

PRE-AGENDA
FOR THE REGULAR MEETING OF
CLALLAM COUNTY PUBLIC UTILITY DISTRICT #1
BOARD OF COMMISSIONERS
AUGUST 22, 2022 AT 1:30 PM

Join Zoom Meeting:

<https://clallampud-net.zoom.us/j/86987880931?pwd=dUVzTmJDVERHdC93WVZlQ2s3MEQ4dz09>

Meeting ID: 869 8788 0931 | **Passcode:** 370407

One tap mobile: +12532158782,,86987880931#,,,,*370407# US (Tacoma)

- **Consent Agenda Items**

The Commissioners will consider approving Consent Agenda items.

- **PUD Internship Presentation on Sequim Solar Storage**

PUD Intern will present on local current and possible/potential solar storage solutions.

- **2022 Resource Plan**

The Commissioners will consider approving the 2022 Clallam PUD Resource Plan.

Staff requests a motion, second, and vote: to approve the 2022 Clallam PUD Resource Plan, which is required to be submitted under Washington State Resource Plans, RCW 19.280 (2006 House Bill 1010).

- **RESOLUTION 2247-22 Authorizing the Disposal of Surplus Property**

Staff requests the Commission pass Resolution No. 2247-22 authorizing the disposal of surplus property.

Staff requests a motion, second, and vote: to pass Resolution No. 2247-22 authorizing the disposal of surplus property consisting of various unrepairable or outdated computer hardware and peripherals valued at a total cost of \$4235.

- **Acceptance Memo for Agreement Cost Increase for Bid No. 210804**

The Commissioners will consider approving Acceptance Memo for Agreement Cost Increase for Bid No. 210804.

Staff requests a motion, second, and vote: to approve Acceptance Memo for Agreement Cost Increase for Bid No. 210804 for the replacement of aging equipment and to bring the Forks substation up to current standards. Due to longer than anticipated shipping delays causing construction delays, extension of the agreement completion date and increased contract costs to re-mobilize the contractor are required to finish the work when materials are received. The delay and re-mobilization increases the total contract amount over 10% with an additional \$8,672.40, for a total project cost of to not-to-exceed \$563,777.22. The revised contract completion date is to be no later than September 29, 2022.

- **Draft Memo of Understanding (MOU) between the County and PUD re Carlsborg Water Supply**

Staff will present for discussion a draft Memo of Understanding (MOU) between the County and PUD re Carlsborg Water Supply.

- **BPA Post-2028 Contract Discussion**

Commissioners and staff will discuss recent developments of the BPA post-2028 contract.

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.

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1. CALL TO ORDER

2. COMMENTS FROM THE PUBLIC

3. AGENDA REVISIONS

4. APPROVAL OF CONSENT AGENDA

- a. Minutes of the August 8 regular meeting;
- b. Claim vouchers for August 8 through August 15, 2022 for a total of \$3,522,655.66; and
- c. Payroll vouchers for the period of July 16 through August 15, 2022.

5. BUSINESS ITEMS

- a. PUD Internship Presentation on Solar Storage Titan Berson
- b. 2022 Resource Plan Tyler King
- c. Resolution 2247-22 Authorizing Disposal of Surplus Inventory Steve Schopfer
- d. Acceptance Memo for Agreement Cost Increase Bid No. 220805 – Forks Substation Construction Doug Adams
- e. Draft Memo of Understanding (MOU) between the County and PUD re Carlsborg Water Supply – for discussion only Tom Martin
- f. BPA Post-2028 contract discussion Commissioners, Staff

6. CORRESPONDENCE/COMMUNICATIONS

- a. Pacific Northwest National Laboratory Roundtable with US Energy Secretary Sean Worthington

7. COMMISSIONER REPORTS

8. STAFF REPORTS

9. BOARD ACTIONS FOR STAFF

10. COMMENTS FROM THE PUBLIC

11. EXECUTIVE SESSION

12. ADJOURN

CLALLAM COUNTY PUBLIC UTILITY DISTRICT #1

Minutes of the Regular Meeting of the Board of Commissioners

Main Office | 104 Hooker Road | Sequim, WA 98382

August 8, 2022 at 1:30 PM - This meeting was held remotely via ZOOM

Commissioners Present

Will Purser, President
Rick Paschall, Vice President
Jim Waddell, Secretary

Staff Present via Zoom

Sean Worthington, General Manager
John Purvis, Assistant General Manager
Lori Carter, Controller/Auditing Officer
Ruth Kuch, Finance Manager/Treasurer
Teresa Lyn, Executive Assistant
Mike Hill, Engineering Manager
Tom Martin, WWW Manager
Nicole Hartman, Communications Manager
Colin Young, Distribution System
Supervisor

Jenean Keate, Contracts Coordinator
Sarah Canepa, Financial Analyst II
Chelsey Jung, Payroll Coordinator
Tyler King, Power Analyst
Kaylie Hunter, Procurement and Facilities
Supervisor
Eric Jacobson, Business Analyst
Shawn Delplain, Broadband Supervisor

Others Present as Identified

JoJo Bead
Patti Morris
Ken Hays
Janet Marx
Krestine Reed

The meeting commenced at 1:30 PM.

PUBLIC COMMENT :58

There was no public comment.

AGENDA REVISIONS 1:49

There were no agenda revisions.

CONSENT AGENDA 1:59

Upon recommendation of staff, and upon motion of Commissioner Paschall, seconded by Commissioner Waddell and carried, the Board approved the following consent agenda items:

- a. Minutes of the July 25 work session;
- b. Minutes of the July 25 regular board meeting;
- c. Claim vouchers for July 25 through August 1, 2022 for a total of \$3,516,522.20;
- d. Removal of delinquent accounts from the August 2022 active accounts receivable totaling \$5,678.92 including a 30% collection fee; and
- e. July 2022 treasurer report.

BUSINESS ITEMS STARTING AT 2:35

- a. **2:38:** Upon recommendation of staff, and upon motion of Commissioner Paschall, seconded by Commissioner Waddell and carried, the Board approved the Acceptance Memo for a cost increase to Contract No. 200334. This contract is for engineering services on LUD 3 infrastructure pre-construction, and was originally contracted at \$65,998.00. Due to additional requirements with City of Port Angeles, a change order was previously created and approved by the General Manager to extend the agreement time and add to the scope of work for an additional \$31,601.00, for a total project cost not-to-exceed \$97,599.00. Due to the extended delay in conditional use permit and purchase and sale agreement, it is determined that more time in engineering services is needed on the agreement in order to complete the scope of work on the sub-division and project design. The extended service time increases the agreement amount over 10% with an additional \$4,806.00, for a total project cost of \$102,405.00, and further extends the completion date from May 31, 2022, to January 31, 2023.

- b. **6:16:** Upon recommendation of staff, and upon motion of Commissioner Paschall, seconded by Commissioner Waddell and carried, the Board approved the Acceptance Memo for a cost increase for Contract No. 200328. This contract is for engineering services on Clallam Bay/Sekiu water main upgrades pre-construction, originally contracted at \$349,452.00. Due to delays and design changes with Washington State Department of Transportation (WSDOT), a change order was previously created and approved by the General Manager to extend the agreement time and add to the scope of work for an additional \$34,843.00, for a total project cost not-to-exceed \$384,295.00. This request is for additional services not included in the original scope of work including: costs associated with attending the bid opening (travel time and mileage); review and recommendation of bids; a reference check of the lowest responsive bidder; and the costs to provide necessary documentation. The additional scope of work and time increases the agreement amount over 10% with an additional \$4,172.00, for a total project cost of \$388,467.00, and extends the completion date from December 15, 2021 to August 10, 2022.

- c. **9:53:** Upon recommendation of staff, and upon motion of Commissioner Paschall, seconded by Commissioner Waddell and carried, the Board approved an Acceptance Memo of Completion for Contract No. 221022 for the Central Warehouse Facility's (CWF) roof restoration for a total contract cost of \$269,382.72, including WSST. All work with CHG Building Systems Inc. has been completed. The project consisted of all necessary services, labor, and materials required to clean, prep, and restore the roof and gutters of CWF at 100 Hooker Road, Sequim, due to deterioration of existing roof sealant and leaking gutters.

- d. **12:50:** Distribution System Supervisor Colin Young presented to the Commissioners for discussion and review a potential modification to construction cost sharing. The goal of the proposal is to provide direction to the Commissioners for a future Resolution on sharing regulations. The recommendation is to eliminate sharing due to the cost of the program and the inherent liabilities with administering it. The option presented simplifies the program and reduces employee administration time. Commissioners Pursers and

Paschall requested the proposed modification be made available for customer feedback prior to the Commissioners consideration of a Resolution to modify construction cost sharing as per today's presentation.

- e. **27:28:** General Manager Sean Worthington presented a 46 page document to the Commissioners that compiled all verbal and written comments received prior to and at the Strategic Plan work session on July 25th. Staff reviewed each comment, noted suggested edits, and added recommendations the Strategic Plan, as provided in today's board packet with the changes highlighted. General Manager Worthington asked for Commissioner approval on the Plan in order to move forward with the budgeting process and to begin developing the strategic projects and capital work associated with the Plan. He also advised that the meeting to discuss the Strategic Plan with the County Commissioners is scheduled for September 12 during the regular PUD board meeting. Should something substantial comes from that joint meeting, Commissioners have the option of an addendum to the Strategic Plan. Commissioner Waddell complimented staff on initiating dialogue with the County Commissioners and Tribes and the EDC. Upon recommendation of staff, and upon motion of Commissioner Paschall, seconded by Commissioner Waddell and carried, the Board accepted the 2023 Strategic Plan as presented.
- f. **32:05:** Commissioners and staff discussed recent BPA Post-2028 contract updates. Topics included: a potential for a reduced PF rate assuming what future secondary revenues will be (and which is changeable based on the type of water year); secondary sales outside of the Tier 1 rate; the potential for some type of refund or dividend that preference customers could receive; a \$60 to \$70 per megawatt hour price based on the latest rate case discussions; Columbia Generation Station (CGS) upgrades; the potential for displacement of Tier 1 into Tier 1; Energy Northwest's request for \$31 million to continue engineering and licensing studies on the CGS upgrade (included in BPA's budget); pushing utilities to come up with defining system size; BPA's appearing to commit to a Tier 1 finished product that is carbon-free; and the reset of contract high water marks in the new contract. Commissioner Paschall asked if our PUD has a position on system size for the new contract (critical water or P 10?).

CORRESPONDENCE/COMMUNICATIONS 48:09

General Manager Sean Worthington reported on several items of correspondence and communication:

1. The County Commissioners have requested to attend PUD's September 12th regular board meeting; this will be the first business item. The County Commissioners would like to discuss the Strategic Plan and Carlsborg water rights expansion efforts. Water and Wastewater Manager Tom Martin will be attendance as will Steve Gray and Carol Creasey from the Public Works Department. PUD Commissioners are requested to confirm by the end of this week if they will be available for the September 12th regular board meeting.

2. The City of Sequim has extended an invitation to the PUD Commissioners for a meet and greet on September 12th from 5 to 6 PM at the City of Sequim chambers during their pre-board meeting work session. Commissioners may attend in person or may Zoom in to the City's in-person meeting. The purpose of the meeting as relayed to General Manager Worthington is to meet and have a brief discussion; although no agenda has been provided by the City to date, Deputy Mayor Brandon Janisse recently sent an email with questions regarding the BPA contract which may be a topic of discussion. Once the City agenda is received it will be forwarded to the Commissioners.
3. Communication from Robert Knapp, Environmental Planning Manager of the Jamestown S'Klallam Tribe, was received regarding the Strategic Plan. Although the Tribe provided no specific comments, they requested continued dialogue with the PUD and specifically requested that the PUD Commissioners engage with Tribal leadership. Accordingly General Manager Worthington is coordinating with Mr. Knapp to set up a joint session later this Autumn. Commissioners are requested to review the three dates proposed and confirm their availability for each
4. The North Olympic Development Council (NODC) in conjunction with the Clallam County Broadband Team (of which PUD is a member) will host a broadband summit on September 1st from 10 AM to 4 PM at Seven Cedars Hotel and Casino. The summit is specifically geared toward broadband project developers and local ISPs. PUD is co-sponsoring this event. If Commissioners are interested in attending, please advise as soon as possible. Assistant Manager Purvis advised that the participant number is ranging around 50 in number including Mason 3 PUD; a speaker from the State broadband office; and a speaker on grants.
5. The Director of the Sequim location of the Pacific Northwest National Laboratory (PNNL) invited General Manager Worthington and Assistant Manager Purvis to attend a Community Roundtable on energy resilience in rural areas. Known attendees are: US Department of Energy Secretary Jennifer Granholm; Representative Derek Kilmer; Representative Steve Tharinger; Chairman W. Ron Allen of the Jamestown S'Klallam Tribe; Chairman Timothy J. Greene, Sr. of the Makah Tribe; and Karen Affeld of the North Olympic Development Council. The Roundtable is scheduled for this Wednesday at PNNL and will focus on the energy needs of the north Olympic Peninsula, including the challenges and opportunities associated with the integration of emerging carbon free-technologies and system infrastructure upgrades. Secretary Granholm will share the DOE's vision for its supporting role in energy transitions and the importance of community in these transitions. Commissioner Waddell commented that this kind of dialogue - getting regional input countywide - can help shape the strategic agenda.
6. Regarding opening the lobby to the public: The county dashboard continues to show declining COVID numbers; last week it was at 562 and this week today it is at 509. PUD has not had at-work transmission over the last two months; all employee cases have been via community transmission. Therefore General Manager Worthington requested the Commissioners authorize opening the lobby to the public. PUD will be interacting with customers at the County Fair and would like to open the lobby prior to the Fair. Public

meeting spaces will not be opened as yet and board meetings will continue to be held virtually. After some discussion, Commissioners authorized opening the lobby.

COMMISSIONER REPORTS 1:00

Commissioner Waddell attended a Northwest Power Conservation Council (NPCC) Resource Adequacy Advisory committee meeting. Topics were: Hydro plant operational constraints and priorities; and simulated operations, market availability, and prices based on NPCC's new Genesis Model. He attended Clallam County Economic Development Council meeting. The topic of which was realistic minimum/subsistence wages. He attended a Western Public Agencies Group (WPAG) meeting. He also attended a free presentation/meeting led by a group in Eugene, OR. Topics were earth justice and the lower Snake River dams.

Commissioner Paschall attended a Western Public Agencies Group (WPAG) meeting. Topics were: Tier 1 and 2 rates and demand rates.

Commissioner Purser attended an Energy Northwest (EN) Board of Directors meeting and a joint meeting with EN's Executive Board. Topics were: salary inflation trends; difficulties in attracting and retaining talent and digital skills professionals as well as hourly employees; health benefits and job security, key factors in attracting and retaining employees; recent Columbia Generating Systems (CGS) downtime due to economic dispatch and equipment problems; CGS supply chain issues encountered in preparing for the next refueling outage; and the Nine Canyon, Packwood, and other EN wind farms, which are doing well; and the Horn Rapids Battery Energy Storage System (a megawatt solar farm with a one megawatt battery) which experienced battery functionality problems requiring the import of technicians from China. Additional topics were: EN's Electric Vehicle Infrastructure Transportation Alliance (EVITA) which advocates for sustainable electric transportation infrastructure in Washington State and the Pacific Northwest; \$3.4 million in project grants applied for EV charging stations on the Highway 101 loop mainly through Clallam County (grants not approved this year; however EN was encouraged to reapply next year to move up in the queue for financing); ongoing permitting and meetings for the 50 megawatt Ruby Flats solar energy system (construction is to start in January 2023); Grant PUD's new nuclear program (where to site it and whether to contract with X-energy or NuScale); a Memo of Understanding (MOU) between EN and a firm developing technology to recycle spent fuel - part of that understanding is that EN will consider having the first reactor to load that recycled fuel.

STAFF REPORTS 1:14

Power Analyst Tyler King provided a briefing on the Climate Commitment Act (CCA). The CCA is an economy-wide cap-and-invest program, passed by Washington state in 2021. The program begins in 2023 and finalized rules are expected in October. The program includes in-state generation and imported electricity. The entity with the obligation for complying with the program for the electricity sector is called the First Jurisdictional Deliverer (FJD). The program covers imported electricity (BPA power is considered imported electricity) if the cumulative annual total is >25,000 MT CO₂e. The CCA gives BPA the option to decide to participate in WA's program as the FJD. BPA will not be the FJD for 2023, but will consider 2024 after WA finalizes the program rules. CCA goals are: nearly \$1 billion in revenue per year (estimates for

WA) by the late 2020; a reduction in the total number of credits/allowances each year, increasing the price of pollution; a reduction of GHG emissions by 95% by 2050; proceeds from the CCA allowance auctions, which must be invested in critical climate projects, addressing issues in environmental justice and inequity; and a requirement that 35% of funds be invested in projects for overburdened communities, with a minimum of 10% going to projects with Tribal support.

BOARD ACTION ITEMS FOR STAFF 1:34

- a. Make Engineering’s proposal to modify construction cost sharing available for customer feedback prior to the Commissioners consideration of a Resolution to modify construction cost sharing per today’s presentation on this topic;
- b. Set dates for upcoming joint meetings with the County, the City of Sequim, and the Jamestown S’Klallam Tribe and communicate these to the Commissioners;
- c. After meeting with the above, ask the Commissioners if they wish to create an addendum to the approved 2023 Strategic Plan;
- d. Advise on the confirmed lobby open date; and
- e. Present a load and greenhouse gas emission forecast to the Board by the end of 2023.

COMMENTS FROM THE PUBLIC 1:35

There was no public comment.

ADJOURN

There being no further business to come before the board, the meeting adjourned at 2:36 PM.

ATTEST:

President

Vice President

Secretary


A detailed transcript of this meeting via audio recording is available to the public on the Commission Meetings page of the PUD website here: <https://clallampud.net/commission-meetings/>.

August 8, 2022

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 8/16/22
AUDITING OFFICER

 DATE 8/16/22
GENERAL MANAGER

Vouchers audited and certified by the Auditing Officer and the General Manager have been recorded on the attached list(s) 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(s):

Summary for Voucher Lists Dated 8/8/2022–8/15/2022

Checks	\$	1,863,978.65
Wire Transfers		1,609,059.31
E-Payment		49,617.70
Prepays		
Total	\$	3,522,655.66

COMMISSIONER

COMMISSIONER

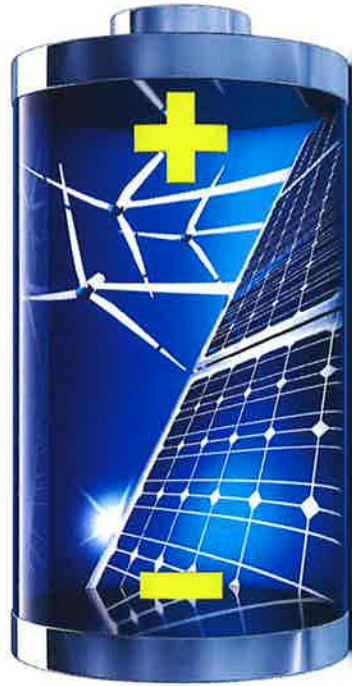
COMMISSIONER



Sequim Solar Storage

Titan Berson

8/22/2022



What is Energy Storage?

- It's the process of storing energy (partially)
- It is best used when excess energy is on the grid and not being used
- It can come in multiple forms



Why Should You Care?

- Washington State Clean Energy Transformation Act (CETA)
- Pushes for renewable generation
- Fossil fuel power plant shutting down
- More demand for electricity and electricity consuming products, such as EV's

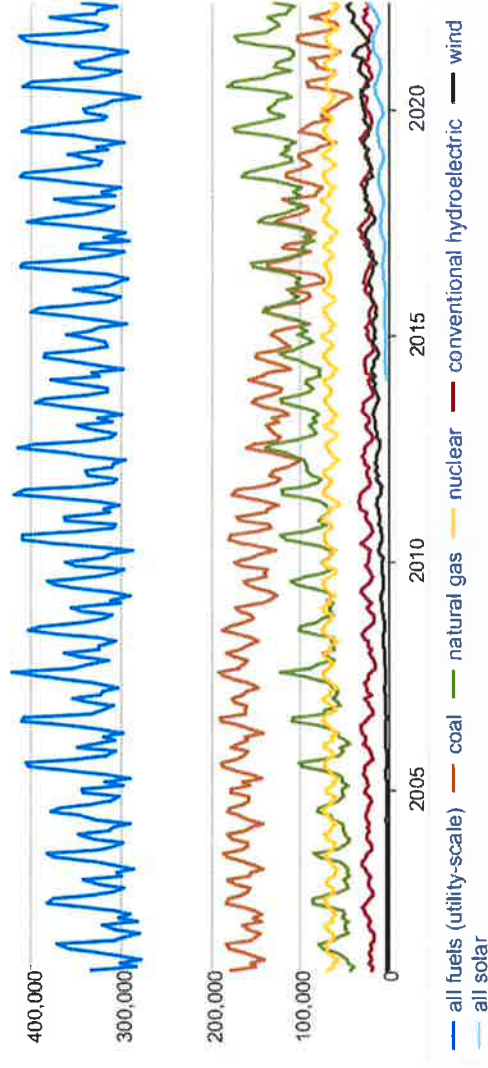


Why Should You Care?



Net generation, United States, all sectors, monthly

thousand megawatthours



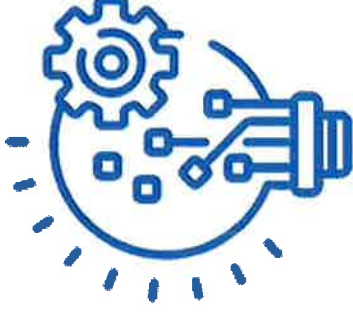
Source: U.S. Energy Information Administration



How Can We Store It?

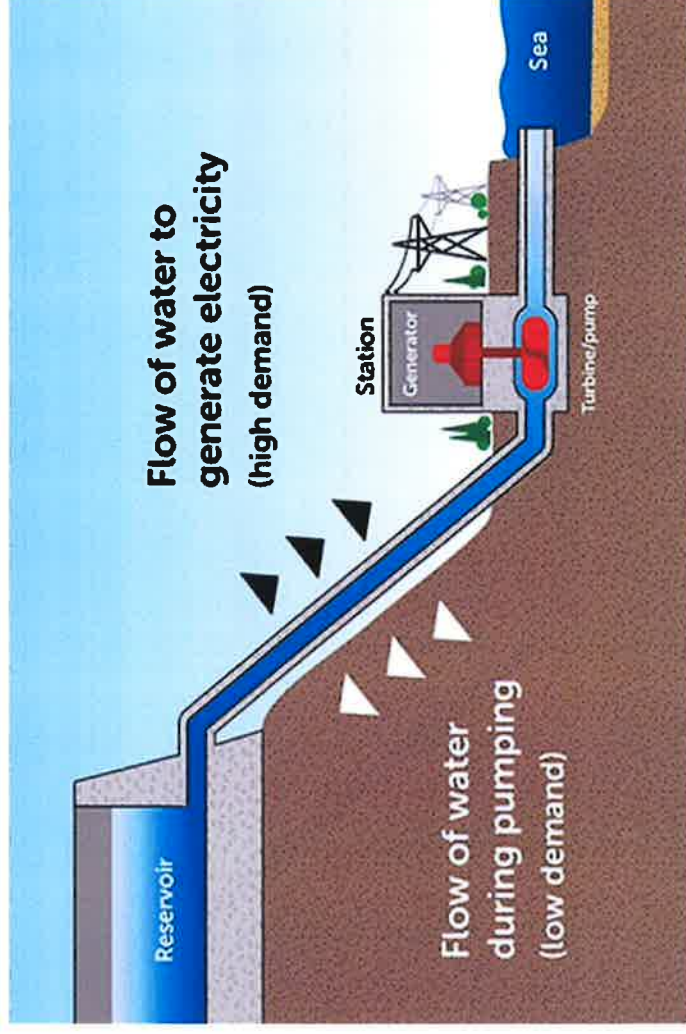


- Several kinds of energy storage
- Currently available: Pumped Hydro Energy Storage, Electro-chemical Energy Storage, and Flywheel Energy Storage
- In development: Compressed Air Energy Storage, Gravity Energy Storage, Thermal Energy Storage, and Electrolysis and Fuel Cell system



Currently Available Storage: Pumped Hydro Storage

- Energy is stored by pumping water to a higher location
- When energy is needed, the upper level reservoir releases water through a turbine
- The turbine then puts electricity on the grid



Currently Available Storage: Electro-Chemical Storage



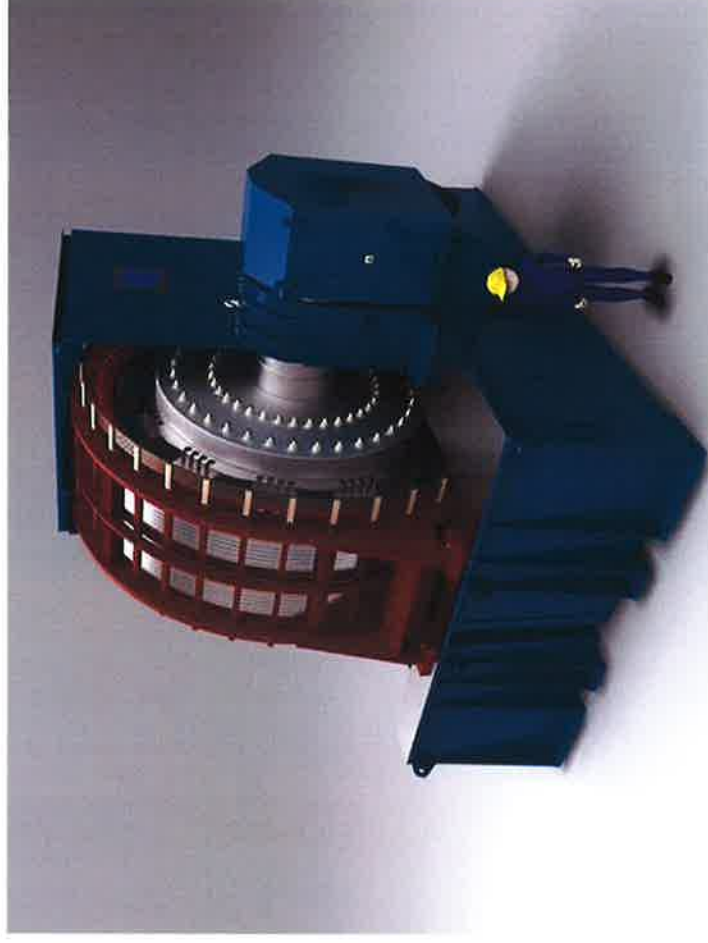
- No different to the batteries in your TV remote
- These batteries store charge and release it through internal chemical reactions
- Eventually these batteries will need to be replaced
- Comes in several forms, lead acid, Lithium-Ion, and flow batteries



Currently Available: Flywheel Storage

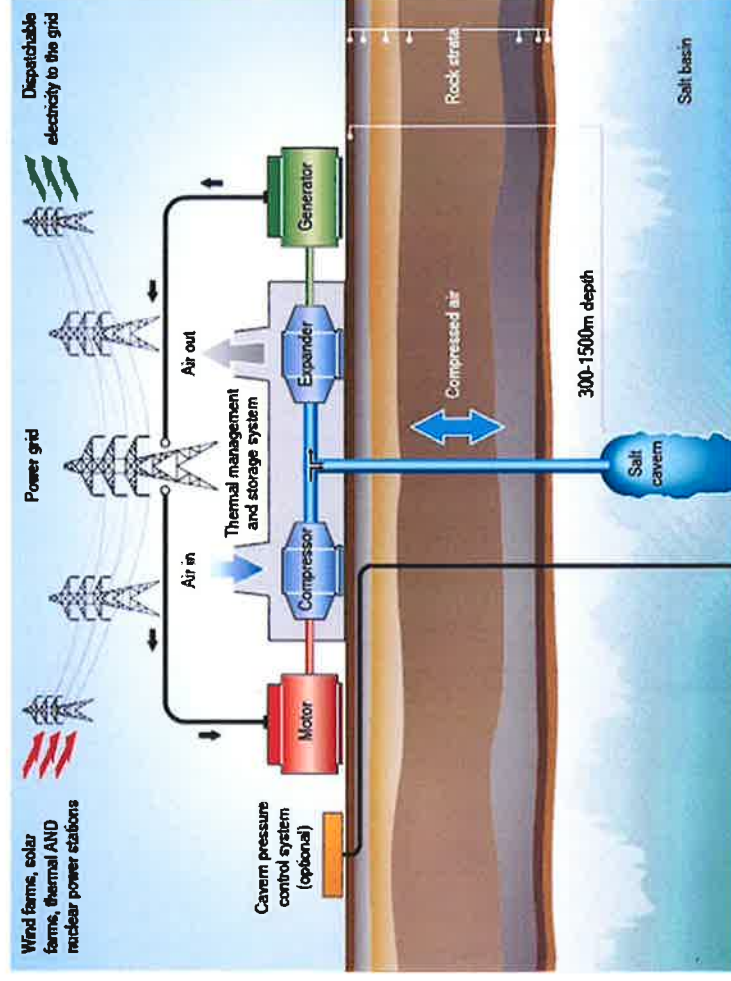


- Giant spinning metal disks
- The faster they spin the more energy they store
- They act as a good source for balancing grid inertia



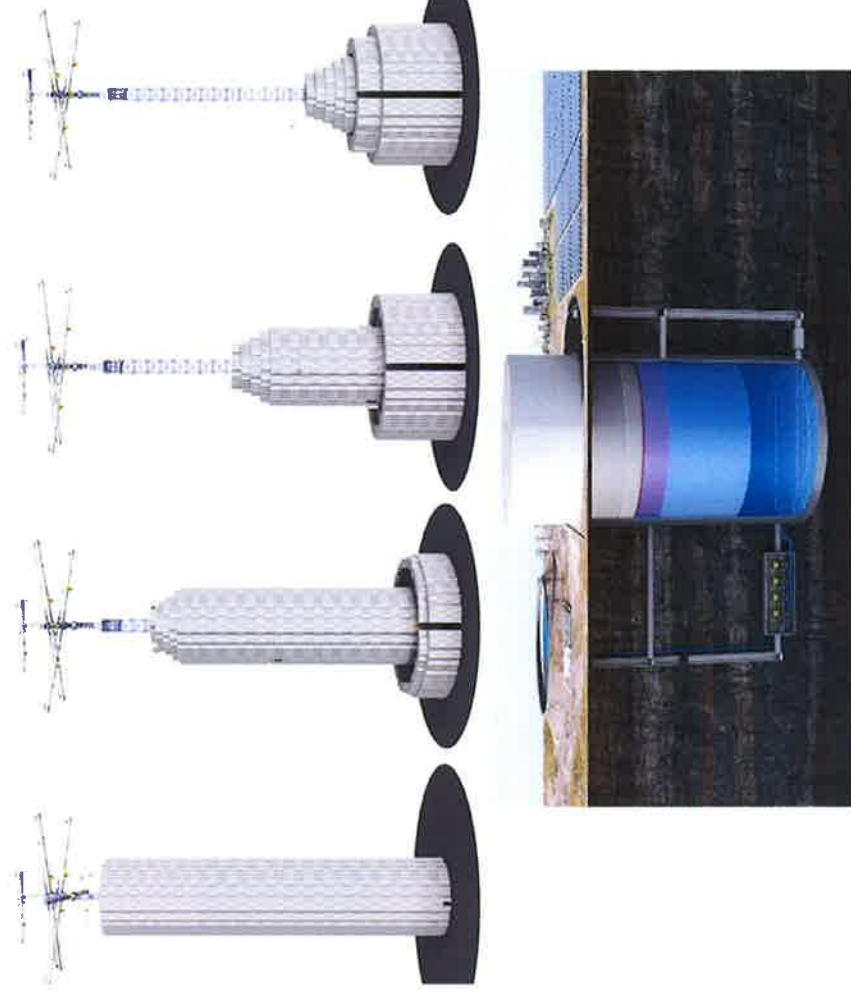
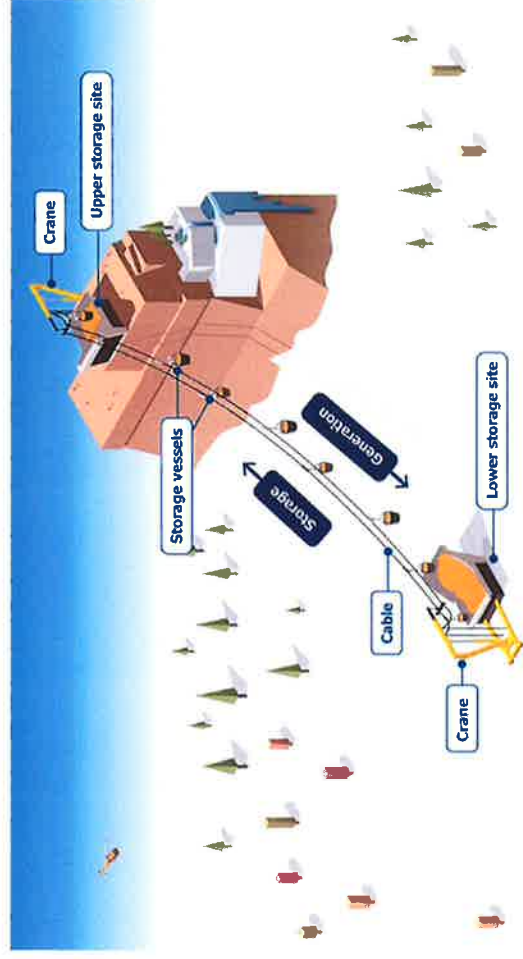
Possible Future Storage: Compressed Air

- Stores energy in underground tanks or caverns
- Uses compressed air to spin a turbine for generation
- Could be stored underwater (UWCAES)



Possible Future Storage: Gravity Energy Storage

- Similar to Pumped Hydro
- One solid mass, or multiple sets of solid mass
- Can be built anywhere



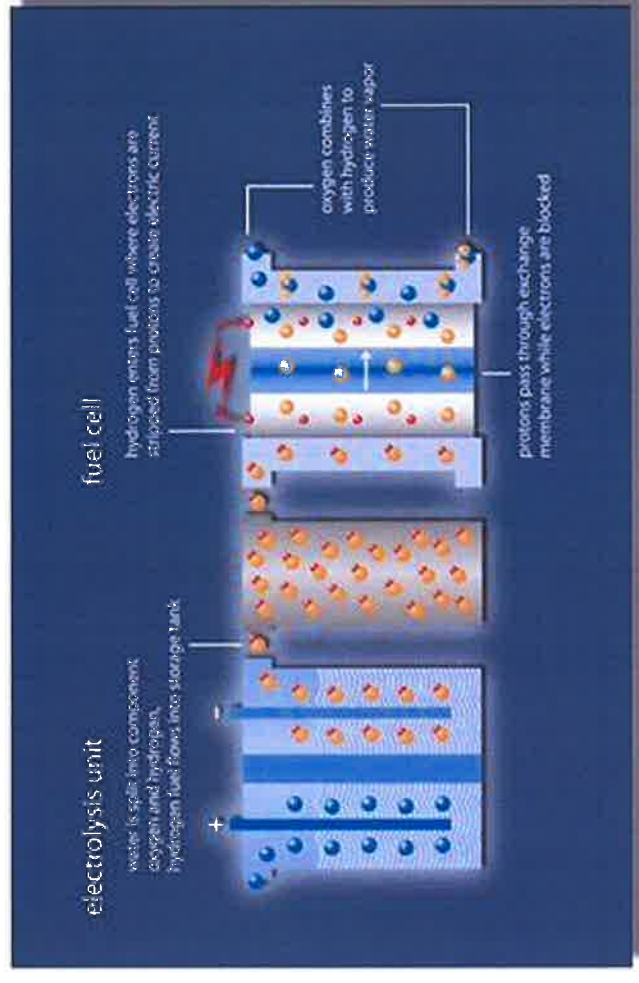
Possible Future Storage: Thermal Storage

- Heat is taken from a generating source with a refrigerant like water
- The water is pumped to a tank filled with a heat absorbent material
- When the energy is needed, the heat is absorbed out of the tank
- This removed energy could be used to power a thermal steam cycle and apply power to the grid



Possible Future Storage: Electrolysis and Fuel Cell

- Splits purified water into hydrogen gas and oxygen
- The hydrogen gas can then be used in a fuel cell system and produces electricity and water
- However, current electrolysis machines need more power than what the fuel cell produces

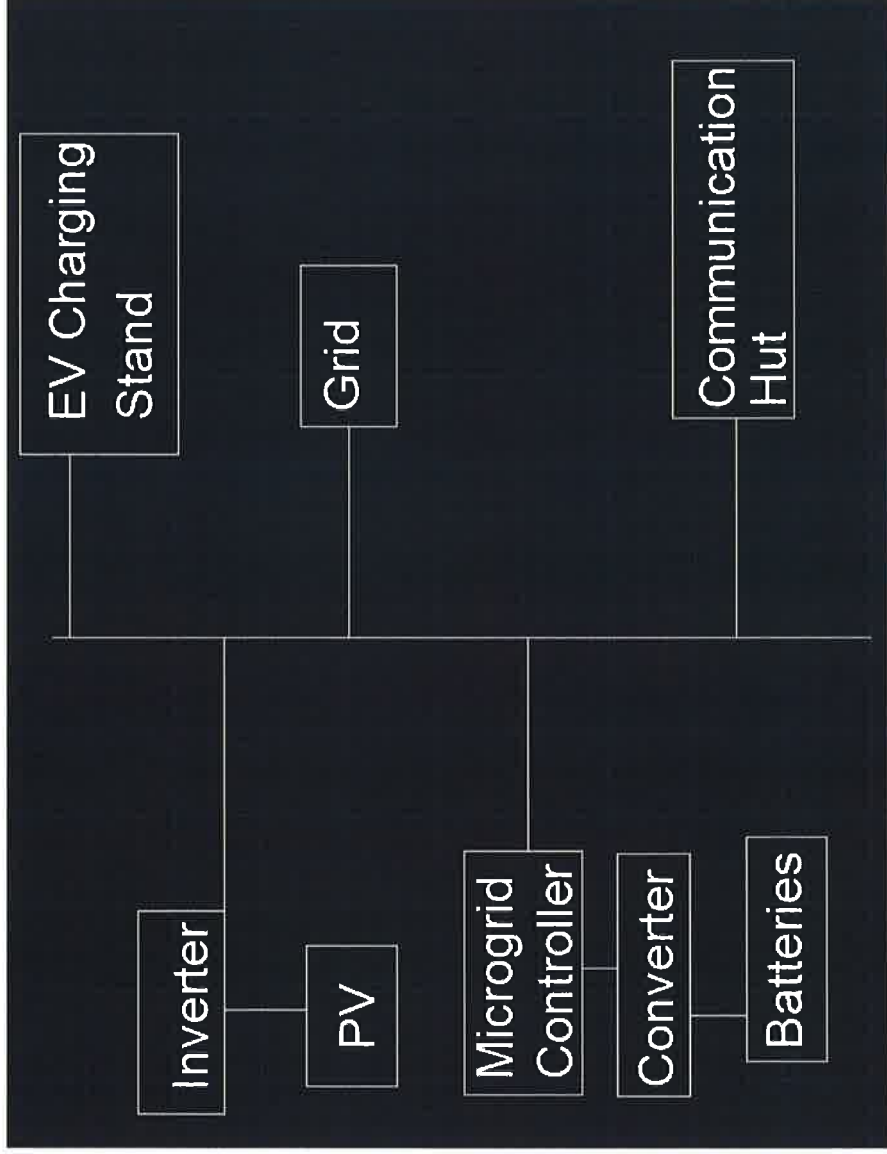




Sequim Sub Microgrid Project

- We want to supply power to the Sequim Sub communications hut
- The communications hut monitors the SCADA system and supports ISPs in the county
- I modeled the current 32.4 kW solar array along with a energy storage system, that would allow the hut to become “islanded”
- Islanded or island mode can occur when the power from the grid is severed, and the powered load can operate on its own stored and generated energy alone
- Useful during major storms or a Cascadia event

Block Diagram



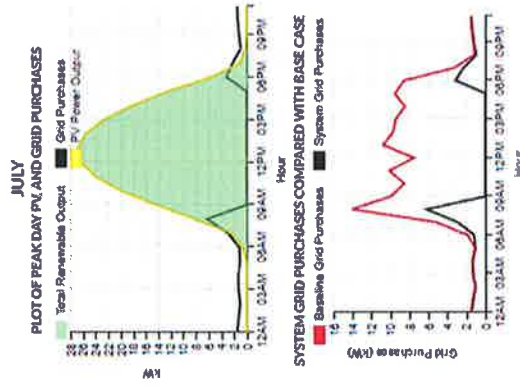
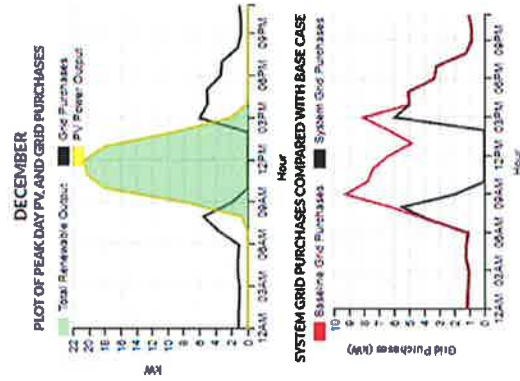


Model Specifications

- I chose to model the Sequim Community Solar with Lithium Ferrrous sulfate (LiFeSO4) batteries.
- The estimated and calculated results where done through HOMER
- The modeled battery data was a TROES LiFeSO4 battery, at 9.22kWh and 51.2 V a battery
- Over 100 kWh needed of storage, so the modeled system is 108 kWh at 12 LiFeSO4 batteries.
- Two cases are shown, a current model with just the solar, and a second model with the energy storage system included

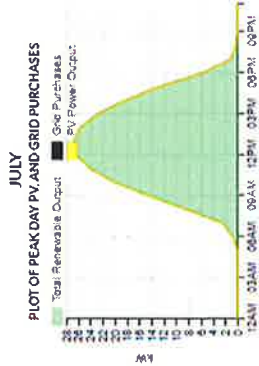
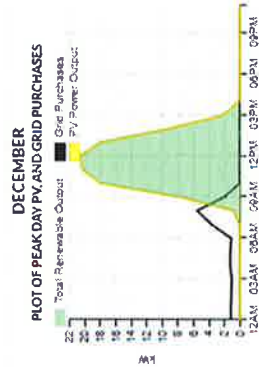


The Model's Performance No Batt.



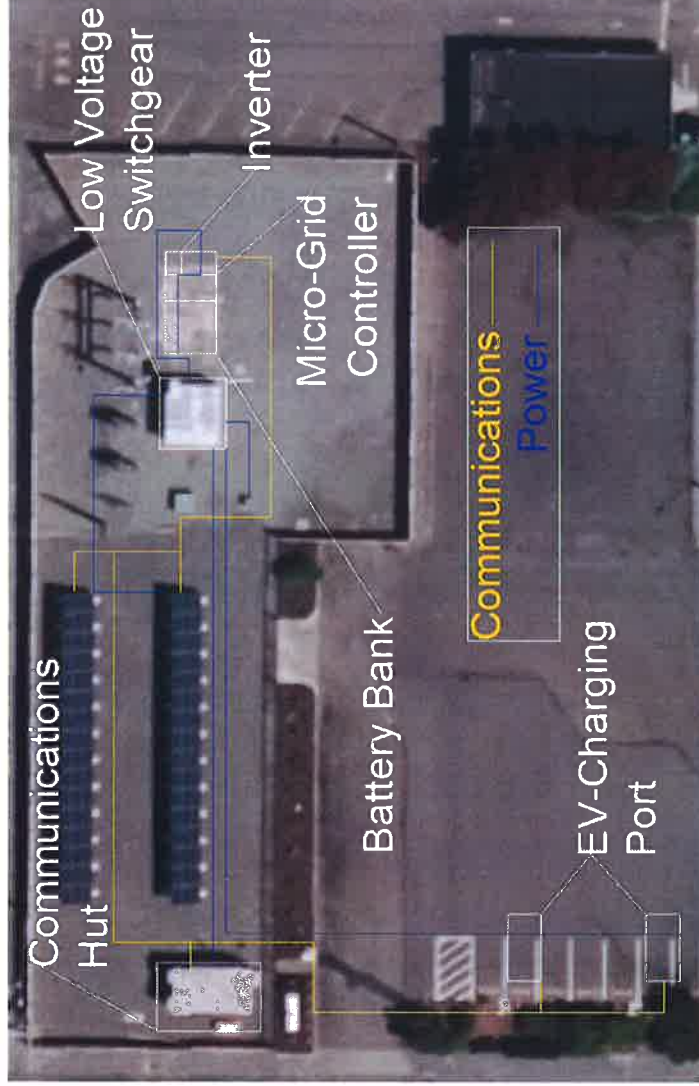
	December	July	Yearly
PV production(daily peak average)	9.10 kW	23.76 kW	41,178 kWh/yr
Total Primary Load(daily peak average)	6.80 kW	9.89 kW	30,660 kWh/yr
Grid Purchases	1,556 kWh	719 kWh	11,960 kWh/yr
Grid Sales	386 kWh	2,818 kWh	20,418 kWh/yr
Peak Demand	8 kW	9 kW	N/A

The Model's Performance with Batt.



	December	July	Yearly
PV production	9.10 kW	23.76 kW	41,178 kWh/yr
Total Primary Load	6.80 kW	9.89 kW	30,660 kWh/yr
Grid Purchases	1,187 kWh	75 kWh	3,479 kWh/yr
Grid Sales	10 kWh	2,162 kWh	11,765 kWh/yr
Battery Charging	N/A	N/A	8663 kWh/yr
Battery Discharging	N/A	N/A	8490 kWh/yr
Peak Demand	8 kW	9 kW	N/A

CAD Design





Estimated Bill of Materials for the Battery System

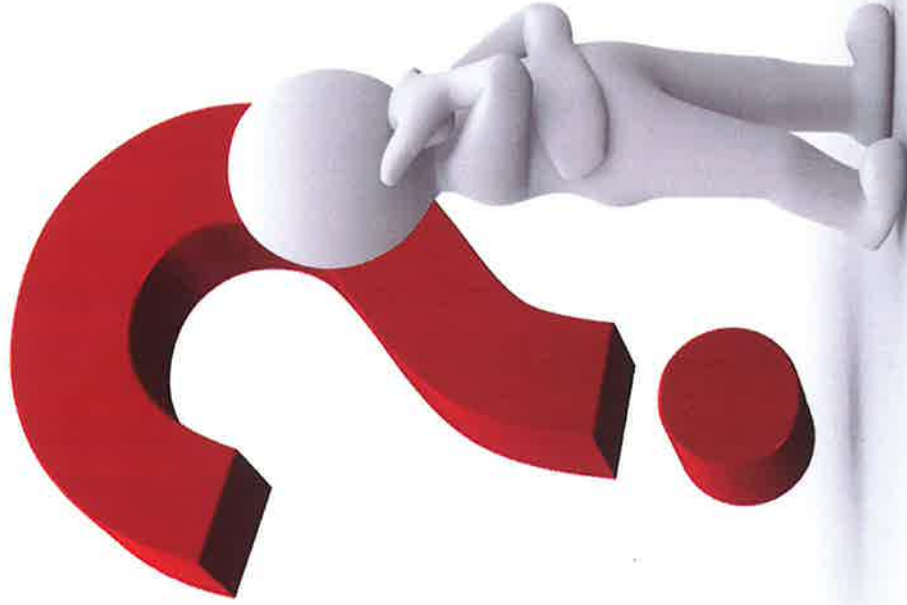
Name	Quantity	Unit Price(\$)	Total Price(\$)
600 Amp low voltage switchgear, 4 breakers	1	28,000.00	28,000.00
Battery mangement controller	1	7,762.50	7,762.50
40 kW Inverter Sunny Island	1	9,315.00	9,315.00
Communication Cable	453.31	0.25	113.33
LiFePO4 batteries @ 9.22 kWh	12	3,105.00	37,260.00
Battery storage facility	1	7,762.50	7,762.50
6 AWG Copper Clad Aluminum	246.45	0.53	130.6185
2 AWG Copper Clad Aluminum	20.97	0.94	19.7118
1 AWG Copper Clad Aluminum	134.5	1.15	154.675
2/0 AWG Copper Clad Aluminum	89.02	1.64	145.9928
300 kcmil Copper Clad Aluminum	84	9.00	756
Mirco Grid Controller	1	70,000.00	70,000
Labor	1	50,000.00	50,000
Misc. costs	1	30,000.00	30,000
Engineering and Planning	1	35,000.00	35,000
Total			276,420.33



Wrap-Up

- I felt that I did more in less time this internship than I did in last years internship.
- I researched energy storage systems that could work in Clallam County
- I modeled several battery systems on HOMER
- I got to touch some more SCADA
- My internship was also supported by the Public Power Internship Program (PIIP) through Energy Northwest

Questions?



Thank-you

Clallam County PUD No. 1

<< Utility Name

Washington State Utility Resource Plan Year

2022

Prepared by:

Tyler King

Estimate Year Period Units	Base Year		5 Yr. Est.		10 Yr Est.	
	2020 Annual (MWa)	77.23	2025 Annual (MWa)	77.47	2030 Annual (MWa)	77.48
Loads						
Resources:						
Future Conservation/Efficiency			0.62		0.62	
Demand Response			0.10		0.80	
BPA Tier 1 (include BPA PF)		75.62	76.03		76.03	
BPA Tier 2		0.94	0.15		0.16	
Non BPA:						
Co-generation						
Hydro (critical water)		0.67	0.67		0.67	
Wind						
Other Renewables						
Thermal-Natural Gas						
Thermal-Coal						
Market Purchase (non BPA)						
Other						
Distributed Generation						
Undecided						
Total Resources		77.23	77.47		77.48	
Load Resource Balance		0.00	0.00		0.00	

This row will be zeros if loads and resource

Date of Board/Commission Approval

August-22 (mm/yy)

Notes: Explain resource choices other than conservation / Use of renewable energy credits in planning / Distributed Generation S

Data is reported using the Federal fiscal year (October through September). The base year is 2020 actual load. The 2025 and 2028 load forecasts are based on 2020 weather normalized actual load applied to BPA using a flat growth rate, including mandated conservation from the Energy Independence Act. The non-federal hydro resource "Line 17" is Clallam's share of the Packwood Lake project owned by Energy Northwest. We have current contracts for RECs to meet the 15% Washington State Renewable Energy Portfolio Standard through 2028. Line 12 Demand Response includes a pilot project within 5 years. The 10 year projected demand response is contingent on an estimated BPA demand rate.

One way of commenting is to enter the line number of the resource title and type in the comment following the number. For example: "Line 24: Our Distributed Generation sources are landfill gas and solar."

A RESOLUTION Authorizing the Disposal of Surplus Property

WHEREAS, in accordance with RCW 54.16.180, the District property and equipment described on the attached list, has been determined to be no longer necessary or useful in the operation of the District's system; and

WHEREAS, removal, storage, and accounting for such surplus equipment is wasteful; now, therefore, be it

RESOLVED, That the General Manager is hereby authorized to dispose of the material described on the attached list as determined to be in the District's best interest.

PASSED, by the Board of Commissioners of Public Utility District No. 1 of Clallam County, Washington, this 22nd day of August, 2022.

President

ATTEST:

Vice President

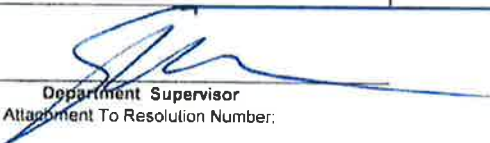

Secretary

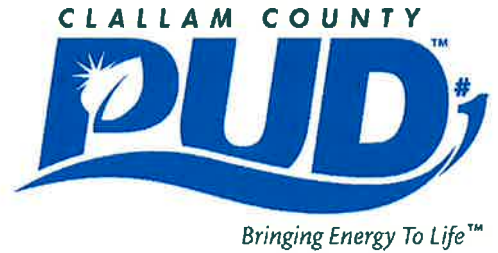
SURPLUS PROPERTY

The equipment listed below has no value to meet the current business needs of the District. Therefore, it is recommended that this equipment be declared surplus.

Submitted By: Erika Olson

Date Submitted:

QTY	DESCRIPTION	ESTIMATED VALUE	DISTRICT I.D. NO.	COMMENTS
1	HP Color Laserjet Pro MFP M476dn	0		Leaves large streaks when printing
1	HP Color Laserjet CP3525dn	0	4638	Prints rough
1	Panasonic Toughbook CF-19	0	4805	SIN: CF-19KCRGCGM - broken
1	Panasonic Toughbook CF-72	0	4423	SIN: CF-72Q3GQZPM - broken
1	iPad 12 9	0	5752	SIN: DLXS51 BUGMW6 - broken
2	Troy Tech MICR Printer - HP Laserjet Pro 400		5543	SIN1: VNG3F42335 SIN2: VNG4527019
1	(Plotter Wide Format Printer) HP DesignJet T1300	800	5229	POE Service Tag 009240 - needs printheads
1	Sharp VCR	10	3630	
1	System76 Darter Pro15	0	8076	SIN: 8J11SC145219
1	Samsung 700z NP7000Z7C	10	5401	SIN: HUY691GCB00242J
1	Dell Latitude 5580 broken	0	6071	SIN: 52L7XT2
1	HP Color Laserjet CP3525dn	800	4638	SIN: CNCC9BG081
1	iPad Pro 12.9	10	5725	SIN: DLXS5133GMW6 - broken
1	NUC NUC7i5BNK (Ops VBB)	0	5789	SIN: G8RY539000AK
1	Colortrac SmartIf SC 36 (Large Format Scanner)	1000	5467	SIN: H2304237
1	Microsoft Surface Book	0	N/A	SIN: 041639561654
1	Canon Rebel T1i Camera	190	5224	SIN: 0870206535
1	Canon Vixia HFS21	450	6241	
1	Dell PP12s laptop	0		CPF4NK1 - worn-out
1	Dell PP12s laptop	0		9PF4NK1 - worn-out
1	Dell PP12s laptop	0		HHVRNK1 - worn-out
1	Dell PP12s laptop	0		9JVRNK1 - worn-out
2	Laserjet Pro 400	400		P1251P150
13	Verifone card readers	0		
1	MS Surface Win 8 pro	0		broken screen
1	Dell Win 7 pro laptop	0		91VKVY1
10	Intel NIC computers	0		
2	Inspiron Zino HD	0		
3	ZM400 Zebra label printers	0		
1	Cannon Imagerunner C34801	565		
4	APC batteries	0		
 Department Supervisor Attachment To Resolution Number:		 Materials Superintendent Dated 8-16-22		



MEMORANDUM

Date: August 22, 2022

To: Sean Worthington, General Manager

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

Re: ACCEPTANCE MEMO FOR AGREEMENT COST INCREASE
OLYMPIC ELECTRIC COMPANY, INC.
FORKS SUBSTATION CONSTRUCTION
BID NUMBER 220805

This contract is for the replacement of aging equipment of the Fork Substation, located at 441 West E Street, Forks, WA, and to bring up to current standards. Due to longer than anticipated shipping delays causing construction delays, extension of the agreement completion date and increased contract costs to re-mobilize the Contractor is required to finish the work as soon as the supplies are received.

The delay and re-mobilization increase the total contract amount over 10% with an additional \$8,672.40, for a total project cost of to not-to-exceed \$563,777.22, and extends the contract completion date to no later than September 29, 2022.

It is recommended to accept the additional agreement cost for re-mobilization and extend the agreement completion date to no later than September 29, 2022.

Accepted by Board of Commissioners at meeting of _____, 20__.

Sean Worthington, General Manager



**FORKS SUBSTATION CONSTRUCTION
OLYMPIC ELECTRIC COMPANY, INC.
Contract No. 220805**

CHANGE ORDER NO. 4

Description: Due to shipping delays causing construction delays longer than anticipated, the District needs to extend the contract completion date and pay the contractor to re-mobilization on the project once the supplies are received. The re-mobilization cost is \$8,672.40, increasing the total contract amount to \$563,777.22, with a completion date extension to September 29, 2022.

Original Contract Amount (Not-to-exceed):	\$509,000.00	(not including WSST)
Change Order No. 1 (not-to-exceed):	\$ 3,042.52	(not including WSST)
Change Order No. 2 (not-to-exceed):	\$ 3,264.80	(not including WSST)
Change Order No. 3 (not-to-exceed):	\$ 39,797.50	(not including WSST)
Change Order No. 4 (not-to-exceed):	\$ 8,672.40	(not including WSST)
 New Contract Amount (Not-to-exceed):	 <u>\$563,777.22</u>	 (not including WSST)

Issued by:

**PUBLIC UTILITY DISTRICT NO. 1
OF CLALLAM COUNTY**

By: _____
Doug Adams, Transmission & Substation
Systems Supervisor

Date: _____

By: _____
John Purvis, Asst. General Manager

Date: _____

OLYMPIC ELECTRIC COMPANY, INC.

By: _____

Date: _____

PRINT NAME

PRINT TITLE



CHANGE ORDER #4

REMOBILIZATION AND
DEMOBILIZATION

BILL TO

CLALLAM PUD No. 1
104 HOOKER RD
SEQUIM, WA 98382

DATE: Wednesday, August 3, 2022

JOB NAME		FORKS SUBSTATION CONSTRUCTION		PREPARED BY:	CASEY ALM	
CATEGORY	QTY	DESCRIPTION		AMOUNT		TOTAL
Labor	20	Hourly Rate - Foreman Lineman		\$ 135.50	\$	2,710.00
Labor	20	Hourly wage - Journeyman Wireman		\$ 122.00	\$	2,440.00
Labor	20	Hourly wage - Apprentice 4th		\$ 93.62	\$	1,872.40
Equipment	20	1 ton Framer Truck - Foreman Truck		\$ 27.50	\$	550.00
Equipment	20	Line Truck - Digger w/45' Boom		\$ 55.00	\$	1,100.00

NOTES	AMOUNT	\$	8,672.40
THIS IS TO COVER SOME OF THE COST INCURRED WITH RESTARTING THE FORKS SUBSTATION CONSTRUCTION PROJECT. OLYMPIC ELECTRIC WILL RETURN TO THE SUBSTATION ONCE ALL MATERIALS ARE ONSITE.		tax	8.60%
		SUBTOTAL	\$ 9,418.23
		DISCOUNT	
		TOTAL	\$ 9,418.23

Olympic Electric Company • 4230 Tumwater Truck Route • Port Angeles, Washington • 98363

This is the estimated price of the project, material costs and labor are subject to change if unforeseen issues arise.

Thank you for your business!

**Draft Clallam County and Public Utility District Memorandum of Understanding
Regarding Carlsborg Water Supply
--For Discussion Purposes Only**

This Memorandum of Understanding ("MOU") is entered by Clallam County ("County") and Public Utility District No. 1 of Clallam County ("District"), each a "Party" and together the "Parties" to this MOU.

RECITALS

WHEREAS, the County adopted (Resolution 47, 2005) the Elwha-Dungeness Watershed (WRIA 18) Plan which was also approved by the other initiating governments—City of Port Angeles, Elwha Klallam Tribe, Jamestown S' Klallam Tribe, and Agnew Irrigation District (largest water purveyor) to guide the management of water resources.

WHEREAS, the 2005 Elwha-Dungeness Watershed Management Plan encourages new water demand to be served by existing Group A Public Water Systems such as the District's Carlsborg Water System.

WHEREAS, the District's mission is to provide reliable, efficient, safe and low cost utility services in a financially and environmentally responsible manner.

WHEREAS, the District owns and operates a Group A water system that was founded and developed to serve local utility districts ("LUD") initiated in the vicinity of Carlsborg, and the District holds three water rights that together authorize withdrawal and use of 468.5 acre feet from three wells and that are currently dedicated to serving the District's existing customers and commitments in its approved retail service area adopted in the District's Water System Plan.

WHEREAS, the District's primary existing Carlsborg production well (LUD #10 Well) is exhibiting rising nitrate contamination levels that are expected to reach the maximum contaminant level allowed within the next four to six years (2026-2028).

WHEREAS, the County formerly designated the Carlsborg Urban Growth Area (UGA) in 2000 under its comprehensive plan pursuant to the Washington State Growth Management Act (GMA), RCW 36.70A, to encourage new development in an area already characterized by urban growth where public facilities and services such as water supply are and can be provided in an efficient manner.

WHEREAS, the GMA supports the provision of adequate public facilities within the Carlsborg UGA such as public water service from a Group A public water system because such services are usually necessary to support urban densities (WAC 365-196-320).

WHEREAS, there are areas of the Carlsborg UGA where Group A public water system service is currently not available from the District or other existing providers.

WHEREAS, the County's Comprehensive Plan supports the District to be the public water purveyor within the Carlsborg UGA and also for the District's water system to be extended throughout the UGA as expeditiously as possible (CCC 31.03.350 (1d) (4)).

WHEREAS, the District's Water System Plan establishes both a "service area" and "retail service area" boundary for the Carlsborg Water System a map of which is attached as Exhibit A.

WHEREAS, the Carlsborg Water System "retail service area" includes the current District LUDs in the Carlsborg area, including parts of the Carlsborg UGA, where the District currently provides water service and has a duty to provide new service connections as set forth in RCW 43.20.260.

WHEREAS, the Carlsborg Water System "service area" (Exhibit A) outside of the "retail service area" is where future water service is planned by the District and includes areas within the Carlsborg UGA currently not within the District's retail service area and also not served by other Group A public water system providers.

WHEREAS, in order to serve the residential and commercial growth that the County has planned to accommodate in the Carlsborg UGA, the District's Carlsborg water system requires additional water right authorizations, new infrastructure including new water production wells, land to site new wells, water storage and pumping facilities, water treatment facilities, and water conveyance and distribution pipes and facilities.

WHEREAS, in 2006, the District filed water right permit application no. G2-30364 (the "2006 Water Right Application") requesting 215 acre feet per year annual quantity and 510 gallons per minute for instantaneous quantity for the anticipated development in the Carlsborg UGA related to County plans to provide sewer service in the UGA.

WHEREAS, effective January 2, 2013, the Department of Ecology ("Ecology") adopted the Water Resources Management Program for the Dungeness Portion of the Elwha-Dungeness Water Resource Inventory Area (WRIA) 18 ("Dungeness Instream Water Rule"), Chapter 173-518 WAC, that establishes instream flows and closures for identified streams, establishes a water exchange to offer mitigation "credits" for sale, and requires mitigation of all new water uses that would deplete any regulated stream.

WHEREAS, on March 19, 2013, the District and the County entered into the Interlocal Agreement for the Carlsborg Wastewater System that provides in Section 4.5 for "in the event the County proceeds with the Sequim Alternative" (i.e., send wastewater to Sequim for treatment) "and water-use mitigation costs to future water customers in the UGA are thereby adversely affected, the County will purchase or otherwise procure for the District additional water rights to supply water for full buildout of the Carlsborg UGA that is outside of the

District's current local utility district water service areas within the UGA, in a quantity sufficient to offset any adverse effects."

WHEREAS, in January 2015, Ecology approved the Carlsborg Sewer Facilities Plan (Clallam County, December 2014) for the "Sequim Alternative," and subsequently the County constructed the sewer system to convey Carlsborg UGA wastewater to the City of Sequim for treatment.

WHEREAS, the County contracted with a consulting firm to provide technical and project assistance to support the District's efforts to obtain Ecology's approval of the District's 2006 water right application, including drilling a new well (the "Carlsborg Very Deep Well") and development of a mitigation plan for new water uses as required under the Dungeness Instream Water Rule.

WHEREAS, Ecology has provided comments to the Parties on the 2006 Water Right Application, including that: (a) when the existing water right permit (G2-27681) was issued, the District's stated its intent to serve growth both inside and outside the Carlsborg UGA over an approximate 15 square-mile regional service area; and (b) the need to address long-term regional water supply coordination plans for the Carlsborg water system together with a plan and schedule for implementation that demonstrates how the District will develop and use the requested additional water supplies within the next 20 years, in addition to water previously allocated under Water Right No. G2-27681, to achieve regional and watershed planning goals.

WHEREAS, Ecology also commented that more than 80% of the District's water right allocations to date remain undeveloped.

WHEREAS, the 2005 Elwha-Dungeness Watershed Management Plan has a desired condition and outcome to be water supply strategies that assure public water service will be available to meet buildout potential in the timeframes required, and a recommendation that recognizing projected buildout and new growth within and beyond current service areas, Group A systems should make application to Ecology for water rights needed to serve that growth with water use efficiency, take steps to extend service areas to serve that growth where feasible and cost-effective, and initiate capital facility planning to support these steps.

WHEREAS, the Parties acknowledge that 2006 Water Right Application cannot yield sufficient water resources for full buildout of the Carlsborg UGA, that uncertainty exists regarding the outcome of the 2006 Water Right Application and the quantity that may be approved, and that continuing cooperative efforts by the Parties will be necessary.

WHEREAS, state approval of the District's 2006 Water Right Application together with existing water rights will support over 80% of the estimated full buildout of the Carlsborg UGA providing sufficient water rights to serve the projected UGA growth 20-years and beyond.

WHEREAS, state approval to increase the 2006 Water Right Application from 215 acre per year to 261 acre feet per year combined with existing water right will support full buildout (100%) of the Carlsborg UGA.

WHEREAS, in their comments, Ecology has expressed interest in preventing the proliferation of individual wells and small water systems where public water service is feasible.

WHEREAS, providing water service to the entire 15-square mile service area originally envisioned under the 1992 water right (G2-72681) is not feasible due to a number of considerations such as distance and high costs to extend water supply infrastructure over a large rural area; low density, rural development pattern that is characteristic of the majority of the area; and insufficient water rights to serve existing and future development in such a large area.

WHEREAS, the 15-square mile regional service area under the District's existing 1992 water right has also experienced significant changes in land use and water management including County establishment of the Carlsborg UGA in 2000, County lowering of rural densities outside the UGA, adoption of the Dungeness Instream Water Rule in 2013, establishment of the Dungeness Water Exchange in 2013 to implement the Rule, and District adoption/updates to its Water System Plan (last update 2017).

WHEREAS, to address Ecology comments regarding the proliferation of individual wells and small water systems where public water service is available, the District has identified a proposed expanded Carlsborg Water Service Area (Map Exhibit B) in the region around the Carlsborg UGA and existing LUDs that includes areas where the District has received landowner requests for water service and is adjacent to or in reasonable proximity of current or planned water supply infrastructure where extension of such water service may be feasible.

WHEREAS, expanding the District's retail service area to the remainder of the Carlsborg UGA not served by an existing Group A Public Water System and other areas within the original 15-square mile regional service area will help to reduce the proliferation of individual wells and further perfect the District's existing water rights.

WHEREAS, the District and County believe that shifting production from the shallower, Carlsborg LUD #10 Well (Aquifer 2) to the Carlsborg Very Deep Well (also known as the Van Lan Well, which is screened in Aquifer 4) will reduce impacts to surface waters from groundwater withdrawals and generate the potential for mitigation under the Dungeness Instream Rule that can support the District's expansion of the retail service area in the Carlsborg Region, including into the remainder of the Carlsborg UGA not served by an existing Group A Public Water System and to the rural lands immediately outside (within about 0.5 miles) of the existing service areas, to the extent of the amount of mitigation that Ecology approves.

WHEREAS, in an effort to address rising nitrate levels in water sources from the existing Carlsborg LUD #10 well, the District has developed a proposed project—the Carlsborg Blending Treatment Facility System Facility Project (the "Project")—to blend water from the Carlsborg

Very Deep Well drilled by the County in 2019 with water drawn from the LUD #10 Well, thereby reducing the level of nitrate contaminants to a safe level and improving the overall water quality provided to the District's Carlsborg Water System.

WHEREAS, the District and the County wish to facilitate the District's ability to extend its retail service area through the installation of a new well site, transmission lines, storage/blending facilities, pump stations and related infrastructure to connect the Carlsborg Very Deep Well water supply to the existing Carlsborg Water System.

WHEREAS, the legal pre-requisites for the District to extend its retail service area, and if necessary, revise its 2017 Service Area Expansion Policy include, but are not limited to, the District submitting a draft Water System Plan Amendment to the Department of Health ("DOH"), DOH reviewing and commenting on the draft, the District defining the SEPA process and schedule, Ecology preparing a report of examination ("ROE") on the 2006 water right application and mitigation plan, Ecology posting a draft ROE for public review, Ecology issuing the final ROE and approval of the mitigation plan, the District selecting a project alternative and adopting the Final Water System Plan, and DOH approving the Water System Plan.

WHEREAS, the Dungeness Water Exchange is the water supplier for rural areas in WRIA 18 that are not possible to be served in a timely and reasonable manner by the District, and the Parties agree that the District cannot serve all such rural areas and should plan to identify a Carlsborg regional service area.

WHEREAS, the County and District seek to work cooperatively to achieve shared goals and objectives related to the growth expected in the Carlsborg Region and efforts to plan for and serve that growing population.

WHEREAS, the County and District also seek to work cooperatively to help each other achieve shared and individual goals and interests related to providing public water service and reducing the proliferation of individual wells and small water systems in the Carlsborg UGA and also the expanded rural area identified by the District outside of the UGA and current LUDs.

WHEREAS, to facilitate that cooperative effort, the County and District benefit from documenting their individual and collective interests, objectives and goals in this MOU so that it can serve as the basis for a future Interlocal Agreement that identifies and further specifies roles and responsibilities regarding efforts to provide service of safe drinking water to the existing and future residents in the Carlsborg Region.

NOW, THEREFORE, in consideration of the mutual undertakings and interests contained herein, inclusive of the recitals above, and of the benefits to be realized by each party and in order to realize the benefits to the general public from agreement between the parties, it is agreed by and among the County and District as follows:

INTERESTS

1. Shared Goals. The District and the County share the following goals with respect to land use and water system planning to accommodate the needs of existing development and projected growth in the Carlsborg Region:

- Provide safe drinking water to the customers of the existing and future Carlsborg Water System.
- Expand the District's retail service area to the remainder of the Carlsborg Region that is not currently served by an existing Group A Public Water System.
- Provide predictability of water service to developers within the entire UGA.
- Appropriate and develop sufficient water for full buildout of the Carlsborg UGA, to be supplied by a Group A water system to support affordable housing, economic development, and other development in the existing UGA.
- Prevent permanent reductions in Dungeness River flows or small streams due to new appropriations of water.
- Reduce proliferation of private exempt wells in the Carlsborg Region and preserve the resources of the Dungeness Water Exchange for rural areas.
- Install water transmission lines and other related infrastructure needed to bring water from the Carlsborg Very Deep Well to the Carlsborg UGA.
- Have in place a Blending Treatment System, which uses clean water from the new Carlsborg Very Deep Well to abate nitrate contamination of drinking water supplies from the LUD 10 Well, by 2026.

2. District Interests. The County recognizes the following District interests related to its operations and planning within the Carlsborg Region and agrees to explore ways to protect or advance them through a subsequent Interlocal Agreement:

- Provide safe drinking water to Carlsborg Water System customers.
- Preserve and maintain water availability for the historical LUD areas of the District's existing service area.
- Preserve the existing 2013 Interlocal Agreement with Clallam County.
- Limit expansion of District's existing retail service area throughout the Carlsborg Region to the available amount of Ecology-approved mitigation.
- Plan for expanding the District's retail service area to meet water needs for the full

buildout of the Carlsborg Region, including but not limited to:

- the District's existing Local Utility Districts of the Carlsborg Water System,
 - the District's proposed consolidation of the Van-Lan Water System,
 - the County's existing Carlsborg Urban Growth Area,
 - the Sequim Valley Airport,
 - a regional area extending approximately 0.5 miles from the ends of the existing Carlsborg Water System distribution system (see Exhibit B) to reduce proliferation of individual wells and small water systems in areas where many landowners have expressed interest or requested District water service.
- Generate additional revenue from new customers to pay for the operation, maintenance and future needed improvements to the Carlsborg Water System.
 - Meet the requirements of the 2013 Dungeness River Water Management and Instream flow Rule.
 - Receive grant funding to offset costs of the Blending Treatment System.

3. County Interests. The District recognizes the following County interests related to its planning for growth within the Carlsborg UGA and agrees to explore ways to protect or advance them through a subsequent Interlocal Agreement:

- Expand retail water service in 2022 to the entire Carlsborg UGA not currently served by a Group A Public Water System.
- Continue to support the District in procuring additional water rights for the District for full buildout of the Carlsborg UGA including obtaining approval of the related Mitigation Plan.
- Support the District's Water System Plan Updates that prioritizes water availability and water supply infrastructure improvement in the Carlsborg UGA.
- Develop opportunities for affordable housing and promote opportunities for higher density residential development and new business growth within the Carlsborg UGA as envisioned under the County's comprehensive plan that are currently limited by lack of access to public water supply in a timely manner.
- Promote water use in the Carlsborg UGA that protects instream flows in the Dungeness Valley.
- Meet requirements of GMA to ensure adequate and reliable public water supplies for the Carlsborg UGA.
- Minimize cost of procuring a water right for the full buildout of the Carlsborg UGA.

4. Mutual Interests. The District and the County share the following mutual interests and seek to advance or protect them through action steps:

- Provide safe drinking water to the Carlsborg Region by installing a blending treatment system to reduce the level of nitrate contaminants to a safe level.
- Plan for serving water needs for the full buildout of the Carlsborg Region while meeting the requirements of the 2013 Dungeness River Water Management and Instream flow Rule.
- Develop opportunities for affordable housing and new business growth in a timely manner.
- Plan for serving water needs of the Sequim Valley Airport, an essential public facility, to address emergency use and other water needs.
- Meet requirements of GMA to ensure adequate and reliable water supplies for growth in the Carlsborg Region.
- Continue joint meetings with Ecology to obtain written approval of the District's 2006 water right application and related Mitigation Plan.
- Satisfy Ecology's requirements for addressing public interest associated with original intent and regional projected use of the District's 1992 water right and with achieving regional and watershed planning goals.
- Develop partnerships, support, and address concerns of key stakeholders such as the Jamestown S'Klallam Tribe, Dungeness Water Exchange, Dungeness River Management Team, Carlsborg UGA landowners and developers, Washington Department of Fish and Wildlife of the District's 2006 water right application.
- Continue consensus to obtain Ecology approval of the proposed mitigation plan prepared by Robinson Noble for the Parties that applies new scientific data acquired from drilling of the Carlsborg Very Deep Well that demonstrates the potential to reduce significantly the impacts on surface water flows by shifting production from the existing, much shallower LUD 10 Well (located in Aquifer 2) to the Carlsborg Very Deep Well (located in Aquifer 4).
- Integrate the operation of the blending treatment system into the water right mitigation plan such that continued perfection of the existing LUD 10 Well water right and shifting of production to the Carlsborg Very Deep Well would allow new water uses to be served by the Carlsborg Very Deep Well without impairment of senior water rights and instream flows.
- Reduce the impact of transference of the cost of the blending treatment system (e.g. surcharge or assessment) to Carlsborg UGA landowners and to increase incentives for development.

- Complete the legal pre-requisites that are necessary for the District to expand its retail water service area to include the entire UGA and expand its service area to include the entire Carlsborg Region.
- Upon Ecology approval of the Mitigation Plan and DOH approval of the District's Water System Plan amendment, update County and District Policies that may be needed to further address regional water supply coordination needs.

5. Interlocal Agreement. The County and District will seek to negotiate in good faith an interlocal agreement that seeks to meet and advance their individual and mutual goals and protect and advance their mutual and individual interests.

6. Statement of goals and interests only. The foregoing is a statement of various individual and/or mutual interests and goals to further discussions and negotiations. Nothing in this document is to be construed as a statement of facts asserted by one party, to be relied upon by the other party. Nothing in this document is to be construed as "consent", "assent" or an agreement of any type that is binding or enforceable in any way including reliance.

[Add signature block]



Legend

- Existing Retail Service Area (2018)
- Service Area (Outside UGA)
- Service Area (Inside UGA)
- Carlsborg UGA

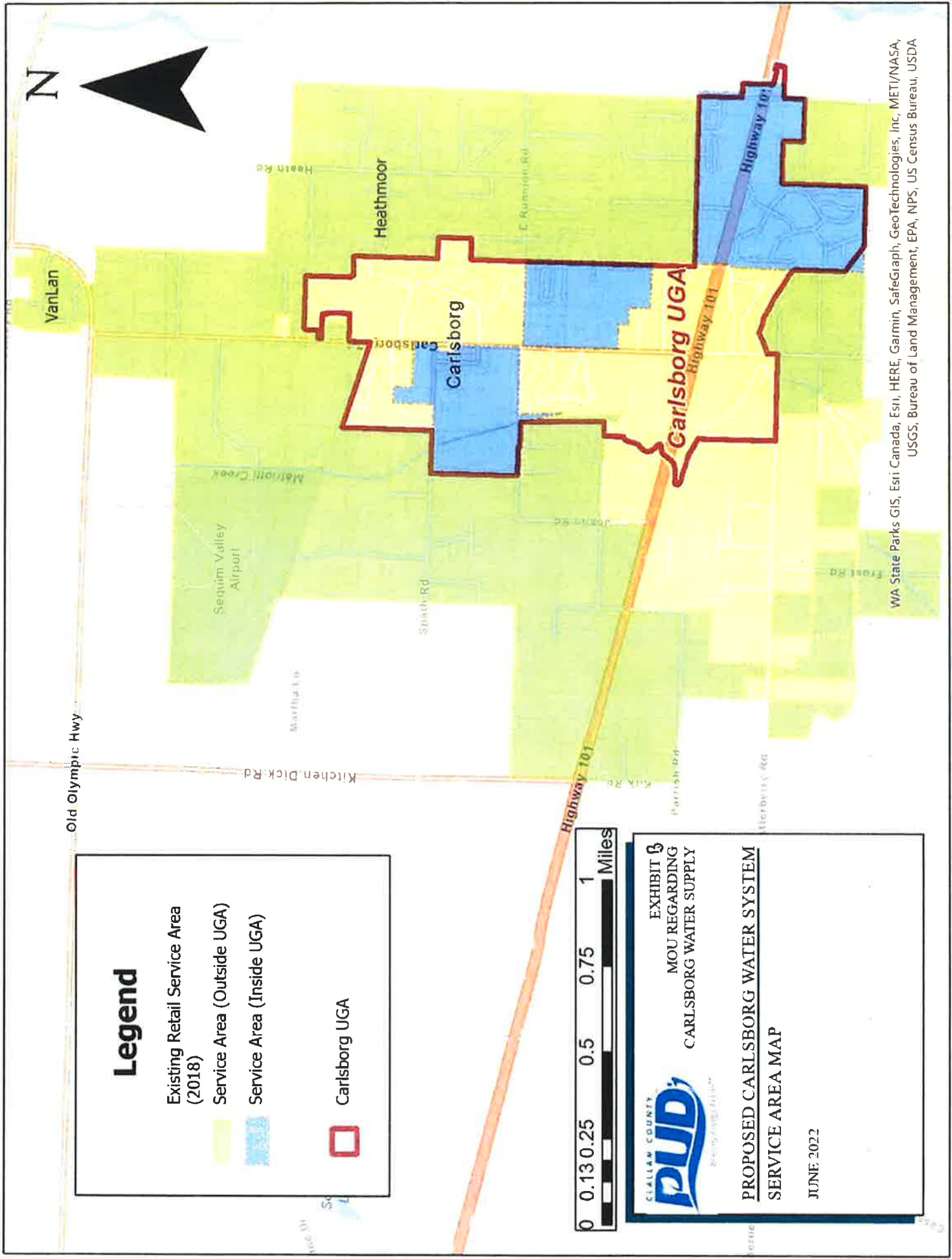


CLALLAM COUNTY
PUD
 Puget Utility District

EXHIBIT 6
 MOU REGARDING
 CARLSBORG WATER SUPPLY

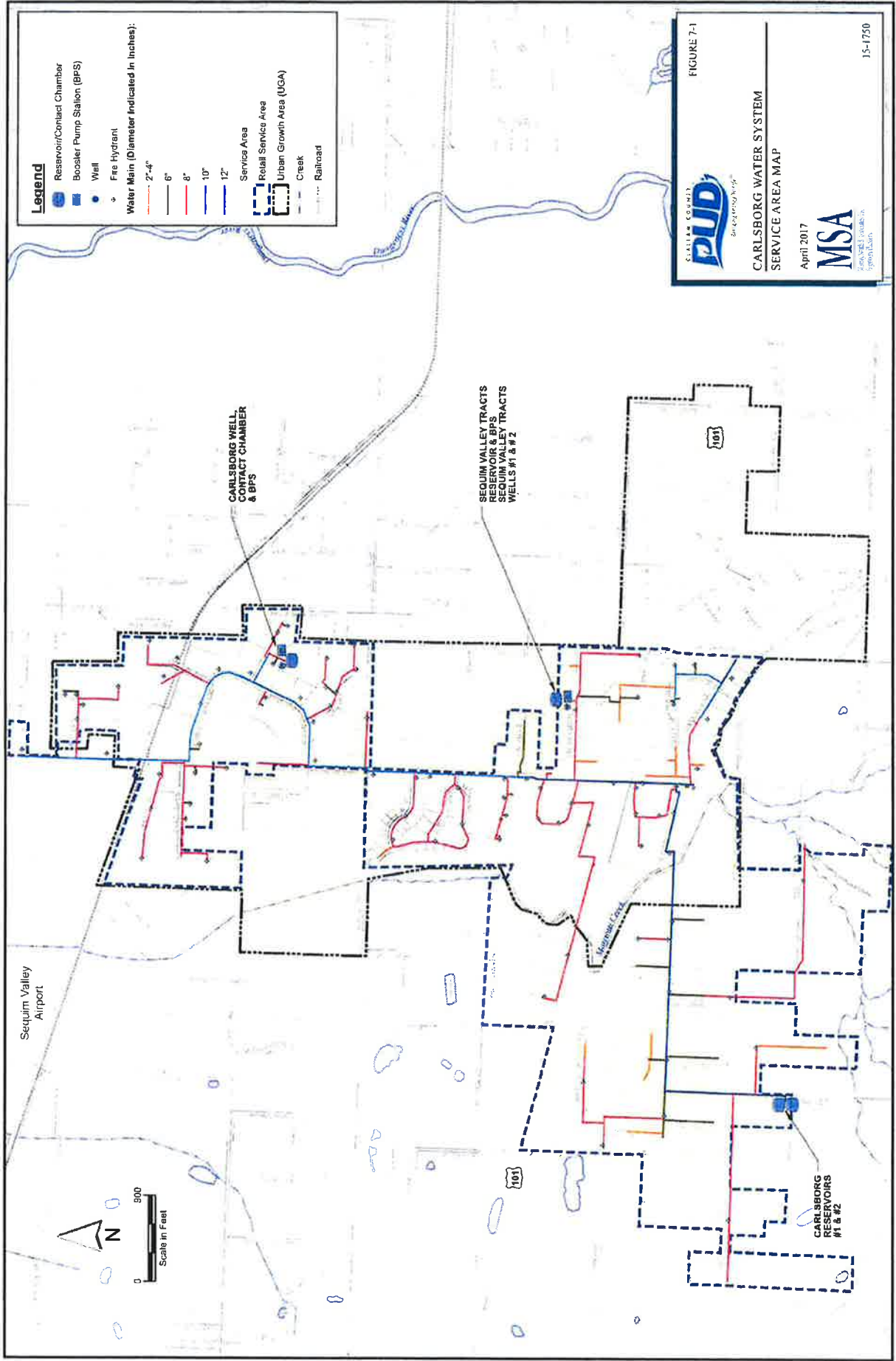
**PROPOSED CARLSBORG WATER SYSTEM
 SERVICE AREA MAP**

JUNE 2022



WA State Parks GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

ATTACHMENT A





MEMO

To: Commissioners Paschall, Purser, and Waddell
From: Sean Worthington, General Manager
Subject: Olympic Peninsula Community Roundtable and Collaborations for climate and energy resilience in rural areas. Hosted by PNNL.
Date: August 10, 2022

Commissioners,

Below is an overview of the meeting that I attended today with the United States Secretary of Energy, Jennifer Granholm. Along with other community leaders, I was invited to participate in a roundtable discussion regarding the Olympic Peninsula and energy resilience.

A little background regarding the nature of the Honorable Jennifer Granholm visit: Supporting rural communities remains a top priority of the United States Department of Energy (DOE). The Pacific Northwest National Laboratory (PNNL) has supported large energy innovation projects in the region in the past, including the [Olympic Peninsula Smart Grid Demonstration](#). The region is currently evaluating what they need to meet current and energy future energy goals, including decarbonization, resilience, equity and access, and economic development. PNNL is committed to sharing lessons from its own net zero lab transition and providing technical expertise through DOE’s technical assistance programs to help the community in meeting its goals.

The objective of the dialogue: This regional dialogue brought together community leaders for a roundtable discussion on energy needs of the of the North Olympic Peninsula (Clallam and Jefferson Counties) and challenges and opportunities for system upgrades. The participants were invited to comment on how PNNL and DOE can assist with their energy transition and what other communities could learn from their experience.

The meeting format: There was a 45-minute dialogue roundtable discussion involving the leaders and community members (listed below). The roundtable was moderated by PNNL laboratory director Steven Ashby. After introductions, the Secretary set the stage by making a few remarks on the Department’s vision for supporting rural energy transitions and the importance of community partnerships. Participants were then invited to speak for two minutes, sharing their views on the challenges and opportunities they face in planning and implementing energy improvements to address diverse goals, including resilience, to equity and affordability, and decarbonization. A roundtable discussion ensued after each participant spoke.

Those in attendance for the roundtable discussion:

- The Honorable Jennifer Granholm, Secretary, DOE;
- Chairman W. Ron Allen, Jamestown S’Klallam Tribe;
- Chairman Timothy J. Greene, Sr., Makah Tribe;
- The Honorable Derek Kilmer, U.S. House of Representatives;
- The Honorable Geri Richmond, Undersecretary for Science and Innovation, DOE;
- The Honorable Steve Tharinger, Washington State House of Representatives;
- Ted Pietrok, Acting Manager, DOE PNSO;
- Steve Ashby, Laboratory Director, PNNL;
- Sean Worthington, General Manager, Clallam PUD;
- Meggan Uecker, Resource Analyst/Lead of Sustainable Sequim Program, City of Sequim; and
- Karen Affeld, Executive Director, North Olympic Development Council.

A synopsis of my remarks are as follows: *I am grateful to Secretary Grandholm and PNNL for the opportunity to participate in this round table discussion.*

I would like to provide a little background on Clallam PUD as well as challenges from a utility perspective to the items being discussed here today. Clallam Public Utility District is a rural distribution utility that is geographically large with a relatively sparse population base located at the very end of a long radial transmission line, literally the last stop on the western interconnect. Our distribution system has more exposure to system outages than almost any other utility in the Pacific Northwest, as do the Bonneville Power Administration transmission lines that serve our territory. During storm season, it is not unusual for some outages to exceed eight hours in duration, and these problems become progressively worse the further west one resides. We are also the first BPA customer in the region that is subject to emergency load shedding in the event of insufficient resources to serve load, this would be similar to what happened in Texas last year. Chairman Greene indicated a “one way in and one way out” situation on the Peninsula and in order to provide redundancy of the BPA transmission lines it would cost in excess of several hundred million dollars.

This is why the development of carbon-free electric resiliency technologies discussed today are very important to our utility and our customers, as is our close collaboration with PNNL and community partners. Micro-grids, distribution scale batteries, renewable generation, including emergent hydrogen and marine based power, are all promising long-term solutions for problems in our community. Recent State legislation and funding in support of low-income community solar, that mitigates energy assistance need, is also something very interesting to us that we are currently exploring.

Having said that, such technologically sophisticated solutions are not easily implemented and come with a high price tag, and it will take a dedicated collaborative effort by many, including those here, to bring these ideas to fruition. Among the biggest challenges for our utility, is limited staff and financial resources. We have little industry and more than 70% of our electric

load and revenue is from residential customers with a median household income that is 30% less than the State average. However, going forward, I can say with confidence that our utility has a capable and impressive work force who are dedicated and invested in the communities we serve and it's our mission to continue providing affordable, reliable and carbon free power.

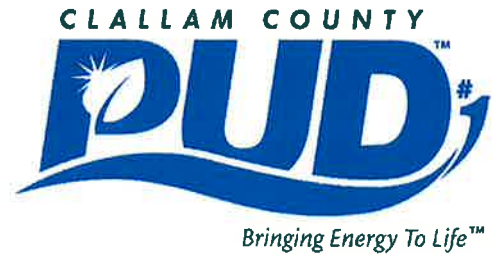
Again, thank you for the opportunity to be here today and thank you Secretary Grandholm for taking time out of your day to share your vision.

Following the conclusion of the meeting, participants were invited to tour the laboratory and surrounding facility. There was much dialogue and promotion of further engagement by the stakeholders and community leaders to partner on initiatives moving forward and PNNL made the commitment to not only host such dialogue but offered up staffing resources and subject matter experts to assist in any way.

PUD staff will continue to remain engaged with PNNL and other local stakeholders to discuss and address future energy needs on the Olympic Peninsula.



Thank you,
Sean Worthington



August 16, 2022

Simon Gore
Technology Manager
Water Power Technologies Office
Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

SUBJECT: Marine Energy FY22 Lab Call, LETTER OF SUPPORT FOR “Framework for Building Grid Resiliency of Coastal Communities using MRE-Based Microgrids”

Dear Simon Gore,

As we work toward meeting community goals around energy resilience, decarbonization and economic development within the Olympic Peninsula we are interested in exploring opportunities for using our marine resources to help meet our energy needs. Through collaboration with the North Olympic Development Council and in concert with our on-going regional energy planning activities, we are pleased to participate in the proposal led by Pacific Northwest National Laboratory entitled, “*Framework for Building Resiliency of Coastal Communities using MRE-Based Microgrids*” in response to the Marine Energy FY22 Lab Call.

We will act in an advisory role with the objective of guiding project direction to ensure that the outcomes provide value to our community. We will also provide system data to support analysis of candidate projects within our distribution network.

We look forward to collaborating with Pacific Northwest National Laboratory, the North Olympic Development Council, and the Department of Energy in evaluating opportunities for marine energy to meet our community’s energy, resilience and economic goals.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sean Worthington", is written over a horizontal line.

Sean Worthington
General Manager
360-565-3240 | sworthington@clallampud.net