility.
c. **Deposit and Study Agreement.** After the Utility and the Applicant agree on the estimated cost of the required studies and identify the parties to perform them, the Applicant and Utility will execute a Study Agreement describing these studies and corresponding deposit payment(s) to the Utility.

i. The deposit is not to exceed the lower of $1,000 or 50 percent (%) of the estimated cost of the studies for the Study Agreement shall be charged in accordance with the Utility’s deposits and charges schedule in effect at the time the Application is submitted.

ii. After the Study Agreement is executed, the Utility will make its best effort to complete the studies in keeping with the studies’ time requirements and other service requests of a similar magnitude.

6. **Denial after Additional Studies.** The Utility will provide the Applicant with the results of the studies conducted under this subsection.

   a. If the studies determine that the interconnection is not feasible, the Utility will issue a Notice of Denial to the Applicant, noting the expiration of the Application and reasons for the denial.

7. **Modification after Additional Studies.** The Utility will provide the Applicant with the results of the studies conducted under this subsection. Based on those results, the Utility and the Applicant may agree to modify the previously complete Application without penalty to the Applicant. A Utility approved modified Application under this subsection shall be considered an approved final Application.

   a. Other than Utility Approved modifications to the complete Application described in this subsection, changes by the Applicant or Interconnection Customer to a previously approved completed Application will be considered a new Application and shall be accompanied by a new application.
fee.

8. **Approval Pending Additional Studies.** If the required studies determine that the interconnection is feasible, the Utility will notify the Applicant of that determination.
   
   a. If no system upgrades are required, the Utility will provide an executable Interconnection Agreement to the Applicant within 5 business days of such notification.
   
   b. If system upgrades are required, the Utility will provide the Applicant with:
      
      i. An executable Interconnection Agreement within 15 business day;
      
      ii. Any additional interim agreements that may be necessary, e.g., construction agreements; and
      
      iii. A good faith estimate of the cost and time necessary to complete the interconnection.

9. **Incomplete Agreement Process.** An Applicant’s failure to execute and return completed agreements and required deposits within the time frames specified in this section or by the Utility, may result in termination of the application process by the Utility under the terms and conditions specified in such agreements.

10. **Agreement Process Deadline.** Within 30 business days of the date of Utility approval of the final Application, the Applicant must execute and return the Interconnection Agreement with the required deposit which shall not exceed 50-percent of the estimated costs to complete the interconnection.

   a. At the Utility's discretion, an extension may be granted in writing.
E. Tier 3 Completion Process

If the following requirements are fully met, the interconnection process shall be deemed complete; the generating facility can begin operation, and the Applicant becomes an Interconnection Customer:

1. The Applicant and the Utility execute an Interconnection Agreement;
2. The Utility received the Certificate of Completion showing inspection of the generating facility by the electrical inspector having jurisdiction over the installation;
3. All documentation demonstrating compliance with the technical requirements for interconnection has been fully and accurately completed, provided to, and accepted by the Utility;
4. All required agreements with the Balancing Authority having jurisdiction and all agreements covering the purchase, sale or transport of electricity and provision of any ancillary services have been completed and signed by all parties;
5. The Utility completes a site verification of proper interconnection and meter installation;
6. All requirements and conditions of the Interconnection Agreement have been satisfied and approved by the Utility;
7. The Utility has granted permission to proceed with commercial operation; and
8. The Interconnection Customer begins operation of the generating facility within 2 years of the effective date of the Interconnection Agreement.
   a. If the generating facility fails to begin operations within the specified timeframe, both the Application and subsequent Interconnection Agreement shall expire.
      i. At the Utility’s discretion, an extension may be granted in writing.
IX. GENERAL TERMS, CONDITIONS, AND TECHNICAL REQUIREMENTS FOR ALL INTERCONNECTIONS

The terms, conditions, and technical requirements in this section shall apply to the Applicant and Interconnection Customer and the generating facility throughout the generating facility’s installation, testing, commissioning, operation, maintenance, decommissioning, and removal. The Utility may verify compliance at any time, with reasonable notice.

A. All electrical generating facilities must comply with these Requirements to be eligible to interconnect and operate in parallel with the Utility’s electric system.

B. Any generating facility proposing to be interconnected with the Utility’s electric system or any proposed change to a generating facility that requires modification of an existing Interconnection Agreement must meet all applicable terms, conditions and technical requirements as set forth in the appropriate Tier, this Section and the regulations and standards adopted by reference in Section XI.

C. These Interconnection Requirements are intended to mitigate possible adverse impacts caused by the generating facility on Utility equipment and personnel and on other customers of the Utility.

D. These Interconnection Requirements are not intended to address protection of the generating facility itself, generating facility personnel, or its internal load.

E. It is the responsibility of the Interconnection Customer to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect its own facilities, personnel, and loads.

F. The Applicant and Interconnection Customer shall comply with, and are responsible for, the generating facility meeting the following requirements 1, 2, 3, and 4 of this subsection.
1. **Modes of Compliance.** The Utility, at its sole discretion, may approve, in writing, alternatives that satisfy the intent of, and/or excuse compliance with, specific elements of these requirements, except local, state and federal regulations, and building codes.

2. **Codes and Standards.** These include 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.
   
a. The Interconnection Customer shall be responsible for obtaining all applicable permit(s) for the generating facility equipment installations on its property.

3. **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 the equipment manufacturer's safety and operating manuals.

4. **Power Quality.** Installations will be in compliance with all applicable standards including IEEE Standard 519 Harmonic Limits, or the Utility’s more stringent harmonic requirements.

G. These specifications and standards shall apply to all interconnecting generating facilities that are intended to operate in parallel with the Utility’s electric system irrespective of the Applicant’s intent to generate energy to serve all or a part of the Applicant's load, or to sell the output to the Utility or any third party purchaser.

1. In the case where the Interconnection Agreement does not constitute an agreement with the Utility to purchase or deliver output from the generating facility, the Interconnection Customer is responsible for separately making all necessary agreements for the purchase, sale, and/or transport of Utility electricity.
H. In order to ensure system safety and reliability of interconnected operations, all interconnected generating facilities shall be constructed, operated and maintained by the Interconnection Customer in accordance with:

1. These rules;
2. The Interconnection Agreement;
3. The applicable manufacturer’s recommended maintenance schedule and operating requirements;
4. Good Utility practice, and
5. All other applicable federal, state, and local laws, regulations and codes.

I. Prior to Initial Operation, all Interconnection Customers must submit a completed Certificate of Completion to the Utility and execute an appropriate Interconnection Agreement with the Utility.

1. The Agreement outlines the interconnection standards, cost allocation and billing agreements, insurance requirements, and on-going maintenance and operation requirements.

J. Separate agreements may be required with the Utility, the Balancing Area Authority or transmission provider, or other party, but not necessarily with the Utility. Such agreements include power purchase, sale, delivery and scheduling of output from the generating facility, integration or other ancillary services.

1. All required agreements must be fully executed prior to Initial Operation of the generating facility.

K. As may be reasonably requested by the Utility from time to time, the Applicant or Interconnection Customer shall promptly furnish the Utility with copies of plans, specifications, records, and other information relating to the generating facility, as well as its ownership, operation, use, or maintenance.

L. For the purposes of public and working personnel safety, any non-approved generating facility interconnection discovered will be immediately disconnected from the Utility system without any liability to the Utility. Such disconnection of non-approved interconnection may result in disconnection of electric service to customers of the Utility other than the owner of the generating facility.
M. To ensure reliable service to and minimize possible problems for all Utility customers, the Utility will review the need for upgrades to its system, including a dedicated transformer. If the generating facility requires Utility upgrades, the Applicant or Interconnection Customer shall pay for all costs of those upgrades.

N. The Utility may require, and will provide its rationale in writing, for a transfer trip system or an equivalent protective function for a generating facility, that cannot:
   1. Detect distribution system faults (both line-to-line and line-to-ground) and clear such faults within two seconds; or
   2. De-energize the Utility’s distribution system within two seconds after detecting the formation of an unintended island.

O. Net Metering. For facilities as set forth in chapter 80.60 RCW: the Utility shall install, own and maintain a kilowatt-hour meter or meters (as the Utility 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 reasonably require.
   1. The Applicant shall provide space for metering equipment.
   2. After the Applicant has submitted drawings and equipment specifications for Utility approval, it will be the Applicant's responsibility to provide, as required, the current transformer enclosure, meter socket(s) and junction box.
   3. The Utility may approve other generating sources for Net Metering but is not required to do so.

P. Production Metering. The Utility may require separate metering for production.
   1. The Production Meter shall be revenue grade and shall conform to the requirements of ANSI C12.1.
   2. This meter will record all generation produced and may be billed separately from any Net Metering or customer usage metering.
   3. All costs associated with the installation of production metering will be paid by the Applicant.
Q. **Common Labeling.** Common labeling shall be required to inform working personnel that the generating facility is operating at or is located on the premises. The labeling shall be:

1. At the Interconnection Customer’s expense;
2. As furnished or approved by the Utility;
3. In accordance with NEC requirements, and
4. Must be posted on meter base, disconnects, and transformers.

R. **Insurance**

1. The Utility will not require additional insurance for a net metered facility that is a qualifying generating facility under chapter 80.60 RCW.
2. Additional insurance, limitations of liability and indemnification may be required by the Utility for other generating facilities permitted under these standards, which do not qualify under RCW chapter 80.60.

S. Prior to any future modification or expansion of the generating facility, the Interconnection Customer will obtain Utility review and approval. The Utility reserves the right to require the Interconnection Customer, at the Interconnection Customer's sole expense, to provide corrections or additions to existing electrical devices in the event of modification of government or industry regulations and standards, or major changes in the Utility’s electric system which impact the interconnection.

T. **In accordance with RCW 80.60.020,** the Utility will make net metering available to eligible customer-generators on a first-come, first-served basis until the earlier of either June 30, 2029, or the first date upon which the cumulative generating capacity of net metering systems equals four percent of the Utility’s peak demand during 1996 (the “mandatory interconnection deadline”). The date for determining whether the mandatory interconnection deadline is met shall be the date of the Utility’s receipt of a completed Application and full payment of the Application Processing Charge. After the mandatory interconnection deadline, the Utility may, in its sole discretion, restrict or prohibit new or expanded interconnected net metered generation capacity, and/or the number of net metered customers on any feeder, circuit or network, based upon the results of an Engineering, Safety and Reliability Review performed by the
Utility Chapter 80.60 RCW, Net Metering of Electricity, allows a Utility to limit interconnection of generation for Net Metering to 0.50% beginning January 1, 2014. If indicated by an Engineering, Safety or Reliability Review, the Utility may restrict or prohibit new or expanded interconnected net metered generation capacity, and/or the number of net metered customers on any feeder, circuit or network. Having exceeded the cumulative net metering requirements of RCW 80.60.020, the District shall credit excess kilowatt-hours described in RCW 80.60.030(3)(b) at the effective wholesale energy rate for all net meter applications submitted after February 1, 2018. The basis for the wholesale rate or multiplier shall be updated annually, go into effect February 1, 2018, and be based on the preceding year's billed Power Purchase costs divided by total kilowatt-hours sold.

U. In addition to the Application fee (if any), Utility charges to the Applicant or Interconnection Customer will be compensatory and applied as appropriate. Such costs may include, but are not limited to, transformers and production meters, as well as utility testing, qualification, studies and approval of non-UL 1741 listed equipment. The Interconnection Customer 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.

V. This section does not govern the settlement, purchase, sale or delivery of any power generated by the Applicant's generating facility. The purchase, sale or delivery of power, including Net Metering of electricity pursuant to chapter 80.60 RCW, and other services that the Applicant may require will be covered by separate agreement or pursuant to the terms, conditions and rates as may be from time to time approved by the Governing Board. Any such agreement shall be complete and filed with the Utility prior to Initial Operation.

W. The Interconnection Customer may disconnect the generating facility at any time, provided that the Interconnection Customer gives reasonable advance notice to the Utility.

X. The Interconnection Customer shall notify the Utility prior to the sale or transfer of the generating facility, the interconnection facilities or the premises upon which the
facilities are located. The Applicant or Interconnection Customer 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.

Y. All generating facilities must have an electrical permit and pass electrical inspection before they can be connected or operated in parallel with the Utility’s electric system. The Applicant shall provide written certification to the Utility that the generating facility has been installed and inspected in compliance with the local building and/or electrical codes.

Z. If the Interconnection Customer is not the owner of the real property on which the generating facility is located,

1. The Interconnection Customer shall indemnify the Utility for all risks to the owner of the real property, including disconnection of service, and

2. The Interconnection Customer shall obtain all legal rights and easements requested by the Utility for the Utility to access, install, own, maintain, operate or remove its equipment and the disconnect switch, if installed, on the real property where the generating facility is located, at no cost to the Utility.

AA. If the interconnected generating facility is owned by a Third Party Owner:

1. the Third Party Owner or Interconnection Customer shall indemnify and hold harmless the Utility for all risks associated with the facility being interconnected to the Utility’s system, including liability for the Utility disconnecting the facility; and

2. the Interconnection Customer executing the Interconnection Agreement shall obtain all legal rights and easements requested by the Utility for the Utility to access, install, own, maintain, operate, replace or remove its equipment, and installing the disconnect switch, on the real property where the generating facility is located or on the generating facility itself, at no cost to the Utility.

X. Filings

The Utility shall maintain on file for inspection at its place of business, the charges, terms and conditions for interconnections pursuant to these Interconnection Requirements. Such filing shall include model forms of the following documents and contracts:
A. Application;
B. Model Interconnection Agreement; and
C. Sample Certificate of Completion (electrical inspector’s form may be used).

XI. ADOPTION BY REFERENCE
The Utility adopts 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 these Interconnection Requirements, and availability of the resources are as follows:

A. The National Electrical Code is published by the National Fire Protection Association (NFPA)
   1. The Utility adopts the version published in 2005; latest is 2011.
   2. The National Electrical Code is a copyrighted document.
   3. Copies are available from the NFPA at 1 Batterymarch Park, Quincy, Massachusetts, 02169 or at http://www.nfpa.org.

B. National Electric Safety Code (NESC)
   1. The Utility adopts the version published in 2002; latest is 2012.

C. Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems.
   1. The Utility adopts the most recent version adopted by IEEE; latest is 2008.

   1. The Utility adopts the most recent version; latest is 2005.

E. Institute of Electrical and Electronics Engineers (IEEE) Standard 519, Recommended Practices and Requirements for Harmonic Control in Electrical
Power Systems.


2. Copies of IEEE Standard 519 are available from the Institute of Electrical and Electronics Engineers at http://www.ieee.org/web/standards/home

F. Underwriters Laboratories (UL), including UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems.

1. The Utility adopts the version published in 2005; UL has made it virtually impossible to determine publication dates.


H. Washington Division of Occupational Safety and Health (DOSH) Standard, chapter 296-155 WAC.

1. The DOSH Standard is available from the Washington Department of Labor and Industries at P.O. Box 44000, Olympia, WA 98504-4000, or at http://www.lni.wa.gov.

I. American National Standards Institute (ANSI)/Institute of Electrical and Electronics Engineers (IEEE) Standard C62.92, IEEE guide for the Application of neutral grounding in electrical Utility systems.


J. Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, IEEE Recommended Practice for Measurement and Limits of Voltage Fluctuations and Associated Light Flicker on AC Power Systems


2. Copies of IEEE Standard 1453 are available from the Institute of Electrical and
Electronics Engineers at http://www.ieee.org/web/standards/home.
Washington State Tier 1 Tests
Single Phase ≤25 kW Inverter Based

Test 1 Is the Generating Facility connected through a UL, 1741 certified inverter?
Yes
No

Test 2 Is the Generating Facility single phase with a nameplate rating of 25 kW or less?
Yes
No

Test 3 Is the Generating Facility connected through a single phase transformer?
Yes
No

Test 4 Is the Generating Facility connected at secondary voltages (<600 V class)?
Yes
No

Test 5 Does the Generating Facility require construction or upgrade of facilities by the utility?
Yes
No

Test 6 If connected to a shared secondary, does the Generating Facility exceed the lesser of the service wire capability or the nameplate of the transformer?
Yes
No

Test 7 If connected to the center tap of a 240 V service, does the Generating Facility create an imbalance between the two sides of the 240 V service of more than 5 kVA?
Yes
No

Test 8 Does the Generating Facility connect to a radial distribution circuit, with aggregate nameplate capacity of the generation on the line section less than 15% of the line section annual peak load?
Yes
No

Generating Facility qualifies for Tier 1 process for the interconnection
Washington State Tier 2 Tests
< 500 kW Nameplate Rating

Test 1 Complete / Valid Interconnection Request – Not Tier 1

Yes

Test 2 Does the Generating Facility have a nameplate rating < 500 kW?

Yes

Test 3 Does the Generating Facility connect to a radial distribution circuit, or to a spot network limited to serving one customer?

Yes

Test 4 Does the Generating Facility connect to the distribution system (<38 kV class)?

Yes

Test 5 If the Generating Facility connects through an inverter, is the inverter UL 1741 certified?

Yes

Test 6 Is the Generating Facility a synchronous generator?

Yes

Test 7 If connected to a shared secondary, does the Generating Facility exceed the lesser of the service wire capability or the nameplate of the transformer?

Yes

Test 8 If connected to the center tap of a 240 V service, does the Generating Facility create an imbalance between the two sides of the 240 V service of more than 5 kVA?

No

Start Tier 3 process

Continued next page
Washington State Tier 2 Tests
< 500 kW Nameplate Rating
Continued from previous page

Test 9  Does the Generating Facility connect to a radial distribution circuit, with aggregate nameplate capacity of the generation on the line section less than 15% of the line section annual peak load?

Yes

No

Test 10 Does the Generating Facility require only minor upgrades to the utility’s system (<$10,000)?

Yes

No

Test 11 Does the aggregate generation, including the Generating Facility, connected to the load side of spot network protectors exceed the smaller of 5% of the spot network’s maximum load or 50 kW? (The interconnection must be through a UL 1741 certified inverter.)

Yes

No

Start Tier 3 process

Test 12 Does the aggregate generation on the circuit, including the Generating Facility, contribute more than 10% of the distribution circuit’s maximum available fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership?

Yes

No

Test 13 Does the maximum available short circuit current, with or without the generation, exceed 87.5% of the interrupting capability of any utility protective device or equipment?

Yes

No

Generating Facility qualifies for Tier 2 process for the interconnection
INTERCONNECTION REQUIREMENTS POLICY

I. PURPOSE AND SCOPE

A. The purpose of these Interconnection Requirements is to establish rules for determining the terms, conditions, technical requirements, processes and charges governing the interconnection of electric generating facilities with a nameplate capacity of no greater than 20 Megawatts to the electric distribution system of Public Utility District No. 1 of Clallam County.

B. These rules govern the terms and conditions under which the Applicant's generating facility will interconnect and operate in parallel with the Utility's electric system. These rules apply only to the physical interconnection of a generating facility to a Utility’s electrical system. They do not govern or grant the right to sell, purchase, or deliver any power generated by the Applicant's generating facility.

C. The specifications and requirements herein are intended to mitigate possible adverse impacts caused by a generating facility on Utility equipment and personnel and/or on other Utility customers. These rules are not intended to address protection of the Interconnection Customer’s generating facility, facility personnel, or internal load.
It is the responsibility of the Interconnection Customer to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect their own facilities, personnel, and loads.

II. APPLICATION OF RULES
A. These rules include various requirements applicable to the Utility, the Applicant, the Interconnection Customer and the generating facility.

B. These rules modify, if necessary, any existing interconnection rules of the Utility, including but not limited to, rules implementing chapter 80.60 RCW: Net Metering of Electricity.

C. These rules do not apply to interconnection of standby or backup generators that are not intended to operate in parallel with a Utility’s system. Such generators shall only be interconnected on terms and conditions prescribed by the Utility, negotiated on a case-by-case basis.

III. DEFINITIONS
- Aggregated Nameplate Capacity – the total AC nameplate capacity of all inverters used to convert the generating facility’s output to AC power.

- Applicant – any person, corporation, partnership, government agency or other entity applying to interconnect a generating Facility to the Utility's electric system pursuant to these Interconnection Requirements. With final approval, interconnection and operation of a facility, the Applicant becomes the Interconnection Customer, unless otherwise approved by the Utility.

- Application – the written notice, on a form prescribed by the Utility, completed by the Applicant and submitted to the Utility, which initiates the interconnection process.

- Automatic Sectionalizing Device – equipment which operates to change the topology of the electrical system - usually in response to abnormal conditions - without operator intervention. Generally this does not include fused cutouts on lateral taps serving a few customers.
• **Business Day** – 7:30 AM to 4:00 PM, Monday - Friday, excluding official federal and Washington State holidays.

• **Certificate of Completion** – the form prescribed by the Utility and completed by the Applicant or Interconnection Customer. The Certificate of Completion shall include certification by the electrical inspector having jurisdiction over the installation of the generating facility, and indicate completion of the installation and inspection of the interconnection.

• **Customer-Generator** – per RCW 80.60.010, the user of a Net Metering system.

• **Electric System** – all electrical wires, equipment, and other facilities owned or provided by the Utility that are used to distribute electricity to customers.

• **Engineering, Safety & Reliability Review** – A comprehensive evaluation and analysis to evaluate the impact(s) of the proposed interconnected generating facility on the Utility’s electrical system, particularly as regards engineering, safety and reliability concerns.

• **Generating Facility** – the source of electricity and all ancillary and interconnection facilities, located on the Applicant’s or Interconnection Customer’s side of the point of common coupling, which an Applicant requests to interconnect, or which an Interconnection Customer interconnects to the Utility's electric system.

• **Governing Board** – the Board of Commissioners of the Public Utility District No. 1 of Clallam County.

• **Incomplete Application Period** – a period of 60 days during which the Applicant can rectify issues the Utility identified in a Notice of Incomplete Application. At its discretion, the Utility may extend this time period.

• **Initial Operation** – the first time the generating facility operates in parallel with the Utility’s electric system.

• **Interconnection** – the physical connection of a generating facility to the Utility’s electric system to achieve parallel operation.
• **Interconnection Agreement** – an agreement between the Utility and the Interconnection Customer which outlines the interconnection requirements, costs and billing agreements, as well as on-going inspection, maintenance and operational requirements. A fully executed Interconnection Agreement is required before the generating facility may generate electricity into and operate in parallel with the Utility’s electric system. Contents of the Interconnection Agreement may vary with the tier category of the interconnection.

• **Interconnection Customer** – the person, corporation, partnership, government agency or other entity that has executed an Interconnection Agreement with the Utility and: 1) owns a generating facility interconnected to the Utility’s electric system; 2) for net-metered facilities, is a Customer-Generator; or (3) is otherwise allowed by law. The Interconnection Customer is responsible for the generating facility and may assign rule compliance responsibility to another party only with the prior express written permission of the Utility.

• **Interconnection Facilities** – the electrical wires, switches and other equipment used to interconnect a generating facility to the Utility’s electric system.

• **Islanding** – the condition that occurs when power from the Utility’s electric system is no longer present and the generating facility continues exporting energy into the electric system.

• **Line Section** – that portion of the Utility’s electric system connected to the generating facility and bounded by Automatic Sectionalizing Devices or the end of the distribution line.

• **Maximum Available Fault Current** – the maximum current available in the event of a short circuit, also known as short circuit current.

• **Model Interconnection Agreement** – standardized terms and conditions that govern the interconnection of generating facilities pursuant to these rules. The Utility may establish Model Interconnection Agreement(s) which may be modified to accommodate terms and conditions specific to individual interconnections.
- **Nameplate Capacity** – the manufacturer's output rating of the generating facility. For a system that uses an inverter to change DC energy supplied to an AC quantity, the nameplate capacity will be the manufacturer's AC output rating for the inverter(s). The nameplate capacities shall be measured in kilowatts.

- **Net Metering** – per RCW 80.60.010(9): measuring the difference between the electricity supplied by an electric utility and electricity generated by a Customer-Generator over the applicable billing period.

- **Parallel Operation or Operate in Parallel** – the synchronous operation of a generating facility while interconnected with the Utility's electric system.

- **Point of Common Coupling** – the point where the generating facility's local electric power system connects to the Utility's electric 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 generating facility and Utility. The point of common coupling is the point of measurement for the Application of Institute of Electrical and Electronics Engineers (IEEE) standard #1547.

- **Radial Distribution Circuit** – a power distribution system with separately wired components that radiate out from a central point; e.g., one power source for a group of customers.

- **Recloser** – a switch or circuit breaker that manually, remotely or automatically closes an electrical circuit after it has been opened by a fault or overload.

- **Reclosing** – the restoration of electrical current by closing a circuit.

- **Shared Secondary** – a utility conductor originating from the secondary side of a transformer and providing power to more than a single service.

- **Spot Network Distribution System** – a power distribution system consisting of two or more primary circuits from one or more substations or transmission supply points, arranged such that they collectively feed a secondary circuit serving a single location (e.g., a large facility or campus) containing one or more Utility customer(s).

- **Spot Network Protectors** – a protective device that monitors the flow of electricity between interconnected systems, disconnecting them automatically should the power begin to flow backwards.
• **Study Agreement** – an Agreement between the Utility and a (typically Tier 3) interconnection Applicant which describes studies required for project approval, their estimated costs and deposit payment(s).

• **Synchronous Generator** – a generator with one or more rotating components that produce AC current.

• **Third Party Owner** – an entity that owns a generating facility located on the premises of an Interconnection Customer and has a contract with that Customer for provision of power from the generating facility. When a third-party owns a generating facility, the Interconnection Customer maintains the entire relationship with the Utility. A Third-Party Owner shall not resell electricity produced from a net-metered generating facility.

• **Tier Category** – one of three categories which outline interconnection parameters for generating facilities up to 20 MW based on capacity and shared characteristics. Initial applicability criteria will determine which tier process the Applicant and Utility will utilize.

• **Transformer Primary Winding** – the coil winding that is directly connected to transformers’ input supply.

• **Utility** – Public Utility District No. 1 of Clallam County, which owns and operates the electrical distribution system with which the Applicant seeks to interconnect a generating facility, and with which an Interconnection Customer has an Interconnection Agreement.

### IV. APPLICATION FOR INTERCONNECTION

A. A standard Application form shall be posted on the Utility’s website and, where practicable, allow for electronic submission.

B. When the Applicant requests interconnection from the Utility, the Applicant shall be responsible for conforming to the rules and regulations that are in effect and on file with the Utility. The Utility will designate a point of contact and publish a telephone number or website address for the purpose of providing information concerning applicable rules and regulations.
C. The Applicant seeking to interconnect a generating facility must fill out and submit, electronically or otherwise, a signed Application form to the Utility. Information must be accurate, complete, and approved by the Utility; however recognition of the Application as complete does not constitute approval to interconnect.

D. If a project is to be installed in a phased manner, the Applicant may choose to submit an Application for approval of the final project size, or may choose to submit Applications at each stage of the project. Each Application will be evaluated based on the nameplate capacity stated on the Application.

1. If the final project size is applied for and the requirements are met, then the Applicant must notify the Utility as additional units are added.

2. If Applications are submitted for different project stages, the project size may not exceed that approved.

E. **Application Processing Charge.** The non-refundable Interconnection Application Processing Charge is set by the Utility according to facility capacity (or Tiers under this rule) and shall be charged in accordance with the Utility’s deposits and charges schedule in effect at the time the Application is submitted.

F. **Non-Discrimination.** All generating facility Interconnection Applications pursuant to these Interconnection Requirements will be processed by the Utility in a non-discriminatory manner, consistent with other service requests and in a manner that does not delay other service requests.

G. **Application Evaluation.** All generating facility interconnection requests pursuant to these Interconnection Requirements will be reviewed by the Utility for compliance with these rules. If the Utility in its sole discretion finds that the Application does not comply with these Interconnection Requirements, the Utility may reject the Application. If the Utility rejects the Application, it shall provide the Applicant with written or electronic mail notification stating the reasons for the rejection.
V. PROJECT TIER AND TECHNICAL REQUIREMENTS

A. Because most Utility distribution systems were not originally designed to interconnect with generating facilities, the impacts of such an interconnection, if not carefully managed, can be detrimental to the safe and reliable operation of the system. For example, when the portion of the Utility system serving the generating facility is de-energized, generating facilities shall not be islanding with other Utility customers, unless specifically permitted by the Utility.

B. In order to facilitate the interconnection process for both the Applicant and the Utility, these rules classify interconnections based on shared characteristics. As smaller generating facilities with appropriate interconnection technologies are expected to have a much lower impact on the Utility’s system, they are typically eligible for expedited processes and standardized interconnection requirements. Larger generating facilities using different generating and interconnection technologies can have more significant impacts on the Utility’s system, such that more in-depth review is required and additional technical requirements may apply.

C. Initial applicability criteria will determine which Tier process an Applicant and Utility will utilize. Attachment 1 consists of flow chart tests for identifying which Tier Category applies to the generating facility. Application process descriptions, technical requirements, and completion criteria for each Tier are included in the Tier Category information below. Additionally, all facilities must meet the appropriate requirements outlined in Section IV: General Terms, Conditions, and Technical Specifications, as well as the rules and standards adopted by reference in Section VI: Adoption by Reference. For Tier 3 facilities, additional requirements apply.

Note: the interconnection requirements listed are for protection of the Utility system. The Applicant and Interconnection Customer are responsible for providing protection for their own equipment.
VI. TIER 1 CRITERIA, PROCEDURES, AND TECHNICAL REQUIREMENTS

A. Tier 1 Applicability: Tier 1 processes and technical requirements will apply if the proposed generating facility meets all of the following criteria:

1. Uses inverter-based interconnection equipment which is certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741;
2. Is single phase and has a nameplate capacity of 25 kW or less;
3. Is connected through a single phase transformer on a radial distribution circuit;
4. Is proposed for interconnection at secondary voltages (600 V class);
5. Other than meter changes, does not require new or upgraded Utility facilities;
6. If interconnection on a single-phase shared secondary is proposed, the aggregate generating capacity on the shared secondary, including the proposed generating facility, shall not exceed the lesser of the service wire capability or the nameplate of the transformer;
7. If interconnection on a center tap neutral of a 240 volt service is proposed, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 5 kVA; and
8. The aggregated nameplate capacity of all interconnected generating facilities (including that of the proposed generating facility) on any line section does not exceed:
   a. 15% of the line section annual peak load as most recently measured or calculated for that line section, or
   b. 15% of the circuit annual peak load as most recently measured or calculated for the circuit.
B. **Tier 1 Application Process:** the following Application timelines are intended to be consistent with, and not cause delays in, other service request Applications of the Utility:

1. Applicant shall submit a complete Application to the Utility. The Utility will not issue a notice of receipt.

2. If the Application is incomplete or otherwise deficient, the Utility will issue a Notice of Incomplete Application, identifying the area(s) of deficiency.

3. When a Notice of Incomplete Application is sent to the Applicant, the Applicant shall provide a complete Application to the Utility within 60 business days of the Notice of Incomplete Application. At its sole discretion, the Utility may grant an extension of the 60 day Incomplete Application Period. An incomplete Application expires at the conclusion of the Incomplete Application Period.

4. Within one month after a complete Application has been submitted to the Utility, the Utility shall make its best effort to approve, approve with conditions, or provide the Applicant with written justification for denying the Application. The Applicant will be notified of any delays due to unforeseen circumstances, customer variance requests, or other incentive program approval requirements.

5. The Applicant has **one year** from the date of Application approval to interconnect and begin operation of the generating facility. The Application shall expire one year from its date of approval unless the Utility, at its sole discretion, grants an extension in writing.

6. The Utility may deny the Application for public safety, system reliability or other reasons as stated by the Utility in the Notice of Denial. Denied Applications expire on the date of denial by the Utility.
C. **Tier 1 Technical and Safety Requirements**: the purpose of safety and technical requirements for Tier 1 generating facilities is to prevent islanding and to ensure that inverter output is disconnected when the source of interconnected Utility electricity is interrupted, de-energized, or disconnected. The generating facility must include the following:

1. **Inverter**
   a. Must be certified by an independent nationally recognized testing laboratory to meet UL 1741 requirements.
   b. Must use under voltage, overvoltage and over/under frequency elements to detect loss of Utility power and initiate shutdown.

2. **Interrupting Device**
   a. The generating facility shall include a device capable of safely interrupting the Maximum Available Fault Current (typically supplied by the Utility).

3. **Voltage and Power Factor**
   a. The generating facility must operate within the voltage and power factor ranges specified by the Utility.
   b. At its sole discretion, the Utility may allow variances based on specific requirements, though the Interconnection Customer may incur charges due to voltage losses.

4. **Visible and Lockable Disconnect**
   a. Applicant shall furnish and install on applicant's side of the meter, a UL-approved safety disconnect switch which shall be capable of fully disconnecting the applicant's generating facility from Utility's electric system. The disconnect switch shall be located adjacent to utility meters and shall be of the visible break type in a metal enclosure which can be secured by a padlock. The disconnect switch shall be accessible to Utility personnel at all times.
b. The requirement in IV.C.4.a. of this subsection will be waived by the utility if:
   i. For remote meter pedestals, the disconnect switch proximity requirements will be waived if permanent signage that adequately describes the location of the disconnect is affixed to the Utility meter base. The Utility shall approve sign materials and content;
   ii. Applicant provides interconnection equipment that applicant can demonstrate, to the satisfaction of Utility, performs physical disconnection of the generating equipment supply internally; and
   iii. Applicant agrees that its service may be disconnected entirely if generating equipment must be physically disconnected for any reason.

5. Enhanced Inverter and Control

a. To protect and ensure the reliability of the distribution feeder, prevent voltage fluctuations, and avoid possible future costs to other Utility customers to upgrade the system, the Utility may, after further review and consideration of system stability and regulatory requirements, specify enhanced inverter characteristics and designate operating parameters for Tier 1 facilities.

b. The Utility may require enhanced inverters, when industry standard protocols for enhanced inverters are developed and enhanced inverters are commercially available, for:
   i. All new interconnections, and, if system stability requires; and
   ii. Retrofitting existing interconnections.
c. The Utility may require the Applicant and Interconnection Customer, at the Applicant and Interconnection Customer’s expense, to procure and install communications and/or control equipment at the generating facility necessary:
   i. To enable the generating facility to receive control signals from the Utility; and
   ii. For the Utility to remotely disconnect and reconnect the generating facility during any period that the generation facility places the Utility’s systems or personnel at risk (e.g., islanding, voltage regulation, stability, reliability, power quality, system protection, etc.).

D. **Tier 1 Completion Process:** if the following requirements are fully met, the interconnection process is deemed complete, the generating facility can begin operation, and the Applicant becomes the Interconnection Customer:

1. The Applicant and the Utility execute an Interconnection Agreement;
2. The Utility received the Certificate of Completion showing inspection of the generating facility by the electrical inspector having jurisdiction over the installation;
3. All documentation demonstrating compliance with these Interconnection Requirements has been fully and accurately completed, provided to and accepted by the Utility;
4. The Utility completes a site verification of proper interconnection and meter installation;
5. All requirements and conditions of the Interconnection Agreement have been satisfied and approved by the Utility; and
6. The Utility has granted permission to proceed with commercial operation.
VII. TIER 2 CRITERIA, PROCEDURES, AND TECHNICAL REQUIREMENTS

A. Tier 2 Applicability: Tier 2 processes and technical requirements will apply if the proposed generating facility meets all of the following criteria:

1. It does not qualify for Tier 1 interconnection applicability requirements;
2. If an inverter is utilized, the inverter must be certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741;
3. It has a nameplate capacity of 500 kW or less;
4. Is proposed for interconnection to either a radial distribution circuit or a spot network distribution system limited to serving one customer;
5. Is proposed for interconnection to an electric system distribution facility operated at or below 38 kV class;
6. Is not a synchronous generator;
7. If interconnection on a shared secondary is proposed, the aggregate generating capacity on the shared secondary, including the proposed generating facility, shall not exceed the lesser of the service wire capability or the nameplate of the transformer;
8. Is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, and its addition shall not create an imbalance of more than 5 kW between the two sides of the 240 volt service;
9. The aggregated nameplate capacity of all interconnected generating facilities (including that of the proposed generating facility) on any line section does not exceed:
   a. 15% of the line section annual peak load as most recently measured or calculated for that line section; or
   b. 15% of the circuit annual peak load as most recently measured or calculated for the circuit.
10. Any upgrades required for the Utility’s system must fall under subsection (i) of the Tier 2 Technical and Safety Requirements section;
11. For interconnection of a proposed generating facility to the load side of spot network protectors, the proposed generating facility must utilize an inverter-based equipment package which is certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741, and together with the aggregated other inverter-based generating facilities, shall not exceed the smaller of 5% of a spot network distribution system’s maximum load or 50 kW;

12. The aggregated nameplate capacity of existing and proposed generating facilities must not contribute more than 10% to the distribution circuit’s maximum fault current at the point on the primary voltage distribution line nearest the point of interconnection;

13. The generating facility’s point of interconnection must not be on a circuit where the available short circuit current, with or without the proposed generating facility, exceeds 87.5% of the interrupting capability of the Utility’s protective devices and equipment (e.g., substation breakers, fuse cutouts, line reclosers, etc.);

14. If the generating facility is proposed for interconnection at primary (>600 V class) distribution voltages, the connection of the transformer(s) connecting the generating facility to the Utility system must use the Utility’s standard connection(s). This is intended to limit the potential for creating over voltages on the Utility’s system for a loss of ground for the duration of any anti-islanding functions or operations.

a. For primary-voltage connections to three-phase, three-wire systems, the transformer primary windings must be connected phase to phase.

b. For primary-voltage connections to three-phase, four-wire systems, the transformer primary windings must be connected effectively grounded, phase to neutral.
B. **Tier 2 Application Process:** the following Application timelines are intended to be consistent with, and not cause delays in, other service request Applications of the Utility:

1. Applicant shall submit a complete Application to the Utility. The Utility will not issue a notice of receipt.
2. If the Application is incomplete or otherwise deficient, the Utility will issue a Notice of Incomplete Application, identifying the areas of deficiency.
3. When a Notice of Incomplete Application is sent to the Applicant, the Applicant shall provide a complete Application to the Utility within 60 business days of the Notice of Incomplete Application. At its sole discretion, the Utility may grant an extension of the 60 day Incomplete Application Period. An Application expires at the conclusion of the Incomplete Application Period.
4. Within two months after a complete Application is submitted to the Utility, the Utility shall make its best effort to approve, approve with conditions, or provide the Applicant with written justification for denying the Application. The Applicant will be notified of any delays due to unforeseen circumstances, customer variance requests, or other incentive program approval requirements.
5. The Applicant has one year from the date of Application approval to interconnect and begin operation of the generating facility. The Application shall expire one year from its date of approval, unless the Utility at its sole discretion, grants an extension in writing.
6. The Utility may deny the Application for public safety, system reliability or other reasons as stated by the Utility in the Notice of Denial. Denied Applications expire on the date of denial by the Utility.

C. **Tier 2 Technical and Safety Requirements:** in all cases, the interconnection facilities must isolate the generating facility from the Utility’s electric system when Utility power is interrupted, de-energized and/or disconnected, e.g., before any reclosing (automatic or manual) takes place. The Interconnection Customer shall prevent its generating facility equipment from automatically re-energizing the electric system. For inverter-based systems, this requirement is satisfied by compliance with UL 1741 requirements.
For non-inverter based systems, a separate protection package will be required to meet IEEE 1547 requirements.

1. **Modifications.** If the generating facility fails to meet Tier 2 criteria, but the Utility determines that the generating facility could be interconnected safely with minor modifications to the transmission or distribution system (e.g., changing meters, fuses, or relay settings), then the Utility may offer the Applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications.
   a. If the Applicant agrees to pay the entire cost of the modifications and authorizes the Utility to make them, then the Utility may approve the Application using Tier 2 processes and technical requirements.
   b. Construction of facilities by the Utility on its own system shall not be required to accommodate the Tier 2 generating facility.

2. **Three-phase Connection.** Required for proposed generating facilities of 50 kW and greater.

3. **Three-phase Induction Generator Interconnections.** The Utility may, at its sole discretion, specify that ground fault protection must be provided. Use of ground overvoltage or ground overcurrent elements may be specified, depending on whether the Utility uses three-wire or effectively grounded four-wire systems.

4. **Inverter.** The Interconnection Customer shall:
   a. Operate and maintain the inverter in accordance with the manufacturer’s guidelines;
   b. Annually test the performance of the inverter; and
   c. Retain documentation demonstrating compliance.
   i. To ensure continuous operations and protection capability of the inverter, the Interconnection Customer shall, in the absence of such documentation, and at the Interconnection Customer’s expense, allow the Utility at its sole discretion, to either test the inverter, or require that the inverter be tested. Should the inverter fail the performance test the Utility may:
a) Disconnect the generating facility without notice;
b) Require replacement of the inverter and/or installation of a visible lockable AC disconnect switch accessible to Utility personnel; and
c) Charge the Interconnection Customer for any reconnection and other Utility costs.

5. Visible and Lockable Disconnect

a. Applicant shall furnish and install on applicant's side of the meter, a UL-approved safety disconnect switch which shall be capable of fully disconnecting the applicant's generating facility from Utility's electric system. The disconnect switch shall be located adjacent to utility meters and shall be of the visible break type in a metal enclosure which can be secured by a padlock. The disconnect switch shall be accessible to Utility personnel at all times.

b. The requirement in VII.C.5.a. of this subsection will be waived by the utility if:
   i. For remote meter pedestals, the disconnect switch proximity requirements will be waived if permanent signage that adequately describes the location of the disconnect is affixed to the Utility meter base. The Utility shall approve sign materials and content.
   ii. Applicant provides interconnection equipment that applicant can demonstrate, to the satisfaction of Utility, performs physical disconnection of the generating equipment supply internally; and
   iii. Applicant agrees that its service may be disconnected entirely if generating equipment must be physically disconnected for any reason.
6. Enhanced Inverter and Control

   a. To protect and ensure the reliability of the distribution feeder, prevent voltage fluctuations, and avoid possible future costs to other Utility customers to upgrade the system, the Utility may, after further review and consideration of system stability and regulatory requirements, specify enhanced inverter characteristics and designate operating parameters for Tier 2 facilities.

   b. The Utility may require enhanced inverters, when industry standard protocols for enhanced inverters are developed and enhanced inverters are commercially available for:

      i. All new interconnections; and
      ii. Retrofitting existing interconnection.

   c. The Utility may require the Applicant and Interconnection Customer, at the Applicant and Interconnection Customer’s expense, to procure and install communications and/or control equipment at the generating facility necessary:

      i. To enable the generating facility to receive control signals from the Utility; and
      ii. For the Utility to remotely disconnect and reconnect the generating facility during any period that the generation facility places the Utility’s systems or personnel at risk (e.g., islanding, voltage regulation, stability, reliability, power quality, system protection, etc.).

D. Tier 2 Completion Process: if the following requirements are fully met, the interconnection process is deemed complete; the generating facility can begin operation; and the Applicant becomes an Interconnection Customer:

   1. The Applicant and the Utility execute an Interconnection Agreement;
   2. The Utility received the Certificate of Completion showing inspection of the generating facility by the electrical inspector having jurisdiction over the installation;
3. All documentation demonstrating compliance with the technical requirements for interconnection has been fully and accurately completed, provided to and accepted by the Utility;

4. All required agreements with the Balancing Authority having jurisdiction, and all agreements covering the provision of any ancillary services, and/or the purchase, sale or transport of electricity have been completed and signed by all parties;

5. The Utility completes a site verification of proper interconnection and meter installation;

6. All requirements and conditions of the Interconnection Agreement have been satisfied and approved by the Utility; and

7. The Utility has granted permission to proceed with commercial operation.

VIII. TIER 3 CRITERIA, PROCEDURES, AND TECHNICAL REQUIREMENTS

The Tier 3 Application, Approval and Completion Processes and Technical requirements are necessarily different from Tiers 1 and 2 due to the unique and more complex characteristics of these generating facilities and associated interconnection requirements. Neither the Applicant nor the Utility should expect streamlining or certainty in the timelines associated with these processes. However, both should expect to apply due diligence and good faith in arriving at project approval.

A. Tier 3 Applicability: the Utility and Applicant will use Tier 3 processes and requirements to interconnect a generating facility if the proposed generating facility does not qualify for Tier 1 or Tier 2.

B. Tier 3 Application Process: the following Application timelines are intended to be consistent with, and not cause delays in, other service request Applications to the Utility.

1. Applicant shall submit a complete Application to the Utility. The Utility will not issue a notice of receipt.

2. If the Application is incomplete or otherwise deficient, the Utility will issue a Notice of Incomplete Application, identifying the areas of deficiency.
3. When a Notice of Incomplete Application is sent to an Applicant, the Applicant shall provide a complete Application to the Utility within 60 business days of the Notice of Incomplete Application. At its sole discretion, the Utility may grant an extension of the 60 day Incomplete Application Period. The Application expires at the conclusion of the Incomplete Application Period.

4. Within three months after a complete Application is submitted to the Utility, the Utility shall make its best effort to approve, approve with conditions, or provide the Applicant with written justification for denying the Application. The Applicant will be notified of any delays due to unforeseen circumstances, customer variance requests, or other incentive program approval requirements.

5. The Applicant has two years from the date of Application approval to interconnect and begin operation of the generating facility. The Application shall expire two years from its date of approval, unless the Utility at its sole discretion, grants an extension in writing.

6. The Utility may deny the Application for public safety, system reliability or other reasons as stated by the Utility in the Notice of Denial. Denied applications expire on the date of denial by the Utility.

C. **Tier 3 Technical and Safety Requirements.** In all cases, the interconnection facilities must isolate the generating facility from the Utility’s electric system when Utility power is interrupted, de-energized and/or disconnected, e.g., before any reclosing (automatic or manual) takes place. The Interconnection Customer shall prevent its generating facility equipment from automatically re-energizing the electric system.

1. **System Design.** Must be such that no single point of failure shall lead to loss of protective functions. This can be achieved by:
   a. Installing multiple discrete-function relays to provide the required functions as a set; or
   b. Installing redundant multi-function devices, each of which provides all of the required functions.
2. **Ground Fault Protection.** Must be provided, unless waived by the Utility in writing.
   
a. Use of ground overvoltage or ground overcurrent elements may be specified, depending on whether the Utility uses three-wire or effectively grounded four-wire systems.

3. **Breaker Failure Detection.** Consistent with Utility practice, breaker failure detection must be provided and secondary action initiated in the event that the interconnection breaker fails to clear for the trip condition. This may require installation of:
   
a. Dual generator breakers tripped by similar interconnection relays, or;
   
b. A main and backup relay with the same functions and zones of protection, one of which trips the generator breaker, and one which trips the main incoming breaker.

4. **Study and Analysis.** The Utility will evaluate the Application and may require, at the Applicant’s expense, any of the studies listed below prior to final approval of the Application. As study results and analyses will provide the basis for the detailed technical requirements for interconnection, Applicant’s acceptance of the findings will be required as a condition of final approval of the Application. Additional studies, beyond those listed below, may be necessary as determined by the Utility.

   *Note: the Applicant may request that studies be combined:*

   a. Feasibility Study;
   
b. System Impact Study; or
   
c. Facilities Study.
d. These studies are intended to quantify the impacts of the generating facility on the Utility system, and may include analysis of the following:
   i. Power Flow;
   ii. Stability;
   iii. Voltage Regulation;
   iv. Metering;
   v. Relay/Protection; and
   vi. Communications/Telemetry.

D. Tier 3 Technical Review and Additional Studies

1. Technical Review. Once the Utility accepts the Application as complete, the Utility will conduct a technical review to determine compliance with these Tier 3 technical standards, and whether any additional Engineering, Safety, Reliability Review or other studies will be required.

2. Notification. The Utility will notify the Applicant of the result of these determinations within 30 business days of when the Application is deemed complete.

3. Approval: No Additional Feasibility Studies Required. If the Utility determines that the proposal complies with Tier 3 technical requirements and requires no additional studies to determine the feasibility of the interconnection, the Utility will notify the Applicant and provide the following:
   a. An executable Interconnection Agreement within 60 business days of such notification;
   b. Any additional interim agreements that may be necessary; e.g., construction agreements; and
   c. A good faith estimate of the cost and time necessary to complete the interconnection.
4. **Non-Approval: Additional Feasibility Studies Required.** If the Utility determines that additional studies are required, the Utility will provide the Applicant with the following:
   a. A Study Agreement that includes a description of what studies are required;
      i. The Applicant may request that studies be combined.
   b. A good faith estimate of the cost and time necessary to perform the studies.

5. **Cost of Additional Studies and System Upgrades**
   a. **Cost Allocation.** The Applicant is responsible for the following:
      i. All reasonable costs incurred by the Utility to:
         a). Study the proposed interconnection; and
         b). Design and construct any required interconnection facilities or system upgrades.
      ii. All reasonable ongoing operation and maintenance costs for facilities added to the electric system that are dedicated to that Interconnection Customer's use; and
      iii. Meeting the credit requirements of the Utility prior to the start of construction.
   b. **Cost Disputes.** Within 30 business days after receiving a notice that additional studies are required, as described in this subsection, the Applicant may supply an alternative cost estimate from a third-party who is currently officially qualified to perform the studies required by the Utility.
c. **Deposit and Study Agreement.** After the Utility and the Applicant agree on the estimated cost of the required studies and identify the parties to perform them, the Applicant and Utility will execute a Study Agreement describing these studies and corresponding deposit payment(s) to the Utility.

   i. The deposit for the Study Agreement shall be charged in accordance with the Utility’s deposits and charges schedule in effect at the time the Application is submitted.

   ii. After the Study Agreement is executed, the Utility will make its best effort to complete the studies in keeping with the studies’ time requirements and other service requests of a similar magnitude.

6. **Denial after Additional Studies.** The Utility will provide the Applicant with the results of the studies conducted under this subsection.

   a. If the studies determine that the interconnection is not feasible, the Utility will issue a Notice of Denial to the Applicant, noting the expiration of the Application and reasons for the denial.

7. **Modification after Additional Studies.** The Utility will provide the Applicant with the results of the studies conducted under this subsection. Based on those results, the Utility and the Applicant may agree to modify the previously complete Application without penalty to the Applicant. A Utility approved modified Application under this subsection shall be considered an approved final Application.

   a. Other than Utility Approved modifications to the complete Application described in this subsection, changes by the Applicant or Interconnection Customer to a previously approved completed Application will be considered a new Application and shall be accompanied by a new application fee.
8. **Approval Pending Additional Studies.** If the required studies determine that the interconnection is feasible, the Utility will notify the Applicant of that determination.
   a. If no system upgrades are required, the Utility will provide an executable Interconnection Agreement to the Applicant within 5 business days of such notification.
   b. If system upgrades are required, the Utility will provide the Applicant with:
      i. An executable Interconnection Agreement within 15 business day;
      ii. Any additional interim agreements that may be necessary, e.g., construction agreements; and
      iii. A good faith estimate of the cost and time necessary to complete the interconnection.

9. **Incomplete Agreement Process.** An Applicant’s failure to execute and return completed agreements and required deposits within the time frames specified in this section or by the Utility, may result in termination of the application process by the Utility under the terms and conditions specified in such agreements.

10. **Agreement Process Deadline.** Within 30 business days of the date of Utility approval of the final Application, the Applicant must execute and return the Interconnection Agreement with the required deposit which shall not exceed 50-percent of the estimated costs to complete the interconnection.
   a. At the Utility’s discretion, an extension may be granted in writing.
E. Tier 3 Completion Process

If the following requirements are fully met, the interconnection process shall be deemed complete; the generating facility can begin operation, and the Applicant becomes an Interconnection Customer:

1. The Applicant and the Utility execute an Interconnection Agreement;
2. The Utility received the Certificate of Completion showing inspection of the generating facility by the electrical inspector having jurisdiction over the installation;
3. All documentation demonstrating compliance with the technical requirements for interconnection has been fully and accurately completed, provided to, and accepted by the Utility;
4. All required agreements with the Balancing Authority having jurisdiction and all agreements covering the purchase, sale or transport of electricity and provision of any ancillary services have been completed and signed by all parties;
5. The Utility completes a site verification of proper interconnection and meter installation;
6. All requirements and conditions of the Interconnection Agreement have been satisfied and approved by the Utility;
7. The Utility has granted permission to proceed with commercial operation; and
8. The Interconnection Customer begins operation of the generating facility within 2 years of the effective date of the Interconnection Agreement.
   a. If the generating facility fails to begin operations within the specified timeframe, both the Application and subsequent Interconnection Agreement shall expire.
      i. At the Utility’s discretion, an extension may be granted in writing.
IX. GENERAL TERMS, CONDITIONS, AND TECHNICAL REQUIREMENTS FOR ALL INTERCONNECTIONS

The terms, conditions, and technical requirements in this section shall apply to the Applicant and Interconnection Customer and the generating facility throughout the generating facility’s installation, testing, commissioning, operation, maintenance, decommissioning, and removal. The Utility may verify compliance at any time, with reasonable notice.

A. All electrical generating facilities must comply with these Requirements to be eligible to interconnect and operate in parallel with the Utility’s electric system.

B. Any generating facility proposing to be interconnected with the Utility’s electric system or any proposed change to a generating facility that requires modification of an existing Interconnection Agreement must meet all applicable terms, conditions and technical requirements as set forth in the appropriate Tier, this Section and the regulations and standards adopted by reference in Section XI.

C. These Interconnection Requirements are intended to mitigate possible adverse impacts caused by the generating facility on Utility equipment and personnel and on other customers of the Utility.

D. These Interconnection Requirements are not intended to address protection of the generating facility itself, generating facility personnel, or its internal load.

E. It is the responsibility of the Interconnection Customer to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect its own facilities, personnel, and loads.

F. The Applicant and Interconnection Customer shall comply with, and are responsible for, the generating facility meeting the following requirements 1, 2, 3, and 4 of this subsection.
1. **Modes of Compliance.** The Utility, at its sole discretion, may approve, in writing, alternatives that satisfy the intent of, and/or excuse compliance with, specific elements of these requirements, except local, state and federal regulations, and building codes.

2. **Codes and Standards.** These include 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.
   a. The Interconnection Customer shall be responsible for obtaining all applicable permit(s) for the generating facility equipment installations on its property.

3. **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 the equipment manufacturer's safety and operating manuals.

4. **Power Quality.** Installations will be in compliance with all applicable standards including IEEE Standard 519 Harmonic Limits, or the Utility’s more stringent harmonic requirements.

G. These specifications and standards shall apply to all interconnecting generating facilities that are intended to operate in parallel with the Utility’s electric system irrespective of the Applicant’s intent to generate energy to serve all or a part of the Applicant's load, or to sell the output to the Utility or any third party purchaser.

1. In the case where the Interconnection Agreement does not constitute an agreement with the Utility to purchase or deliver output from the generating facility, the Interconnection Customer is responsible for separately making all necessary agreements for the purchase, sale, and/or transport of Utility electricity.
H. In order to ensure system safety and reliability of interconnected operations, all interconnected generating facilities shall be constructed, operated and maintained by the Interconnection Customer in accordance with:
   1. These rules;
   2. The Interconnection Agreement;
   3. The applicable manufacturer’s recommended maintenance schedule and operating requirements;
   4. Good Utility practice, and
   5. All other applicable federal, state, and local laws, regulations and codes.

I. Prior to Initial Operation, all Interconnection Customers must submit a completed Certificate of Completion to the Utility and execute an appropriate Interconnection Agreement with the Utility.
   1. The Agreement outlines the interconnection standards, cost allocation and billing agreements, insurance requirements, and on-going maintenance and operation requirements.

J. Separate agreements may be required with the Utility, the Balancing Area Authority or transmission provider, or other party, but not necessarily with the Utility. Such agreements include power purchase, sale, delivery and scheduling of output from the generating facility, integration or other ancillary services.
   1. All required agreements must be fully executed prior to Initial Operation of the generating facility.

K. As may be reasonably requested by the Utility from time to time, the Applicant or Interconnection Customer shall promptly furnish the Utility with copies of plans, specifications, records, and other information relating to the generating facility, as well as its ownership, operation, use, or maintenance.

L. For the purposes of public and working personnel safety, any non-approved generating facility interconnection discovered will be immediately disconnected from the Utility system without any liability to the Utility. Such disconnection of non-approved interconnection may result in disconnection of electric service to customers of the Utility other than the owner of the generating facility.
M. To ensure reliable service to and minimize possible problems for all Utility customers, the Utility will review the need for upgrades to its system, including a dedicated transformer. If the generating facility requires Utility upgrades, the Applicant or Interconnection Customer shall pay for all costs of those upgrades.

N. The Utility may require, and will provide its rationale in writing, for a transfer trip system or an equivalent protective function for a generating facility, that cannot:
   1. Detect distribution system faults (both line-to-line and line-to-ground) and clear such faults within two seconds; or
   2. De-energize the Utility’s distribution system within two seconds after detecting the formation of an unintended island.

O. **Net Metering.** For facilities as set forth in chapter 80.60 RCW: the Utility shall install, own and maintain a kilowatt-hour meter or meters (as the Utility 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 reasonably require.
   1. The Applicant shall provide space for metering equipment.
   2. After the Applicant has submitted drawings and equipment specifications for Utility approval, it will be the Applicant’s responsibility to provide, as required, the current transformer enclosure, meter socket(s) and junction box.
   3. The Utility may approve other generating sources for Net Metering but is not required to do so.

P. **Production Metering.** The Utility may require separate metering for production.
   1. The Production Meter shall be revenue grade and shall conform to the requirements of ANSI C12.1.
   2. This meter will record all generation produced and may be billed separately from any Net Metering or customer usage metering.
   3. All costs associated with the installation of production metering will be paid by the Applicant.
Q. **Common Labeling.** Common labeling shall be required to inform working personnel that the generating facility is operating at or is located on the premises. The labeling shall be:

1. At the Interconnection Customer’s expense;
2. As furnished or approved by the Utility;
3. In accordance with NEC requirements, and
4. Must be posted on meter base, disconnects, and transformers.

R. **Insurance**

1. The Utility will not require additional insurance for a net metered facility that is a qualifying generating facility under chapter 80.60 RCW.
2. Additional insurance, limitations of liability and indemnification may be required by the Utility for other generating facilities permitted under these standards, which do not qualify under RCW chapter 80.60.

S. Prior to any future modification or expansion of the generating facility, the Interconnection Customer will obtain Utility review and approval. The Utility reserves the right to require the Interconnection Customer, at the Interconnection Customer's sole expense, to provide corrections or additions to existing electrical devices in the event of modification of government or industry regulations and standards, or major changes in the Utility’s electric system which impact the interconnection.

T. In accordance with RCW 80.60.020, the Utility will make net metering available to eligible customer-generators on a first-come, first-served basis until the earlier of either June 30, 2029, or the first date upon which the cumulative generating capacity of net metering systems equals four percent of the Utility’s peak demand during 1996 (the “mandatory interconnection deadline”). The date for determining whether the mandatory interconnection deadline is met shall be the date of the Utility’s receipt of a completed Application and full payment of the Application Processing Charge. After the mandatory interconnection deadline, the Utility may, in its sole discretion, restrict or prohibit new or expanded interconnected net metered generation capacity, and/or the number of net metered customers on any feeder, circuit or network, based upon the results of an Engineering, Safety and Reliability Review performed by the Utility.
U. In addition to the Application fee (if any), Utility charges to the Applicant or Interconnection Customer will be compensatory and applied as appropriate. Such costs may include, but are not limited to, transformers and production meters, as well as utility testing, qualification, studies and approval of non-UL 1741 listed equipment. The Interconnection Customer 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.

V. This section does not govern the settlement, purchase, sale or delivery of any power generated by the Applicant’s generating facility. The purchase, sale or delivery of power, including Net Metering of electricity pursuant to chapter 80.60 RCW, and other services that the Applicant may require will be covered by separate agreement or pursuant to the terms, conditions and rates as may be from time to time approved by the Governing Board. Any such agreement shall be complete and filed with the Utility prior to Initial Operation.

W. The Interconnection Customer may disconnect the generating facility at any time, provided that the Interconnection Customer gives reasonable advance notice to the Utility.

X. The Interconnection Customer shall notify the Utility prior to the sale or transfer of the generating facility, the interconnection facilities or the premises upon which the facilities are located. The Applicant or Interconnection Customer 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.

Y. All generating facilities must have an electrical permit and pass electrical inspection before they can be connected or operated in parallel with the Utility’s electric system. The Applicant shall provide written certification to the Utility that the generating facility has been installed and inspected in compliance with the local building and/or electrical codes.

Z. If the Interconnection Customer is not the owner of the real property on which the generating facility is located,
1. The Interconnection Customer shall indemnify the Utility for all risks to the
owner of the real property, including disconnection of service, and
2. The Interconnection Customer shall obtain all legal rights and easements
requested by the Utility for the Utility to access, install, own, maintain, operate
or remove its equipment and the disconnect switch, if installed, on the real
property where the generating facility is located, at no cost to the Utility.

AA. If the interconnected generating facility is owned by a Third Party Owner:
1. the Third Party Owner or Interconnection Customer shall indemnify and hold
harmless the Utility for all risks associated with the facility being
interconnected to the Utility’s system, including liability for the Utility
disconnecting the facility; and
2. the Interconnection Customer executing the Interconnection Agreement shall
obtain all legal rights and easements requested by the Utility for the Utility to
access, install, own, maintain, operate, replace or remove its equipment, and
installing the disconnect switch, on the real property where the generating
facility is located or on the generating facility itself, at no cost to the Utility.

X. FILINGS
The Utility shall maintain on file for inspection at its place of business, the charges, terms
and conditions for interconnections pursuant to these Interconnection Requirements. Such
filing shall include model forms of the following documents and contracts:
   A. Application;
   B. Model Interconnection Agreement; and
   C. Sample Certificate of Completion (electrical inspector’s form may be used).

XI. ADOPTION BY REFERENCE
The Utility adopts 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 these Interconnection Requirements, and
availability of the resources are as follows:
   A. The National Electrical Code is published by the National Fire Protection
      Association (NFPA)
1. The Utility adopts the version published in 2005; latest is 2011.
2. The National Electrical Code is a copyrighted document.
3. Copies are available from the NFPA at 1 Batterymarch Park, Quincy, Massachusetts, 02169 or at http://www.nfpa.org.

B. National Electric Safety Code (NESC)
   1. The Utility adopts the version published in 2002; latest is 2012.

C. Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems.
   1. The Utility adopts the most recent version adopted by IEEE; latest is 2008.

   1. The Utility adopts the most recent version; latest is 2005.

E. Institute of Electrical and Electronics Engineers (IEEE) Standard 519, Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems.

F. Underwriters Laboratories (UL), including UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems.
   1. The Utility adopts the version published in 2005; UL has made it virtually impossible to determine publication dates.

G. Occupational Safety and Health Administration (OSHA) Standard at 29 CFR
1910.269.


H. Washington Division of Occupational Safety and Health (DOSH) Standard, chapter 296-155 WAC.

   1. The DOSH Standard is available from the Washington Department of Labor and Industries at P.O. Box 44000, Olympia, WA 98504-4000, or at http://www.lni.wa.gov.

I. American National Standards Institute (ANSI)/Institute of Electrical and Electronics Engineers (IEEE) Standard C62.92, IEEE guide for the Application of neutral grounding in electrical Utility systems.


J. Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, IEEE Recommended Practice for Measurement and Limits of Voltage Fluctuations and Associated Light Flicker on AC Power Systems

Washington State Tier 1 Tests
Single Phase ≤ 25 kW Inverter Based

Test 1 Is the Generating Facility connected through a UL 1741 certified inverter?

Test 2 Is the Generating Facility single phase with a nameplate rating of 25 kW or less?

Test 3 Is the Generating Facility connected through a single phase transformer?

Test 4 Is the Generating Facility connected at secondary voltages (<600 V class)?

Test 5 Does the Generating Facility require construction or upgrade of facilities by the utility?

Test 6 If connected to a shared secondary, does the Generating Facility exceed the lesser of the service wire capability or the nameplate of the transformer?

Test 7 If connected to the center tap of a 240 V service, does the Generating Facility create an imbalance between the two sides of the 240 V service of more than 5 kVA?

Test 8 Does the Generating Facility connect to a radial distribution circuit, with aggregate nameplate capacity of the generation on the line section less than 15% of the line section annual peak load?

Generating Facility qualifies for Tier 1 process for the interconnection
Washington State Tier 2 Tests
< 500 kW Nameplate Rating

Test 1 Complete / Valid Interconnection Request – Not Tier 1

Test 2 Does the Generating Facility have a nameplate rating < 500 kW?

Test 3 Does the Generating Facility connect to a radial distribution circuit, or to a spot network limited to serving one customer?

Test 4 Does the Generating Facility connect to the distribution system (<38 kV class)?

Test 5 If the Generating Facility connects through an inverter, is the inverter UL 1741 certified?

Test 6 Is the Generating Facility a synchronous generator?

Test 7 If connected to a shared secondary, does the Generating Facility exceed the lesser of the service wire capability or the nameplate of the transformer?

Test 8 If connected to the center tap of a 240 V service, does the Generating Facility create an imbalance between the two sides of the 240 V service of more than 5 kVA?

Start Tier 3 process

Continued next page
Washington State Tier 2 Tests
< 500 kW Nameplate Rating
Continued from previous page

Test 9 Does the Generating Facility connect to a radial distribution circuit, with aggregate nameplate capacity of the generation on the line section less than 15% of the line section annual peak load?

Yes

No

Test 10 Does the Generating Facility require only minor upgrades to the utility’s system (<$10,000)?

Yes

No

Test 11 Does the aggregate generation, including the Generating Facility, connected to the load side of spot network protectors exceed the smaller of 3% of the spot network’s maximum load or 50 kW? (The interconnection must be through a UL 1741 certified inverter.)

Yes

Start Tier 3 process

No

Test 12 Does the aggregate generation on the circuit, including the Generating Facility, contribute more than 10% of the distribution circuit’s maximum available fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership?

Yes

No

Test 13 Does the maximum available short circuit current, with or without the generation, exceed 87.5% of the interrupting capability of any utility protective device or equipment?

Yes

No

Generating Facility qualifies for Tier 2 process for the interconnection
MEMORANDUM TO BOARD OF COMMISSIONERS

TO:       CLALLAM PUD BOARD OF COMMISSIONERS
FROM:     SIMON BARNHART, GENERAL COUNSEL

SUBJECT:  TRANSFER OF SURPLUS POLE AND SWITCH TO JEFFERSON PUD
DATE:     JUNE 10, 2019

In April 2015, the District conveyed to PUD No. 1 of Jefferson County ("Jefferson PUD") a substantial portion of the District’s electric facilities located in Jefferson County. The facilities consist mostly of electric transmission facilities that serve the Port Townsend Paper mill, but also include transmission lines and appurtenances that serve as backup transmission facilities for the District, originating at BPA’s Fairmount Substation located south and east of Discovery Bay and continuing west to a point west of Discovery Bay. The facilities retained by the District include Pole #2902-241861, Pole #2902-241862, and Switch #1170, and extend westward to Clallam County.

Attached to this memo are two overhead photos that show (1) the general location of the subject facilities, and (2) the specific locations of Pole #2902-241862, #2902-241861 and Switch #1170.

When the District conveyed the transmission facilities to Jefferson PUD, the parties executed an Agreement for Reservation of Transmission Line and Switch Capacity under which Jefferson PUD agreed to reserve for the District transmission line and switch capacity from the Fairmount Substation to Switch #1170, to ensure our continued ability to rely on those transmission facilities as backup to our primary transmission facilities.

This summer, the District is rebuilding a section of the transmission system from Discovery Bay to Blyn. The work of that project will include installing a new switch, to be Switch #1171, to the west of Pole #2902-241861, Pole #2902-241862, and Switch #1170. With the installation of the new switch, each Utility will have the ability independently to isolate their respective systems without the need for immediate coordination of system operations.

Upon completion of the installation of Switch #1171, the District will no longer need Switch #1170, Pole #2902-241861 (the pole that holds Switch #1170), and Pole #2902-241862 (a span guy attachment). Those facilities will therefore be surplus to the District’s needs. They will, however, be useful to Jefferson PUD’s operation of the facilities they acquired from the District in 2015.
Proposed Resolution No. 2151-19 declares the aforementioned facilities to be surplus to the District’s needs upon the installation of Switch #1171, and authorizes the General Manager to convey those facilities to Jefferson PUD at such time as the General Manager determines is appropriate. Jefferson PUD has agreed to accept the facilities from the District.

In connection with the transfer of the facilities to Jefferson PUD, the District and Jefferson PUD will execute an amendment to the Agreement for Reservation of Transmission Line and Switch Capacity, to extend the reserved capacity through Switch #1170 and to Switch #1171.

Staff requests that the Commission pass Resolution No. 2151-19, declaring that upon the installation of Switch #1171, the District’s Switch #1170, Pole #2902-241861, and Pole #2902-241862 shall be surplus to the District’s needs, and authorizing the General Manager to convey those facilities to PUD No. 1 of Jefferson County at such time as the General Manager determines is appropriate.
A RESOLUTION Authorizing the Disposal of District Property

WHEREAS, the District owns electrical transmission facilities located in Jefferson County, Washington, originating at the District’s Pole #2902-241861, and including Pole #2902-241862 and Switch #1170 (collectively referred to as the “Facilities”); and

WHEREAS, Public Utility District No. 1 of Jefferson County (“Jefferson PUD”) provides retail electrical transmission service in Jefferson County; and

WHEREAS, in April 2015, the District conveyed certain assets to Jefferson PUD, including real property, structures, poles and attachments, conductors, insulators, and switches originating at the District’s Pole #2902-251462 located outside BPA’s Fairmount Substation, and terminating at, but excluding, the aforementioned Pole #2902-241861 and Switch #1170 located west of the Discovery Bay Substation and the Discovery Bay Switching Station; and

WHEREAS, as partial consideration for that transfer of assets, Jefferson PUD agreed to reserve for the District certain transmission line and switch capacity between BPA’s Fairmount Breaker #1374 and the District’s Switch #1170; and

WHEREAS, that reserved capacity is important to the District in that it allows the District to continue to serve its load during those times when the District’s primary transmission facilities are down because of system maintenance or emergency conditions; and

WHEREAS, the District plans to rebuild its transmission system from Discovery Bay to Blyn, at which time a new switch, #1171, will be installed on Pole #2902-241860 west of the existing Pole #2902-241861 and Switch #1170; and

WHEREAS, upon the installation of Switch #1171, the District’s utility operations will no longer require the use of Switch #1170, Pole #2902-241861, or Pole #2902-241862 (a span guy attachment backing up Pole #2902-241861), and those facilities will become surplus to the District’s needs; and

WHEREAS, those same facilities would be useful to Jefferson PUD’s operations; and

WHEREAS, RCW 54.16.180(2)(a) authorizes the District to convey to Jefferson PUD any part of property owned by the District that is located outside the District’s boundaries; and

WHEREAS, in order to avoid unnecessary expense incurred in connection with the District’s continued ownership of surplus facilities, it is in the District’s best interest for the District to convey to Jefferson PUD Switch #1170, Pole #2902-241861, and Pole #2902-241862; and
WHEREAS, as consideration for the transfer of these facilities to Jefferson PUD, the Agreement for Reservation of Transmission Line and Switch Capacity will be amended to extend the reserved transmission line and switch capacity from Switch #1170 and Pole #2902-241861 to Switch #1171 and Pole #2902-241860.

NOW, THEREFORE, BE IT RESOLVED as follows:

1. Upon the installation of Switch #1171, the District’s Switch #1170, Pole #2902-241861, and Pole #2902-241862 shall be surplus to the District’s needs.

2. The General Manager is hereby authorized to convey to Public Utility District No. 1 of Jefferson County Switch #1170, Pole #2902-241861, and Pole #2902-241862, at no cost to Jefferson PUD, at such time as the General Manager determines is appropriate.

PASSED by the Board of Commissioners of Public Utility District No. 1 of Clallam County, Washington, this 10th day of June, 2019.

________________________
President

ATTEST:

________________________
Vice President

________________________
Secretary

Resolution No. 2151-19