

EPMO Project Services, BQS Professional Services Contract

Proposed Contract 430-12000 with Brazil Quality Services (BQS) for Inspection Services



Powering our way of life.

Commission Request

Commission approval to award Contract 430-12000 with Brazil Quality Services

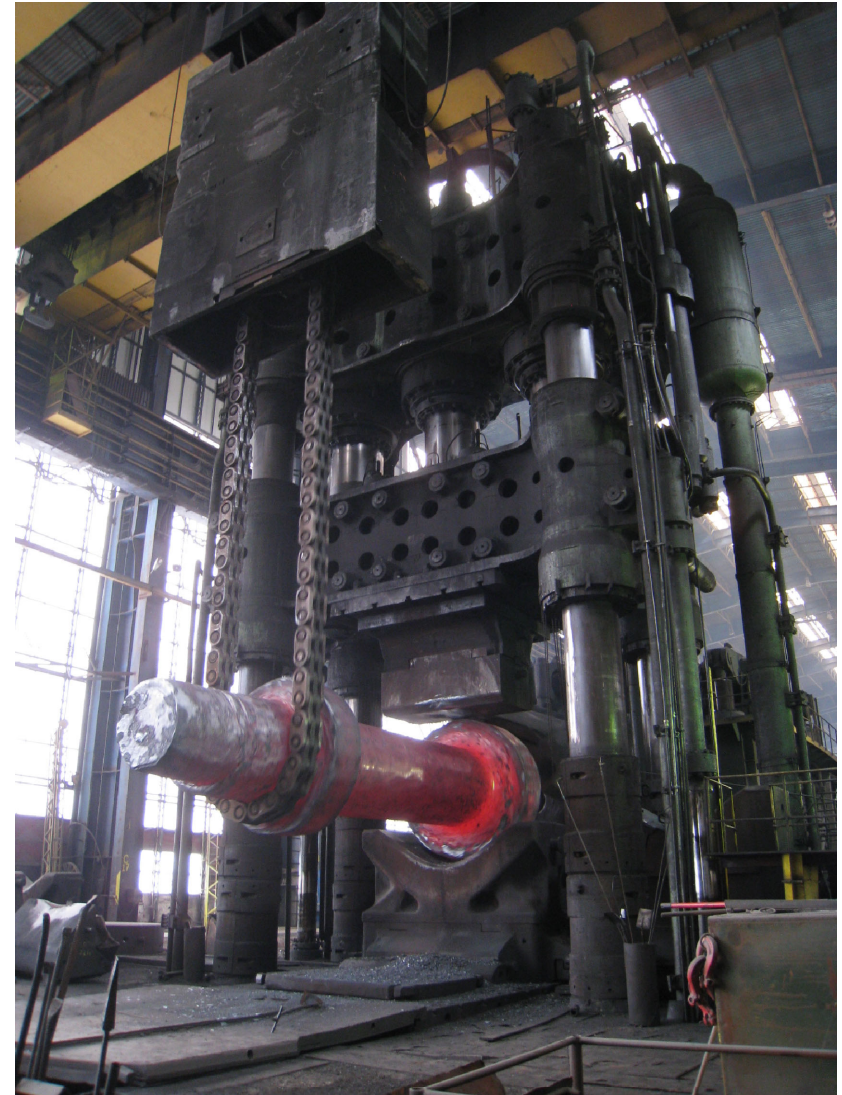
- Not To Exceed Amount: \$6.6M
- Duration: 7 Years
- Purpose: Maintain continuity and continue utilizing existing inspectors to support ongoing work at Priest Rapids and international suppliers.



Priest Rapids turbine assembly

Project Quality Control

- Source Inspections (at manufacturing locations) and Onsite inspections for Turbine and Generator projects as well as others.
- Manufacturing locations in 10 countries for Priest Rapids and Wanapum projects.
- Castings, forgings, welded fabrications, high voltage equipment related to power production.
- Our involvement in the quality process is critical to ensure District is getting what we're paying for.
- Critical inspections historically witnessed by District inspectors on Priest Rapids and Wanapum turbine/generator projects.
- Utilize BQS resident inspectors at manufacturing locations to supplement District inspectors



Wanapum Turbine shaft forging

LOCATIONS WHERE WE CURRENTLY HAVE OR HAVE PREVIOUSLY HAD ONGOING WORK THAT REQUIRED INSPECTOR INVOLVEMENT

Current Locations:

- Priest Rapids Dam
- Quebec, Canada
- Ontario, Canada
- York, Pa
- Mexico City, Mexico
- Sao Paulo, Brazil
- Taubate, Brazil
- Milan, Italy,
- Castelfranco, Italy
- Yinchuan, China

Previous Locations:

- Wanapum Dam
- Slovenia
- Krakow, Poland
- Bucharest, Romania
- Tianjin, China
- Pinghu, China
- Anshan, China
- Chengdu, China
- Ulsan, Korea
- Busan, Korea

Potential Locations:

- India
- Shanghai, China

Inspection Locations

- PREVIOUS LOCATIONS
- CURRENT LOCATIONS
- POTENTIAL FUTURE LOCATIONS



History with BQS

35 Years supporting District projects under multiple contracts

- 1989 Priest Rapids generator rewind source inspections
- 1992 Wanapum turbine rehabilitation, source inspections
- 2004 Wanapum turbine replacement, source inspections
- 2008 Wanapum generator replacement, onsite and source inspections
- 2014 Priest Rapids turbine/generator project, onsite and source inspections
- Supported some source inspections for Power Delivery transformer supply as well as station service equipment (via. Purchase Order)
- BQS inspectors have been developed by working alongside District inspectors.
 - Developed working relationship, trust and understanding of Districts expectations
 - Development of China inspectors prior to Covid has been instrumental in managing QC during and after Covid



Wanapum Thrust runner forging UT inspection

Current and future work

Ongoing need for support from BQS on District projects

- Priest Rapids turbine/generator project
 - Manufacturing until 2028
 - Onsite work until 2030.
 - Manufacturing predominantly in China. Travel to these shops for District inspectors has become all but impossible since Covid.
- Intend to utilize contract to support other projects rather than using POs.
 - Power Delivery transformer supply from Mexico and other locations
 - Priest Rapids and Wanapum Station Service component supply



Priest Rapids generator shaft refurbishment and new thrust runner

Existing BQS Contract 230-3871

- Initiated 2014. Contract is now 9+ years old, expires end of 2023
- Initial value \$3.8M, now \$6.5M with change orders
- Scope is for source inspections at manufacturing locations as well as onsite at Priest Rapids
- Does not have duration or funds remaining to get to end of Priest Rapids project
- Decision was made not to do change order as contract language is outdated.



Priest Rapids runner hub casting inspection

New (proposed) BQS Contract 430-12000

- 7 years, NDE \$6.6M
 - Gets us through PRD TG Project
- Did not use RFP process.
 - Rates are comparable with other existing, similar contracts.
 - Allows us to continue utilizing the same experienced, resident inspectors who are local to manufacturing facilities and familiar with this work which saves the District the effort, cost and increased risk with developing a new contractor and inspectors.
- Scope
 - Source inspections for T/G Project as well as onsite at Priest Rapids
 - Will help to efficiently support quality needs of other projects.



Priest Rapids hub casting material testing coupons

Contract Rate Comparison

Contract	Rate Description	Location	ST Rate	OT Rate	Notes
HDR Engineering Inc. 130-10837a	Construction Manager	Domestic	\$166.78		Power Delivery projects. Domestic, not setup for international source inspections.
	Construction Inspector	Domestic	\$143.62		
Electrical Consultants Inc. 130-10837C	Technician III/Inspector III	Domestic	\$140.00		"Construction/Field Testing" Domestic, not setup for international source inspections.
	Field Construction Manager	Domestic	\$190.00		
MacKay and Sposito 430-11380	Construction Inspector V	Domestic	\$175.00	\$227.50	Domestic, not setup for international source inspections.
	Construction Inspector IV	Domestic	\$150.00	\$195.00	
	Hydroelectric Specialist	Domestic	\$192.50	\$192.50	
BQS 430-12000	Mechanical, electrical, NDE and welding Inspector	Brazil/South America	\$76.35	\$103.70	All inclusive rate with no extra charges for travel, meals etc.
	Mechanical, electrical, NDE and welding Inspector	China	\$130.00	\$175.50	
	Lead Mechanical Inspector - Site	PRD	\$194.67	\$262.81	
	Senior Mechanical Inspector – Site	PRD	\$169.27	\$228.51	
	Mechanical Inspector – Site	PRD	\$150.38	\$203.00	
	Lead Electrical Inspector – Site	PRD	\$194.67	\$262.81	
	Senior Electrical Inspector – Site	PRD	\$169.27	\$228.51	
	Electrical Inspector – Site	PRD	\$150.38	\$203.00	
	Mechanical, electrical, NDE and welding Inspector (traveling)	Canada/USA/Mexico/ Europe/South Korea/India	\$127.25	\$171.79	
Specialist inspector, metallurgist	Europe	\$140.00	\$189.00		

Financials

Anticipated expenditures for new contract over 7 years (\$6.6M)

- \$4.1M Priest Rapids T/G 2nd shift onsite inspections ending in 2030 (7 years)
- \$2.3M Priest Rapids T/G Source inspections, currently in China, USA and Canada
- \$190k Other projects including Power Delivery transformers in Mexico, Wanapum and Priest Rapids station service, other.
- All expenditures are accounted for in current approved project budgets or will be included in future approved budgets before services are utilized.



Priest Rapids turbine blade casting

Questions?



Powering our way of life.

Power Delivery Facilities Project (PDF)

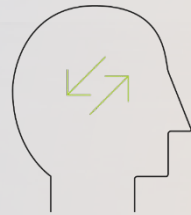
Request for Award of New Service Center Progressive
Design-Build Team Contract 430-11765

Absher | Integrus | Huitt Zollars

November 14, 2023



Projects@Grant



Change@Grant



Powering our way of life.

Agenda

- 01 Project History and Justification
- 02 New Service Center Approach
- 03 Contract Award Process
- 04 Contract Specifics
- 05 Recommendation



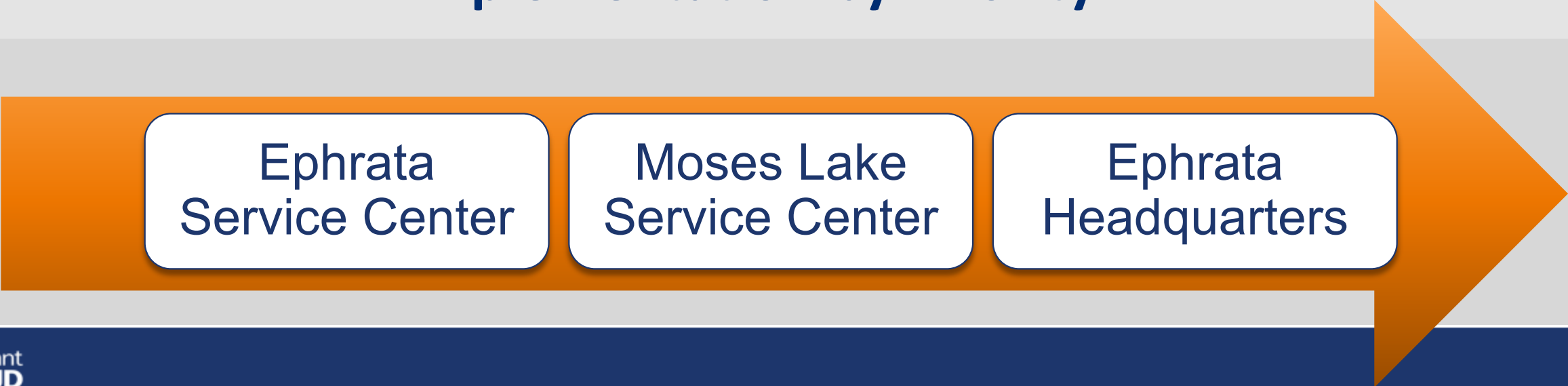
01

Project History and Justification
Facilities Master Plan

History : Facilities Master Plan Analysis



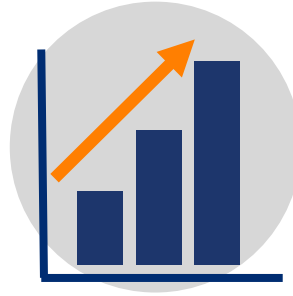
Implementation by Priority



Project Value



Meet **long-term** employee and customer **growth**



Safety and **risk** opportunities



Increased **efficiency**



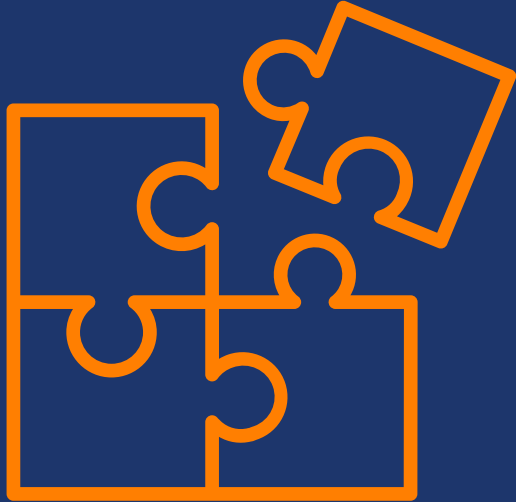
Design with **innovation** in mind



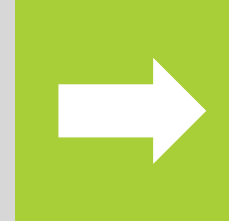
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New Service Center Approach
Progressive Design Build

Why Progressive Design-Build?



**Ensure team continuity
while leveraging
collaboration and program
development**



Innovation + efficiencies



Selection based on qualifications

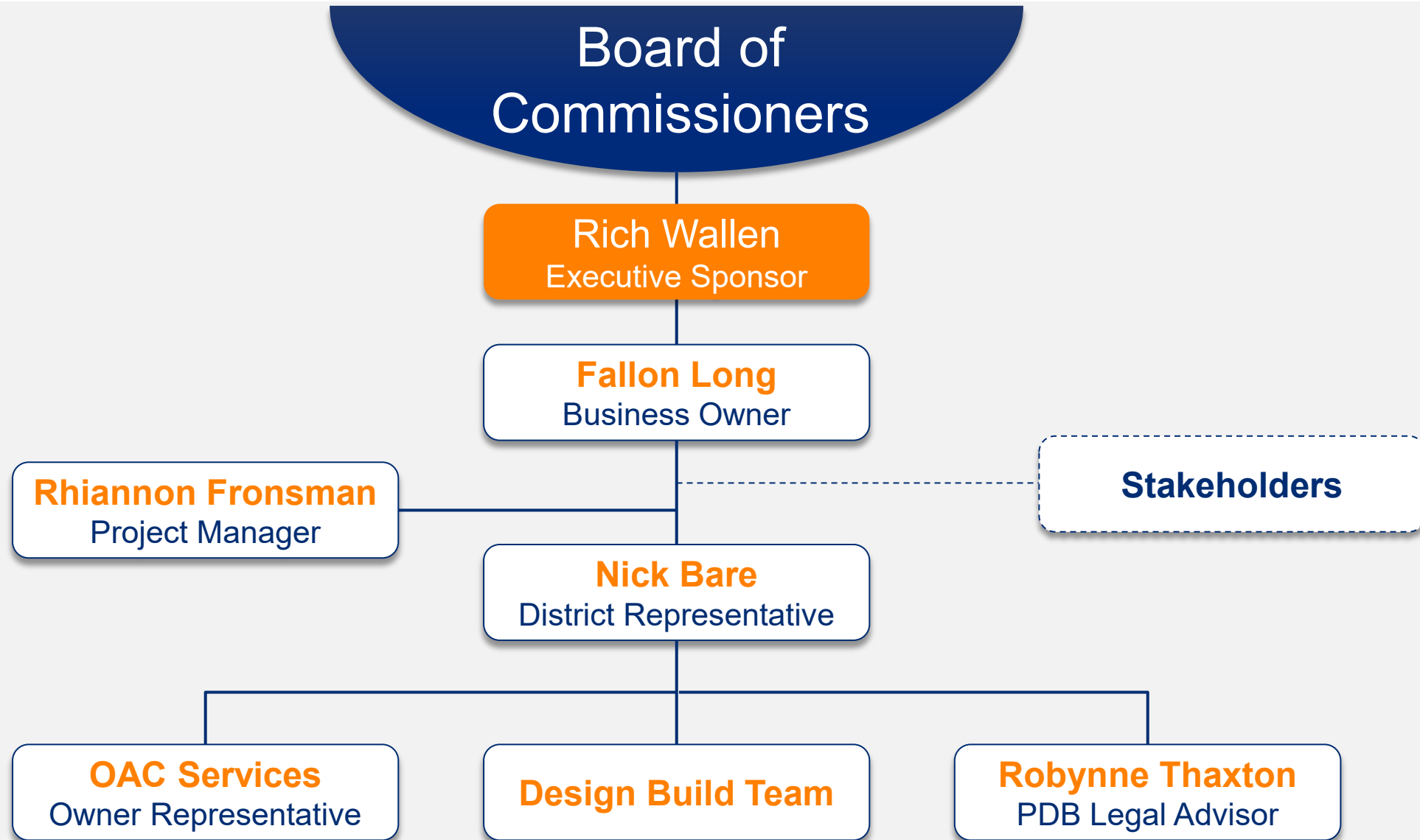


Designed for best value



Earliest scope, cost, and schedule certainty

New Ephrata Service Center – Key Project Team



Alternative Public Works Contracting

Revised Code of Washington (RCW) 39.10
Progressive Design-Build Team

Project Review
Committee
(PRC)

Request for
Qualifications
(RFQ)

Evaluate and
Score – Shortlist
Finalists

Request for
Proposals
(RFP)

Evaluate and
Score –
Successful
Proposer
Determined

Negotiations
and Finalize
Contract

03

Contract Award Process
Alternative Public Works

Design-Build Contract Award Process

RFQ Step 1

Evaluated and Scored

- ✓ Proposed Team
- ✓ Past Performance on Projects Similar Scope and Complexity
- ✓ Progressive Design Build Delivery Capabilities
- ✓ Past Utilization of DBE, MWBE, small businesses

Design Build Team	Score
Absher Integrus Huitt Zollars	92
Lydig Construction Bernardo Wills Whitman, Requardt & Assoc	92
Garco ALSC Architects	88
Abbott Construction Ankrom Moisan	86
Graham TCF Architecture	85
Sellen Jacobs	84
PCL Construction DLR Group	81

Design-Build Contract Award Process

RFP Step 2 Evaluated and Scored

Design-Build Team	Score	Total
Absher Integrus Huitt Zollars	88.79	180.79
Garco ALSC Architects	81	169.00
Lydig Construction Bernardo Wills Whitman, Requardt & Assoc	74.94	166.94

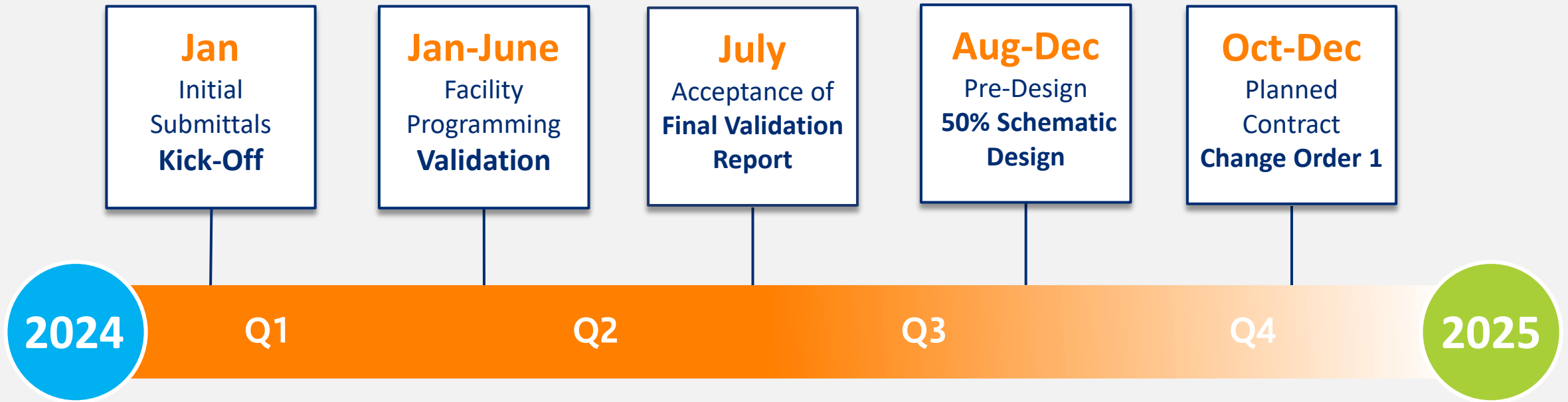
- ✓ Interactive Meetings
- ✓ Progressive Design-Build Approach
- ✓ Cost Tracking and GMP Development Approach
- ✓ Design Management Approach
- ✓ Construction Management Approach
- ✓ Accident Prevention, Safety and Claims
- ✓ Inclusion Plan, DBE, MWBE, small businesses
- ✓ Design-Builder's Fee

04

Contract Specifics

Absher | Integrus | Huitt Zollars

Level of Effort



Key Deliverables

- ✓ Owner Criteria
- ✓ Final Validation Report
- ✓ Project Planning Submittals
- ✓ Refined Scope of Work & Requirements
- ✓ Preliminary Basis of Design Documents
- ✓ 50% Schematic Design



Level of Effort Estimate

Detail

- ✓ Not to exceed contract price
- ✓ Time and expenses

Description	Estimated Cost
Absher Team Personnel	\$3,332,352
Subconsultants (<i>Survey, Civil Eng, Landscape</i>)	\$156,638
Site Investigation Allowances (<i>Geotech, Locates, Soil Sampling</i>)	\$250,000
Combined Fee (<i>the cost of Insurance & Bond, & % of the cost of work</i>)	\$156,290
Travel / Reimbursable Allowance	\$87,000
Business & Occupation Tax	\$17,611
Total Validation Phase Estimate	\$3,999,891

05

Recommendation

Approval to Execute Contract

Recommendation

Approval to Execute Contract

- ✓ Award New Service Center Progressive Design-Build Team contract to **Absher Construction + Integrus Architecture + Huitt-Zollars**
- ✓ Contract not to exceed **\$3,999,891**
- ✓ Execute initial scope of work for **program validation and pre-design activities** for new Service Center



Questions





Powering our way of life.



Nov 14th 2023
Presentation to the
Commissioners

Dispatchable Reliable Power from Renewables

Agenda

1) Thank you to the Commissioners:

Nelson Cox, *President*
Tom Flint, *Vice President*
Terry Pyle, *Secretary*
Larry Schaapman, *Commissioner*
Judy Wilson, *Commissioner*

2) Introduction to Obsidian:

David Brown
Founder and Senior Principal, Obsidian Renewables

John Cable
Principal, Obsidian Renewables

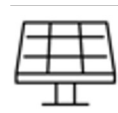
Ken Dragoon
Director of Hydrogen Development

Shannon Souza
Government and Community Liaison



Introduction to Obsidian

- ❖ A Pacific Northwest pioneer in utility scale renewable energy since 2008
 - ✓ We live here, we work here
 - ✓ Developed the first utility-scale solar energy facility in Bonneville Power Administration's service territory
 - ✓ First solar facilities in PGE's and PacifiCorp's generating portfolios
 - ✓ ~500 MW of solar generation operating and in late-stage development across Oregon & Washington
- ❖ A Pacific Northwest pioneer in hydrogen and low-carbon fuels since 2018
- ❖ A focus on projects serving electric utilities, public utility districts and independent power producers in Oregon and Washington



Our Company Values

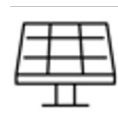
- ❖ Commitment to innovation in the field of Renewable Energy, Energy Storage and Low Carbon Fuels

The projects we develop in the PNW region:

- Deliver additional low carbon power to complement existing hydro power
- Help address load growth on transmission constrained systems
- Provide reliable, long-duration energy storage
- Scale to meet the needs of future power generation and energy storage demand

- ❖ Commitment to our communities

- Obsidian is locally owned and focused on the communities where we operate
- Dedicated use of local and union labor
- Investment in workforce training and education
- Commitment to safety in construction and operations
- Working toward shared goals of long-term economic development and job creation



Meeting Grant County Load Growth with Clean Energy

The challenge:

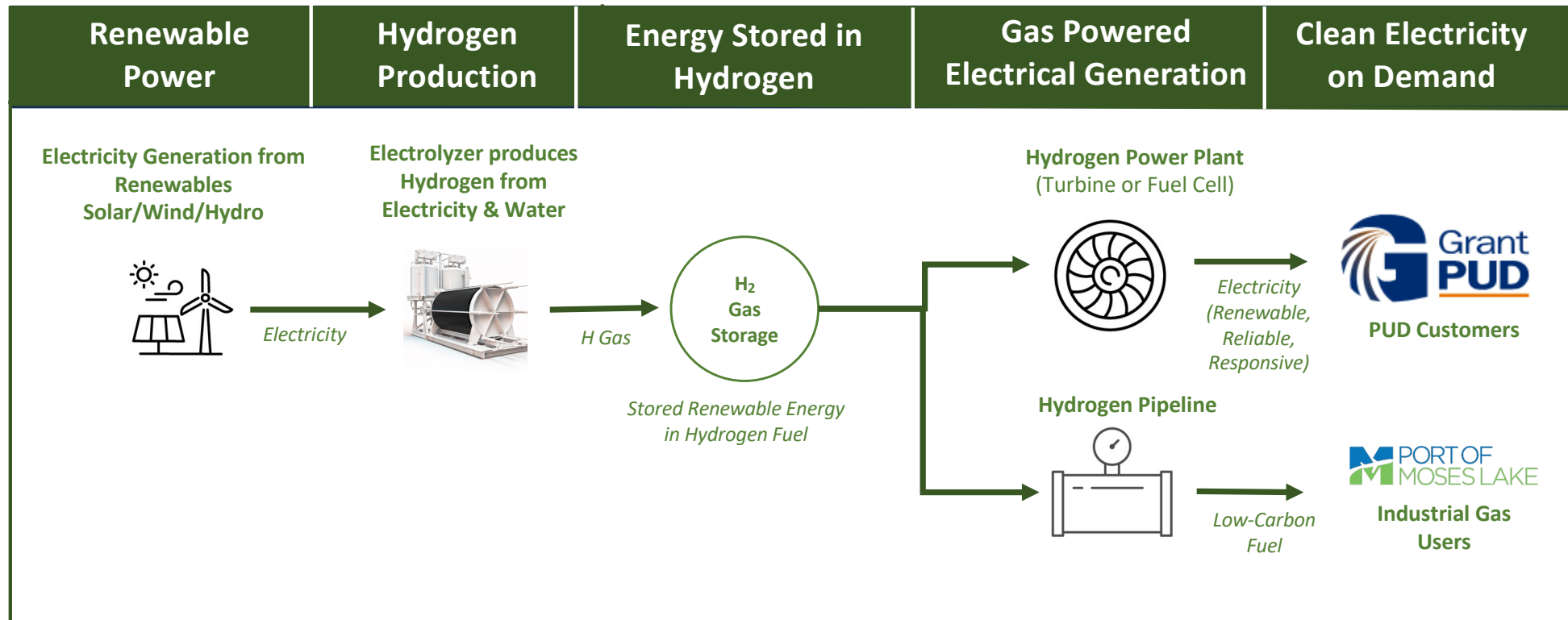
Meeting load growth reliably and economically while complying with carbon emission limitations

- ❖ Grant County and its PUD have attracted new loads and economic opportunities.
- ❖ Looking forward, the PUD is expecting load growth and requires additional firm capacity and energy.
- ❖ Relying on new fossil resources to meet load growth is constrained by state regulation and local availability of natural gas service.
- ❖ Wind and solar power generation can contribute energy but can't supply the dependable capacity needed to reliably serve customers.
- ❖ Storing low carbon energy needed to continuously provide power for more than 24 hours is best done with low carbon fuels, not lithium-ion batteries, as batteries beyond 8-12 hours with today's technology are just too expensive.



The Solution: Clean fuels to run a new dispatchable power plant supported by storage

- The Solution:**
- 1) A reliable, dispatchable turbine generator for capacity benefits and value.
 - 2) New renewable generation (primarily solar) is coupled with an electrolyzer to produce hydrogen.
 - 3) Energy is stored in the form of hydrogen and connected to the power plant
 - 4) The generator produces electricity for Grant PUD as needed.



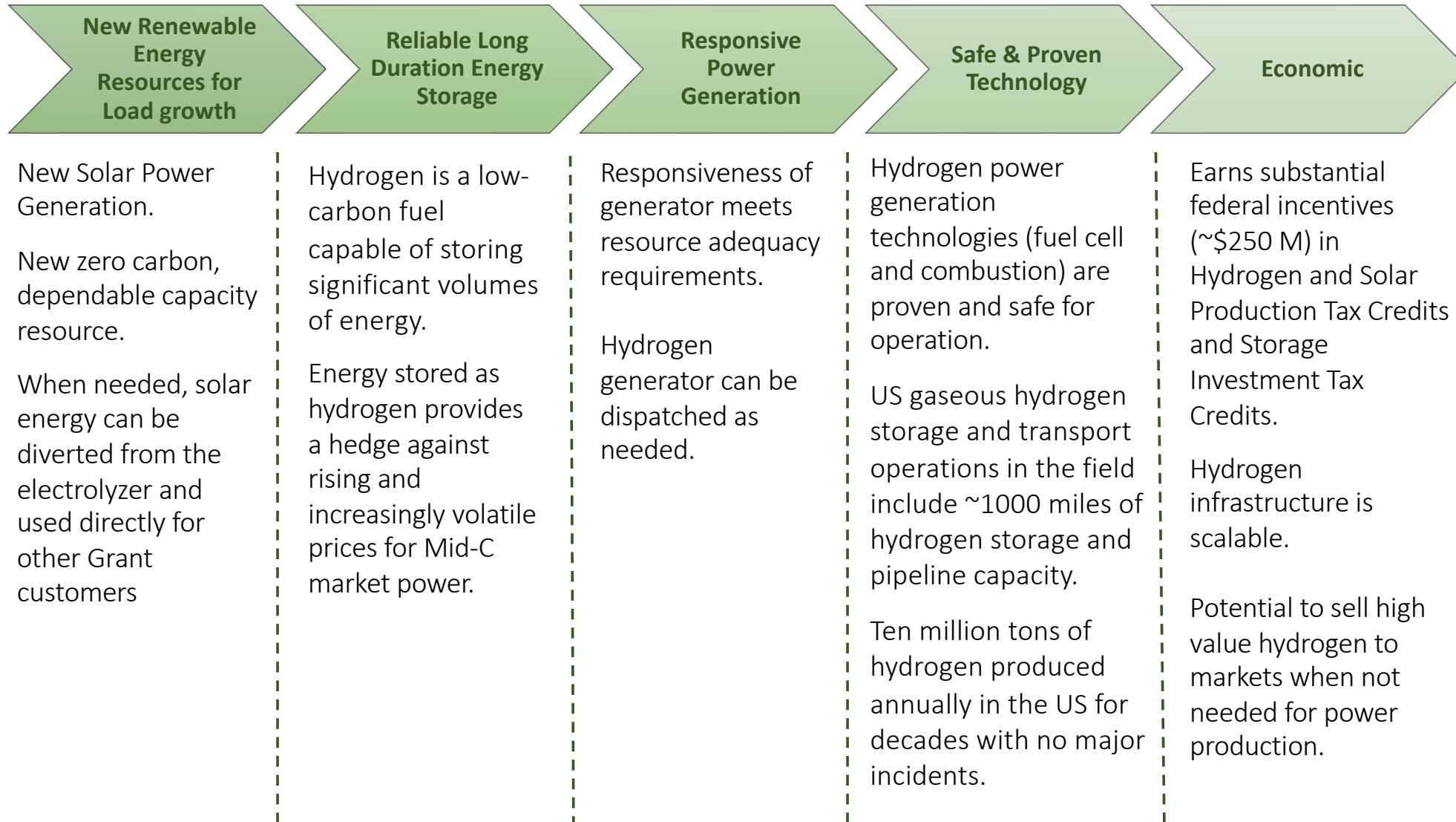
Benefits to the PUD and the Region

Proposed system is additional, simple, responsive, safe, low-cost, and actionable

- ❖ **Helps meet the PUD's Resource Adequacy Needs:** Hydrogen in storage provides the PUD with sufficient energy storage to meet resource adequacy needs.
- ❖ **Provides Long Duration Renewable Energy Storage:** Stored clean fuel provides long duration (days, not 4 hours) storage of renewable energy.
 - *Capable of storing more energy than lithium-ion batteries for a longer duration and with today's technology, at a lower cost.*
- ❖ **Development is Actionable, Operations are Safe and Reliable:** System is based on long-proven technologies operating safely in the field today.
- ❖ **Business Development:** Once clean hydrogen is available locally, its use will expand to agriculture (fertilizer production and farm equipment fuel), transportation (trucks and tractors), and industry (e.g., REC and Group 14).
 - Obsidian is not developing a project in Grant County, it is establishing a branch of its hydrogen business to supply wholesale clean energy and fuels to the PUD, the Ports, and industrial and agricultural customers.



Project Strengths



Electrolysis – A Long Established and Safe Technology

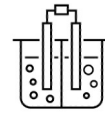
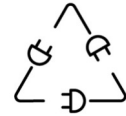
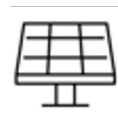
- ❖ Splitting water into hydrogen and oxygen was discovered two centuries ago.
 - Running an electric current through water is called electrolysis, the devices that do that are called electrolyzers.
 - Hydrogen production via electrolysis at utility scale dates back nearly a century!
- ❖ It takes a lot of electricity to split water into hydrogen and natural gas was less expensive.
 - Nearly all hydrogen produced today is made from natural gas but the availability of low-cost wind, solar, and hydro power plus the drive to decarbonization has brought reinvigorated interest in electrolysis.



Glomfjord Norway 100 MW electrolyzer, 1953-1991



Rjukan Norway 32 MW electrolyzer, 1927-1970s



Electrolysis Process Feedstocks and Products

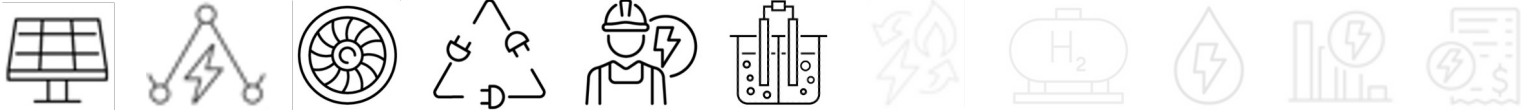
Hydrogen via electrolysis requires two basic feedstocks

Feedstocks for Electrolyzer:

Electricity	Water
<ul style="list-style-type: none"> ❖ Electricity – from renewable energy sources (to meet clean resource adequacy requirements and realize cost savings from hydrogen production tax credits) 	<ul style="list-style-type: none"> ❖ About 4 gallons of water consumed per 1 kg of hydrogen production. ❖ Total water consumption for project size under consideration estimated to be 75 acre-ft per year.

Process Products

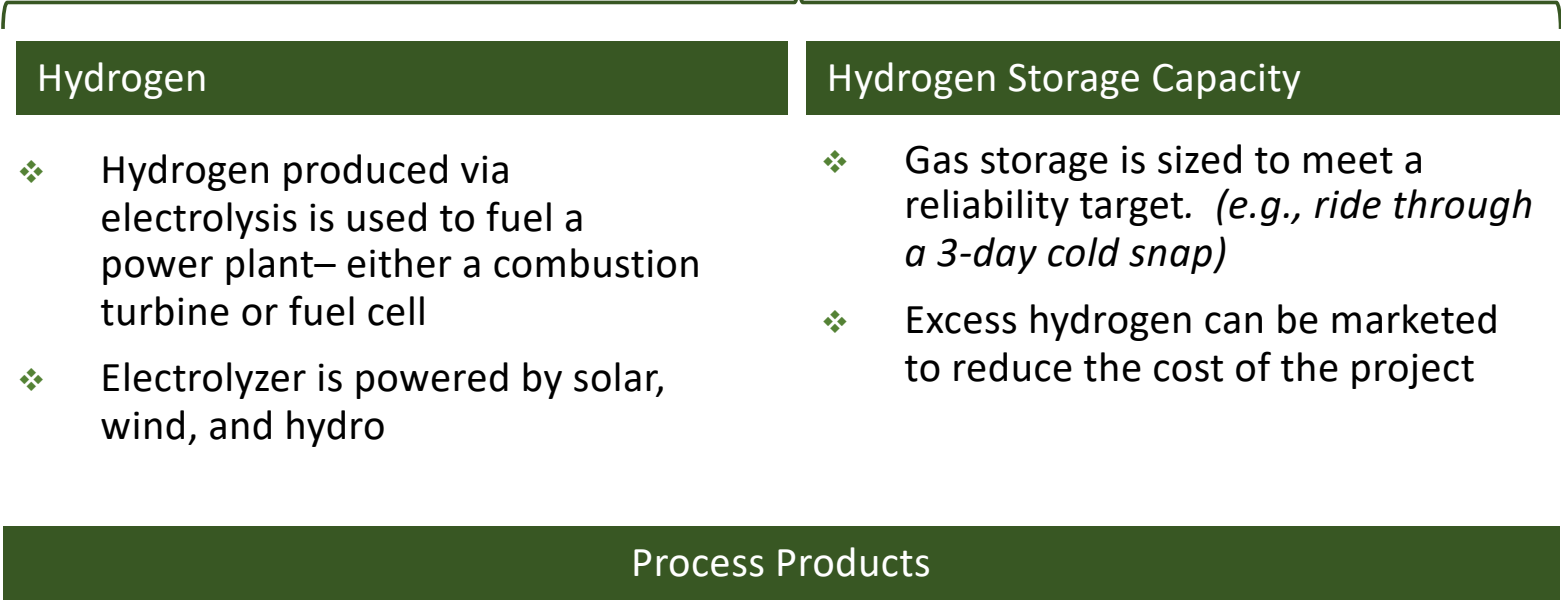
- ❖ **Hydrogen** (*a carbon free fuel*)
- ❖ **Oxygen** (*vented or potentially used in wastewater treatment or other industry*)
- ❖ **Heat @80C** (*vented or used for food processing, HVAC, other industry*)
- ❖ **Wastewater** effluent (*mineralized water, can be reused for cooling*)



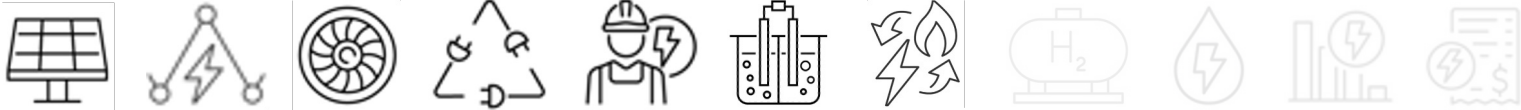
Hydrogen Gas-to-Power Generation

Hydrogen gas-to-power generation produces electricity, reliably and on demand

Fueling Hydrogen Powered Generation

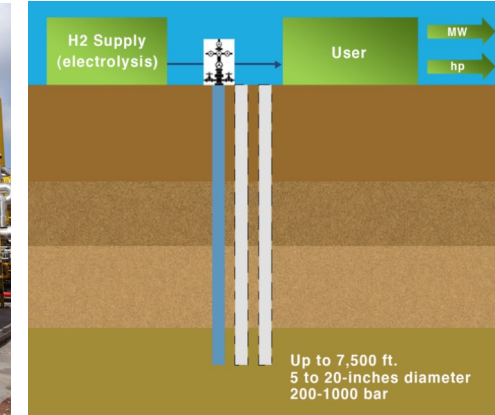
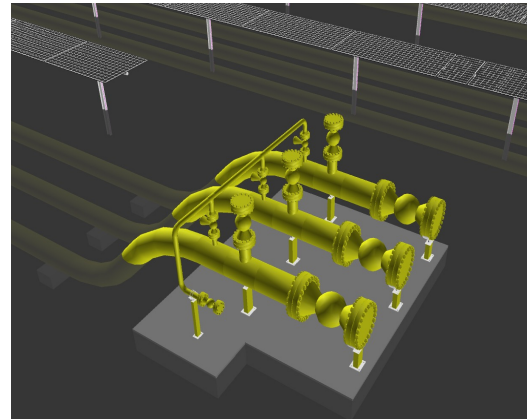


- ❖ **Clean Electricity, Reliably on Demand**
- ❖ **Clean water**
- ❖ **Low or no NOx Emissions**
 - Hydrogen Fuel Cells – zero NOx emissions
 - Hydrogen Turbines - NOx emissions controllable to conventional gas turbine levels



Hydrogen Storage Options

Multiple methods of gas storage are under study



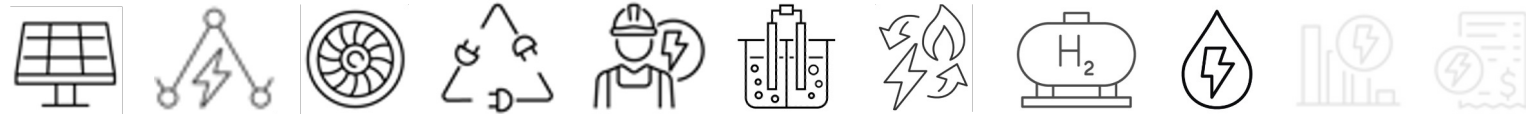
Obsidian's Manifold, LDMS™

- ❖ Large amounts of hydrogen can be stored in buried pipe under a solar field.
- ❖ Traditional above ground tanks can be added to provide more storage as needed.
- ❖ Alternative underground storage methods are being studied but will not be deployed in early stages of the project.
- ❖ Natural gas can be stored in the same manner.

Water Resource Planning

Minimizing use of water consumption

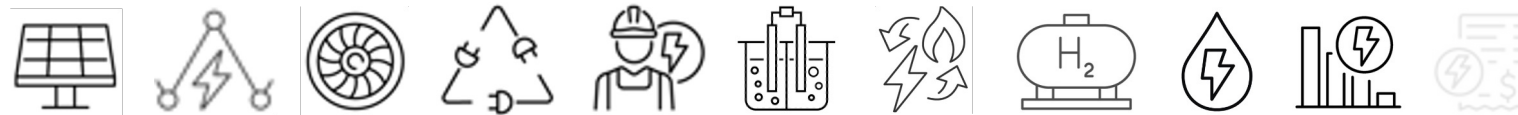
- ❖ Obsidian and Grant PUD are working together on water resource planning for the electrolyzer and cooling operations.
- ❖ Consumptive water use estimated at 75 acre-ft per year:
 - Water used for electrolysis can be sourced from water treatment plants.
 - Water used in cooling of electrolyzer can be recycled.
- ❖ Potential effluent water sources include:
 - City of Moses Lake
 - Port of Moses Lake
 - City of Ephrata



Evaluating Clean Fuel Turbine & Alternatives

Hydrogen is Lowest Cost Storage for Periods of Power Supply Above About 8 Hours

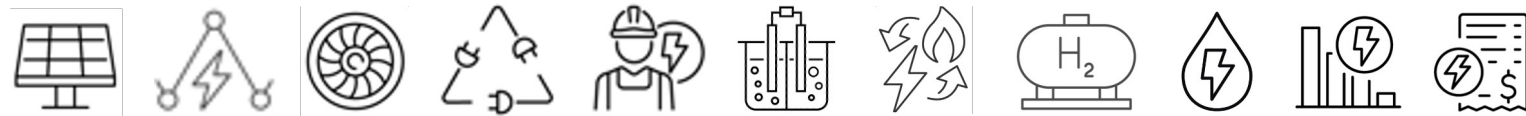
	Clean Fuel Turbine Solution	Battery Solution	Market Purchases Of Renewable Energy
Configuration:	<i>New Renewables and hydro + Electrolysis + Hydrogen Storage + Generation</i>	<i>New Renewables + Battery Storage</i>	<i>Contracted or Merchant</i>
Considerations:	<i>Lowest Cost for Long Duration Storage; Clean, Responsive & Dispatchable; Receives Full Capacity Value in Resource Adequacy Showing</i>	<i>Efficient; Clean & Responsive; Lower capacity value in resource adequacy planning (shorter duration with today's battery technology)</i>	<i>Not a PUD-controlled asset; volatile and increasingly expensive; May not provide capacity benefits in resource adequacy planning</i>



Realizing the Benefit of Federal Incentives

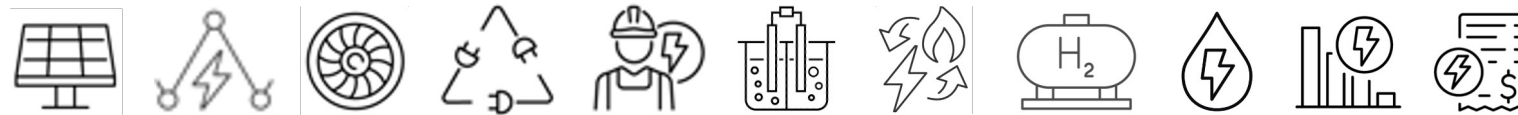
Significant federal incentives for hydrogen production and energy storage reduce project cost

- ❖ Clean hydrogen federal incentive is automatic, not applied for. Equal to the equivalent to \$3/kg of hydrogen produced, or the equivalent of \$3/gallon of gasoline or \$26/mmBTU of hydrogen produced.
 - Internal Revenue Service has yet to announce rules regarding what constitutes “clean” hydrogen production.
 - A kilogram of hydrogen contains the energy of a gallon of gasoline.
- ❖ A federal tax incentive of up to 40% for hydrogen storage facilities.
- ❖ These federal incentives total about \$250 million in federal tax credits over a ten-year period for a project roughly the size of that under discussion with Grant PUD staff.



Joint Working Parties & Project Development Partners

Grant County PUD		Obsidian Renewables	
Rich Wallen	Chief Executive Officer	David Brown	Sr. Principal
John Mertlich	Managing Director	John Cable	Principal
Paul Dietz	Enterprise Risk Management	Laurie Hutchinson	VP, Renewable Energy Development
Kevin Marshall	Engineering Support	Ken Dragoon	Director, Hydrogen Development
Brent Gregory	Project Manager	Michelle Slater	Senior Legal Counsel and Project Manager
Baxter Gillette	H2 Economic Analysis	Shannon Souza	Government & Community Liaison
Bryce Greenfield	H2 Production & Storage Lead	Abe Mooney	Development Manager
Dave Dempsey	Power Generation Using H2 Lead	Kirk Moore	Sr. Analyst, Hydrogen & Renewables Development
Lisa Stites	Power Supply Portfolio Integration/Modeler	Matt Kirsch	Development Manager





THANK YOU

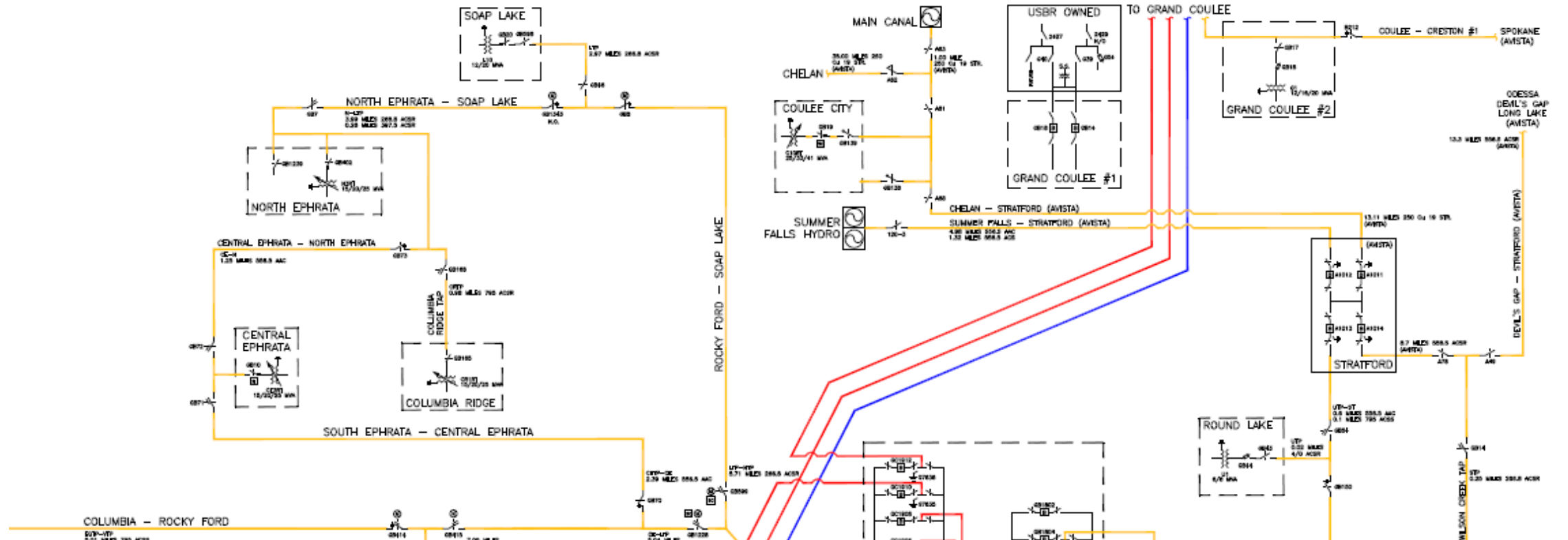
Construction & Maintenance Soap Lake Substation Fire



Grant County
PUBLIC UTILITY DISTRICT

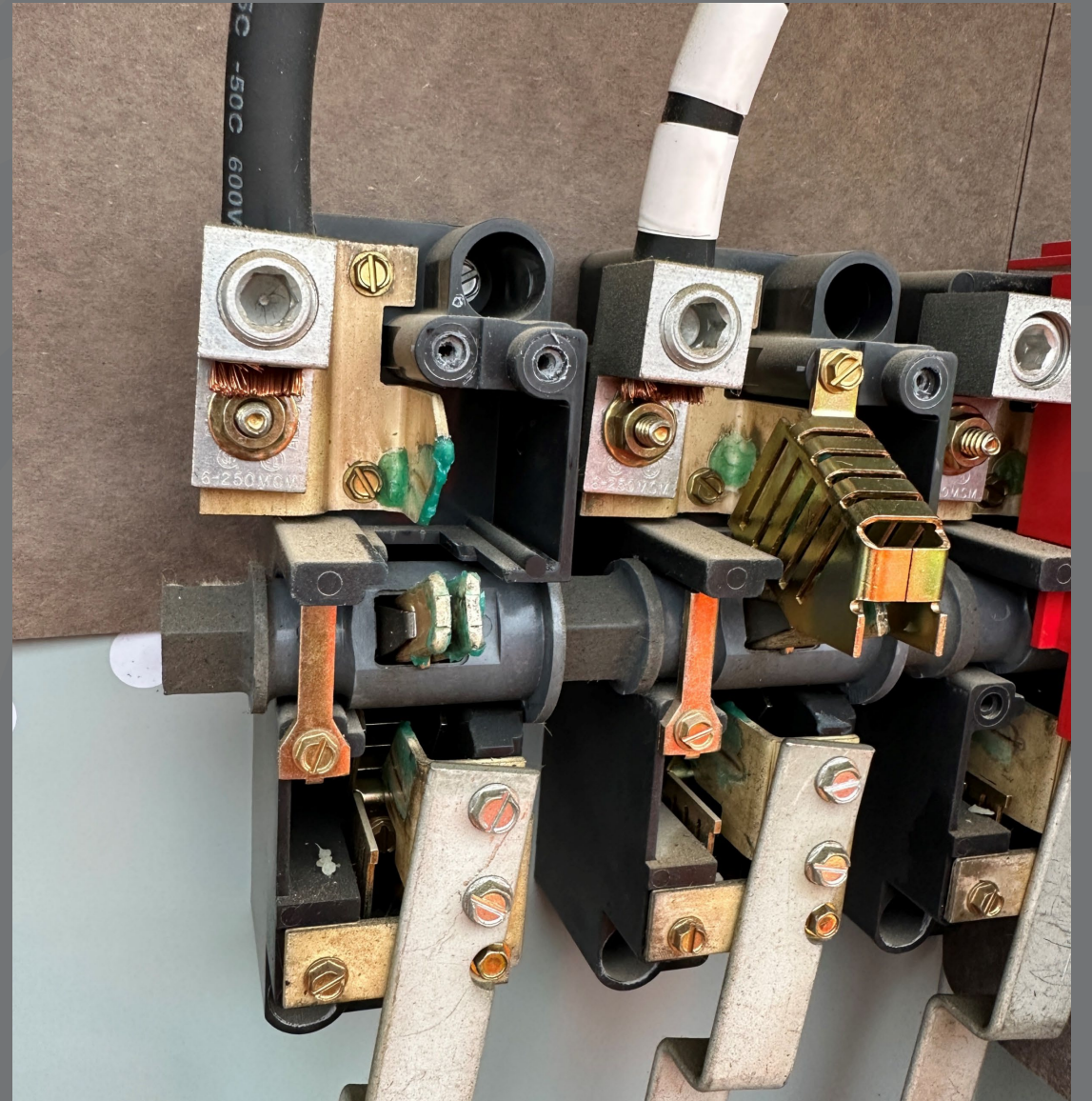
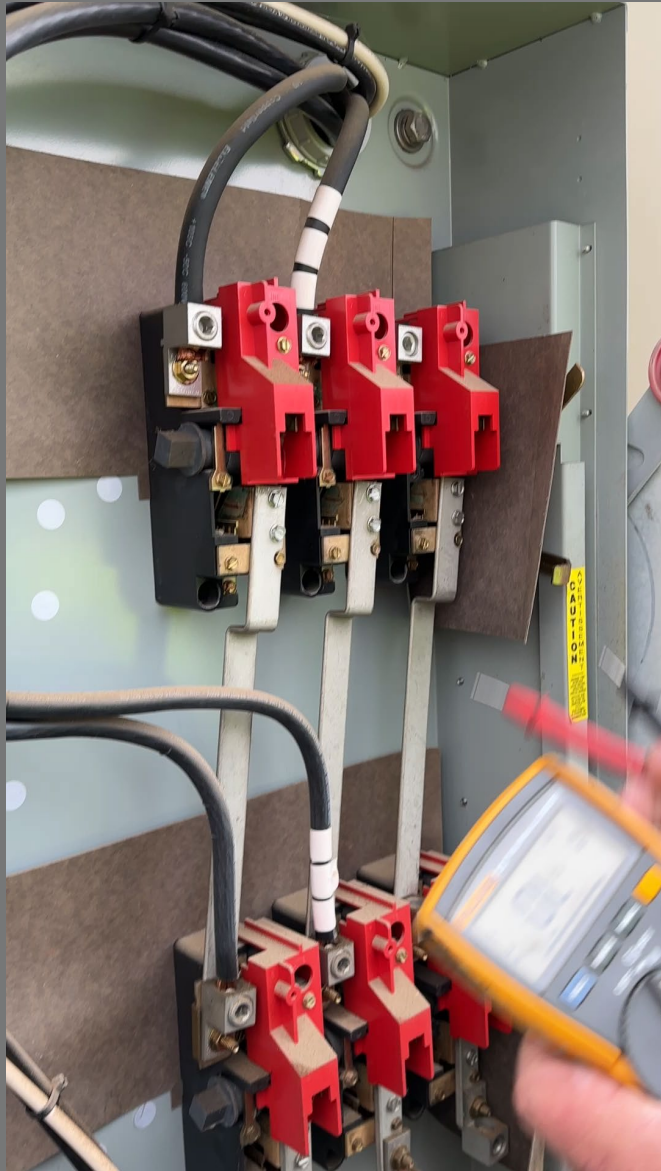
What, When and Why - Investigation

- Wednesday, October 25th, 2023
- 14:05 Soap Lake distribution began faulting
- 14:08 the 115kV transmission line to soap lake relayed open
- Distribution currently being fed by North Ephrata, Coulee City and Round Lake Stations.









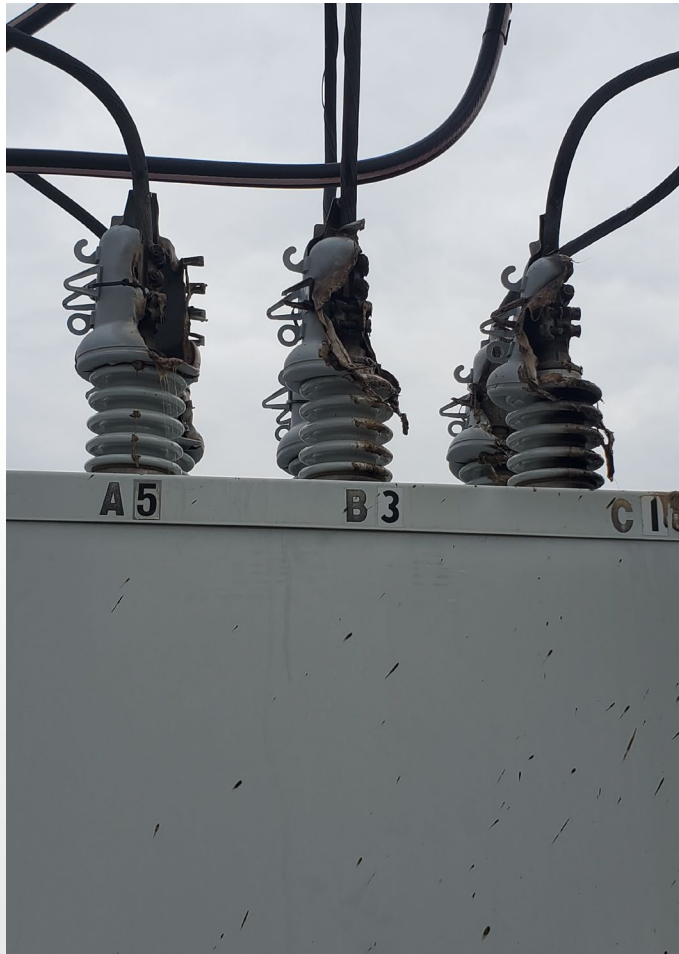


The Damage











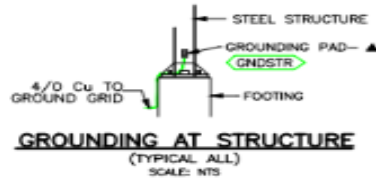
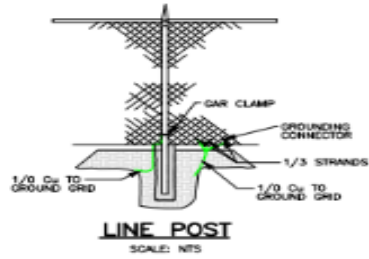








Path Forward



CONDUCTOR LEGEND:

- 4/0 STRANDED Cu WIRE ABANDONED
- - - 2/0 STRANDED Cu WIRE
- 4/0 STRANDED Cu WIRE
- - - 1/0 STRANDED Cu WIRE
- - - 2/0 STRANDED Cu WIRE ABANDONED

NEW CONDUCTOR LEGEND:

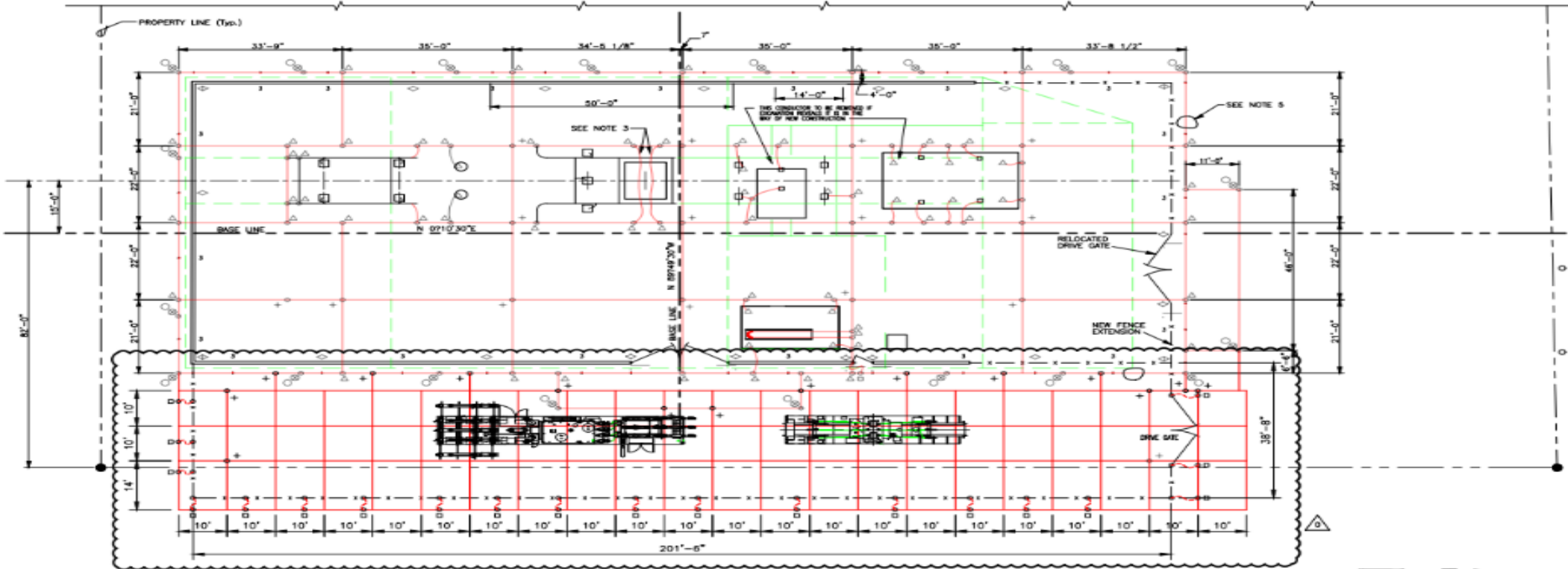
- 4/0 STRANDED Cu WIRE
- - - 1/0 STRANDED Cu WIRE

GROUNDING LEGEND

SYMBOL	DESCRIPTION	QTY.
⊙	CANWELD ROD TO CONDUCTOR #17193506	20
⊙	GROUND ROD #C2000008	20
—	CONNECTOR #17331010	7
⊙	CRIMP CONNECTOR #17022019	57
⊙	3" PIPE CLAMP (REUSE EXISTING)	8
⊙	4" PIPE CLAMP (REUSE EXISTING)	6
—	CONNECTION POINT	
⊙	CONNECTION TO STRUCTURES #17304800	12
⊙	GRD PAD	6
⊙	3 1/2" PIPE CLAMP (REUSE EXISTING)	4
⊙	CONNECTOR 4/0-1/0 #17023200	38
⊙	CONNECTOR 4/0-4/0 #17023300	31
⊙	#4/0 STR Cu #18624007	1790 FT
⊙	#1/0 STR Cu #18621007	250 FT

NOTES:

- CONNECT EVERY THIRD LINE FENCE POST, ALL CORNER POSTS AND GATE POSTS, TO THE GROUND GRID WITH 1/0 Cu. CONNECT THE FENCE FABRIC ADJACENT TO EVERY GROUNDING THIRD POST TO THE GROUND GRID WITH 1/0 Cu.
- GROUND CONDUCTORS 18" BELOW GRADE.
- LIGHTNING ARRESTOR LOOPS.
- GATES BONDED TO SUPPORTING POSTS WITH FLEXIBLE GROUNDING STRAPS.
- 2-FOOT SECTION CUT OUT OF GROUND MAT WIRE.



RELEASE FOR CONSTRUCTION

JEREMY WALKER, P.E.		PROJECT NO. 1802201	
DATE: 5/21/21		SCALE: AS SHOWN	
PROJECT: SOAP LAKE		SUBJECT: SOAP LAKE	
SOAP LAKE SUBSTATION GROUND GRID MOBILE DEPLOYMENT ADDITIONS			
DATE:	WT:	1	E
5/21/21	1:10		
			L-03.000

STATE AND FEDERAL LEGISLATIVE UPDATE

Nov. 14, 2023

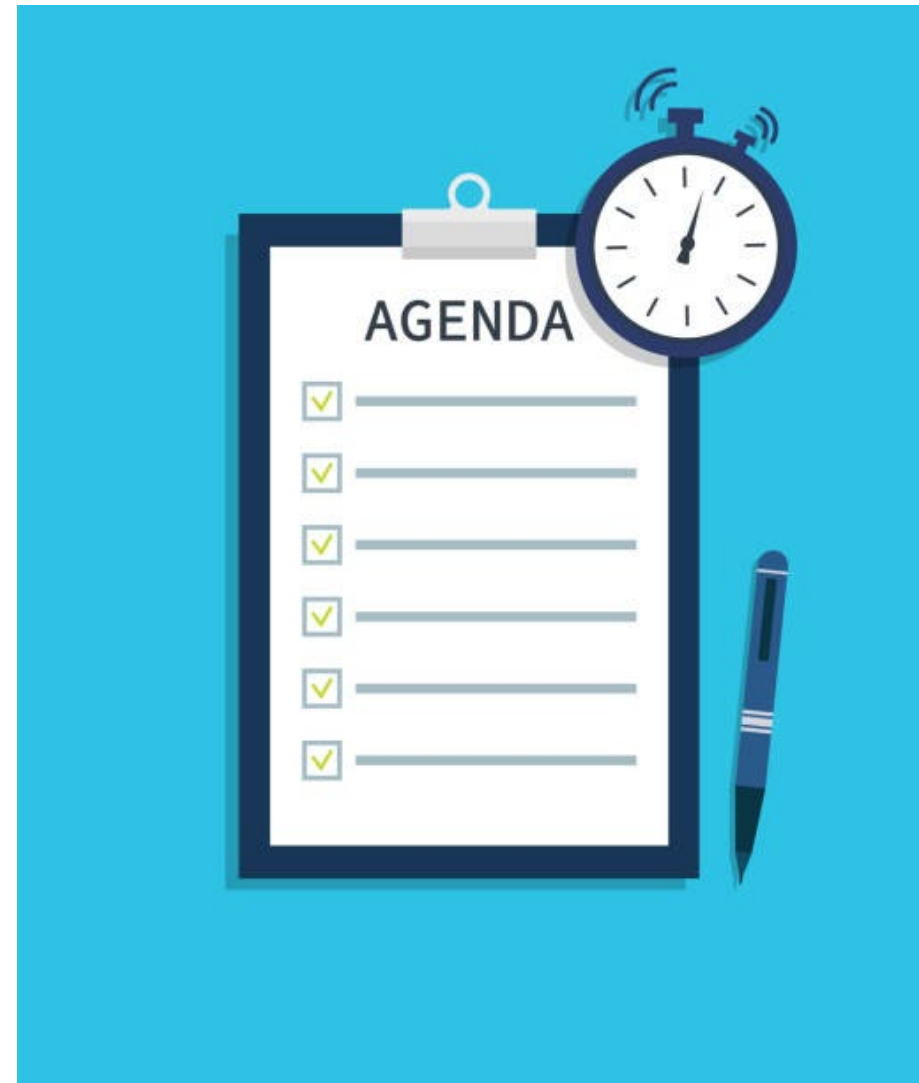


Powering our way of life.

Agenda

Key Topics

- *State Issues and Topics* –
 - State session starts in January
 - Low-income energy assistance
 - Other issues we are tracking
- *Federal Issues and Topics* –
 - Elective pay
 - Hydro relicensing reform
 - Other federal priorities





State Legislative Topics

Legislative session begins
in January



State legislative session

State Session Begins Second Monday in January

- Short session, 60 days
- Second year of the legislative biennium. Supplemental budgets adopted during the session:
 - Operating
 - Capital
 - Transportation
- Carryover and new bills will be heard
 - Bills introduced in 2023 that did not pass will be re-introduced (2,312 bills were introduced and approximately 20% passed)
 - If a bill does not make it through the process by the end of 2024, it is “dead”

Low-income Energy Assistance

Program Design

- Sec. 120 of CETA requires electric utilities to make energy assistance programs and funding available to low-income customers.
- Legislative report delivered in March 2023 by Dept. of Commerce that aggregates data including a summary of energy assistance programs, energy burden and energy assistance needs
- The report is the first state-wide assessment of electric utility low-income energy assistance programs
- Commerce engaged in a series of workshops over the summer/early fall to engage stakeholders on potential elements of the program
- Comments were filed and we will continue to engage in the process

Cap-and-Invest Auction

Under the direction of the Dept. of Ecology

- The Washington State Dept. of Ecology posted its “Auction Summary Report” for the third quarterly auction of the cap-and-invest program that occurred on Aug. 31.
- The auction included both the consignment of no-cost allowances by WA utilities and the sale of current-year allowances by Ecology.
 - Proceeds from consigning utilities totaled \$184.5 million while state proceeds totaled \$356.6 million
- To date, the state has received over \$1.4 billion from the cap-and-invest program.

Interim Priorities

Legislative issues to watch

- **CCA Bills**- Several bills on this issue will carry over from the last session and new bills are being introduced.
- **Net Metering**- Follow developments as the state conducts a study that will look to define the future of net metering in Washington state.
- **Broadband**- Track the development of state programs that will lead to the distribution of BEAD funding (\$1.23 billion) such as the digital equity plan and State Broadband 5-year plan to the NTIA
- **Lower Snake River Dams (LSRDs)**- Continue to monitor as the Dept of Commerce is looking to conduct a study of what new energy sources/services would be needed to offset the value currently provided by the dams.
- **Transportation Electrification**- Washington State recently completed its transportation electrification strategy. A legislative report is anticipated to be delivered early next year.



Federal Legislative

Fall 2023 Update

An Overview from Washington

What factors are impacting work

- Will there be a government shutdown?
 - Continuing resolution currently funds the government through Nov. 17
- Must-pass bills still awaiting passage:
 - National Defense Authorization Act
 - Farm bill
 - Reauthorize the Federal Aviation Authorization Act
 - Fiscal year 2024 appropriations bills
- Upcoming 2024 federal elections – President, House, Senate

Elective Pay – Inflation Reduction Act (IRA)

IRA = Tax Credits

- IRA contains approximately \$369 billion for energy/climate investments
 - Public power has access to these incentives through direct or “elective” pay procedures which allows tax-exempt entities to receive energy credits as a direct payment
 - Extends and increases the tax credits for incremental hydro improvements such as capacity upgrades at existing hydro facilities
- Treasury has released some guidance but has not clarified the domestic content requirements regarding the elective payment requirement.
- We will continue to monitor to ensure Treasury provides guidance on domestic content requirements, including waivers, that are clear and consistent.

Legislation Would Create Additional Incentives

Bill sponsored by Senator Cantwell

- Whereas hydroelectric projects that qualify within the IRA only apply to investments that produce a marginal increase in power generation, this bill would expand that.
- The legislation would establish a new 30% federal tax incentive to encourage upgrades that:
 - Enhance the safety and security of existing dams
 - Invests in projects that expand fish passage infrastructure
 - Improve water quality and recreational use opportunities at hydropower project sites
- The bill also establishes a first-ever federal cost-share to encourage the removal of obsolete river obstructions

Hydro Relicensing Reform

Items we are tracking

By 2030, 281 existing hydropower and pumped storage facilities will have their license expire

Bills would help streamline hydropower relicensing to help ensure the long-term viability of the hydropower industry

Two bills advancing in the House (Chairwoman Rodgers) and Senate (Sen. Cantwell)

Have provided input to staff and national organizations of the pros and cons of each. We will need to closely monitor the progress of each



What people are saying about the Hydropower Clean Energy Future Act:

"We are pleased that House Energy and Commerce Committee Chair Cathy McMorris Rodgers has reintroduced the Hydropower Clean Energy Future Act. As Congress focuses on energy permitting, it's important that the hydro licensing process facilitates reinvestment in the nation's hydropower fleet. We look forward to working with her and others in Congress to optimize hydropower's contribution to the transforming electric grid." – **Kirk Hudson, General Manager Chelan PUD**

"Grant PUD appreciates the leadership of Congresswoman Cathy McMorris Rodgers as she introduces the Hydropower Clean Energy Future Act. Our renewable energy portfolio is rooted in hydropower which has allowed us to reliably and affordably serve our customer's homes, businesses, and farms here in the Northwest for many decades. As the owner and operator of two hydroelectric dams on the Columbia River, as well as the operator of two smaller hydropower generation projects, our combined hydropower generating capacity is more than 2,100 megawatts, and we recognize the essential role hydropower plays in our collective quest for carbon-free energy sources. We look forward to working with the Congresswoman and others to see the success of this bill that will help modernize the hydropower licensing process and unlock the potential of new hydropower energy throughout the county." – **Rich Wallen, CEO and General Manager of Grant PUD**

"Recognizing hydropower as a reliable, clean and affordable energy partner sets a path of success for communities working to support renewables in the fuel mix while protecting their most vulnerable neighbors. We appreciate Congresswoman McMorris Rodgers' steadfast leadership in advancing hydropower's prominence in supporting a clean, reliable grid." – **Gary Ivory, Douglas PUD General Manager**

Supply Chain

Lack of supply of essential grid components

- DOE has announced that it is proposing new energy efficiency standards for distribution transformers
 - The new standard would change the type of steel used in manufacturing to support greater energy efficiency of transformers.
- Request into DOE to reconsider rolling out new standards
 - Coalition letter from Public Power and others requesting the DOE to reconsider
 - April, a bipartisan (65 members of the house) sent a letter to Sec. Granholm seeking withdrawal of the conservation standards. In June, 46 senators sent a similar letter.
- Bills have been introduced in the House and Senate that would delay DOE from finalizing the proposed standards until production can increase
- DOE is expected to issue a final rule in the coming weeks/months

Thank You



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Energy Services Program Overview

November 14th, 2023

Christopher Buchmann

Customer Solutions Program Supervisor



Powering our way of life.



Agenda

Energy Services Program Overview

- Energy Independence Act (I-937)
- Clean Energy Transformation Act (CETA)
- Irrigation Demand Response (IDR)
- Net Metering

Energy Independence Act (I-937)

2022-2023 Biennium

What is I-937?

Washington's Energy Independence Act (EIA), enacted a renewable portfolio standard (RPS) commonly referred to as "Initiative 937" effective January 1, 2010. The CPA must be updated every two years. The next update will be submitted the end of 2025.

Penalties

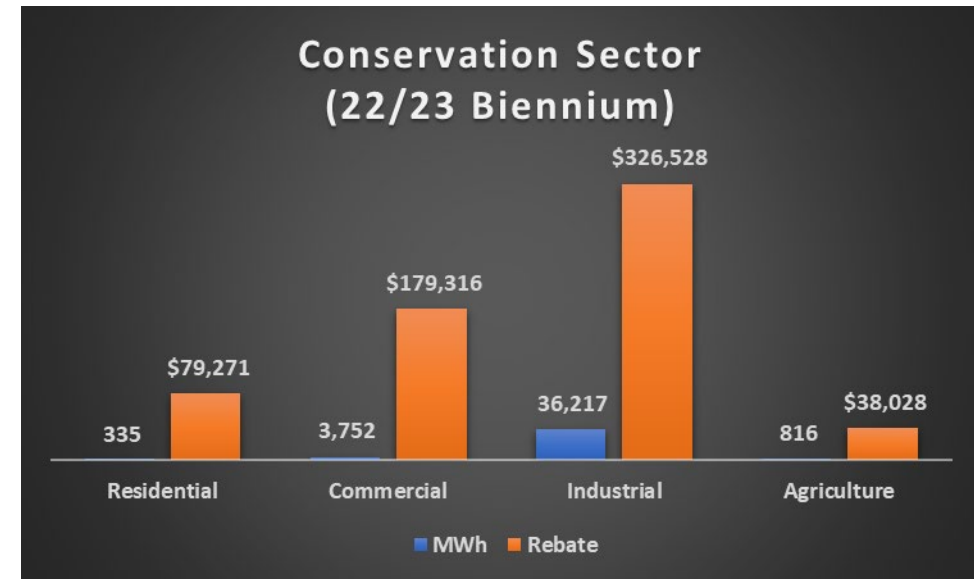
- A utility that fails to comply with the energy conservation or renewable energy targets shall pay an administrative penalty to the state of Washington in the amount of \$63 for each megawatt-hour of shortfall.

Example: If none of the targets are met the penalty would be \$2,685,213.48 and if half are met, the penalty would be \$1,262,540.74

- This penalty shall be adjusted annually and carried over to the next biennium.

Currently:

- Conservation Target:** 40,033 MWh has been exceeded
- Actual Saved to Date:** 41,121 MWh (103% of target met)
- To Date:** Grant PUD has relied heavily on data centers



Future:

- Use part of I-937 budget to benefit CETA through Conservation programs

Conservation Potential Assessment (CPA)

2024-2025 Biennium

Target:

Per RCW 19.285.040, qualifying utilities shall pursue all conservation that is cost-effective, reliable, and feasible.

I-937 requires utilities pursue all cost-effective conservation resources and meet conservation targets set using a utility-specific Conservation Potential Assessment (CPA) methodology.

The EIA sets forth specific requirements for setting, pursuing and reporting on conservation targets.

Measures Used to Meet Conservation Target:

- **Residential:** Insulation, Window, Heat Pump, Duct Sealing
- **Commercial:** Lighting
- **Industrial:** Custom Projects
- **Agricultural:** Sprinkler Replacement, High Pressure Sprinkler Conversion, Base Boot Center Pivot Gasket Replacement, Irrigation Pump Efficiency Upgrades

PUD's 2024-2025 Biennium Targets:

- **2-year Target:** 3.81 aMW (33,375.6 MWh)
- **10-year Target:** 18.65 aMW (163,374.0 MWh)

	2-Year	6-Year	10-Year	20-Year
Residential	0.16	0.66	1.46	3.04
Commercial	0.65	2.01	3.32	6.5
Industrial	2.84	8.99	11.91	15.32
Agricultural	0.15	0.75	1.48	2.94
Total	3.81	12.52	18.65	29.23

Energy Independence Act (I-937)

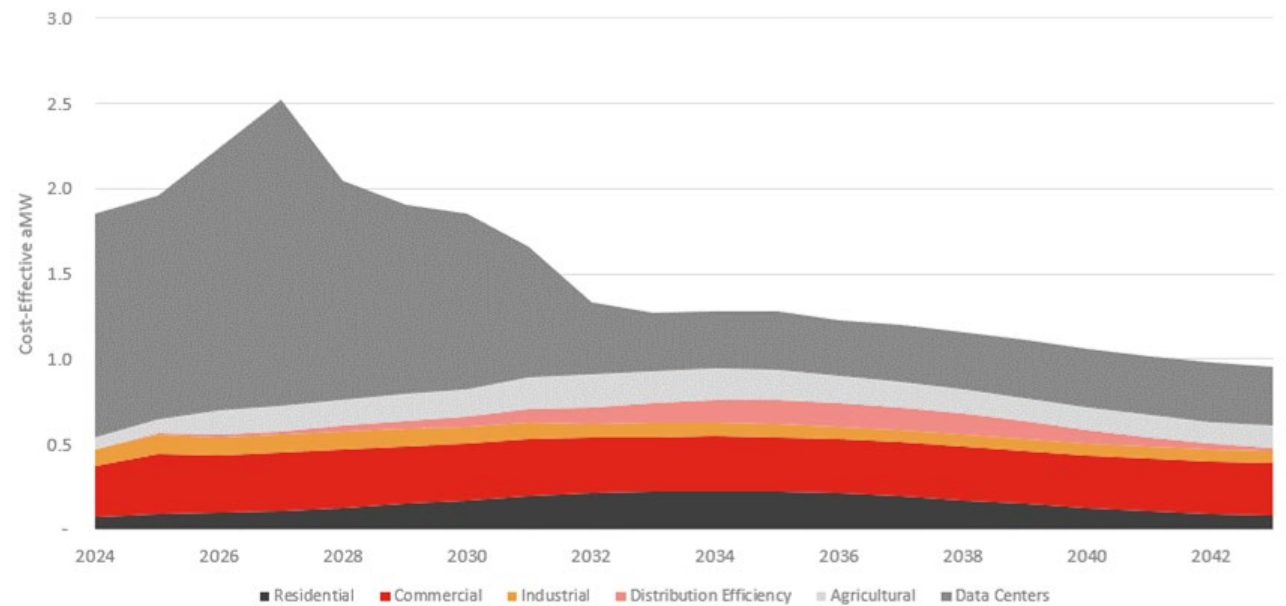
2024-2025 Biennium

Annual Cost-Effective Energy Efficiency Potential Estimate

The largest share of future savings potential is projected to be from **large data center projects**. The savings potential estimated in the first 2 years is based on both historic levels and the projects with planned completion dates in 2024 and 2025. These larger projects take significant lead time to develop and complete.

The second largest share of conservation is available in the District's **commercial sector**. The District has achieved significant savings in lighting measures in recent years, leaving limited remaining savings. Notable measures in this area include *Heat Pump Water Heaters, Heat Recovery Ventilation, Chillers and AC, Commercial Lighting, and Refrigeration*.

Only 15% of the potential is in the **residential sector** with the largest contributing measures include water heating and HVAC. Other notable potential in this end use include *Smart Thermostats, Low Flow Shower Heads, Faucet Aerators, Water Heater Circulator Controls and Circulators, and Air Source Heat Pumps*.



Clean Energy Transformation Act (CETA)

What is CETA?

CETA establishes policy that the public interest includes the “equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities.”

RCW 19.405.010

Deadlines:

- Meet 60% of the 2019 energy assistance need (per U.S. Census) with a 6% Energy Burden by 2030
 - 1,187 households utilizing current low-income programs
 - 1,174 households not currently utilizing low-income programs

Currently:

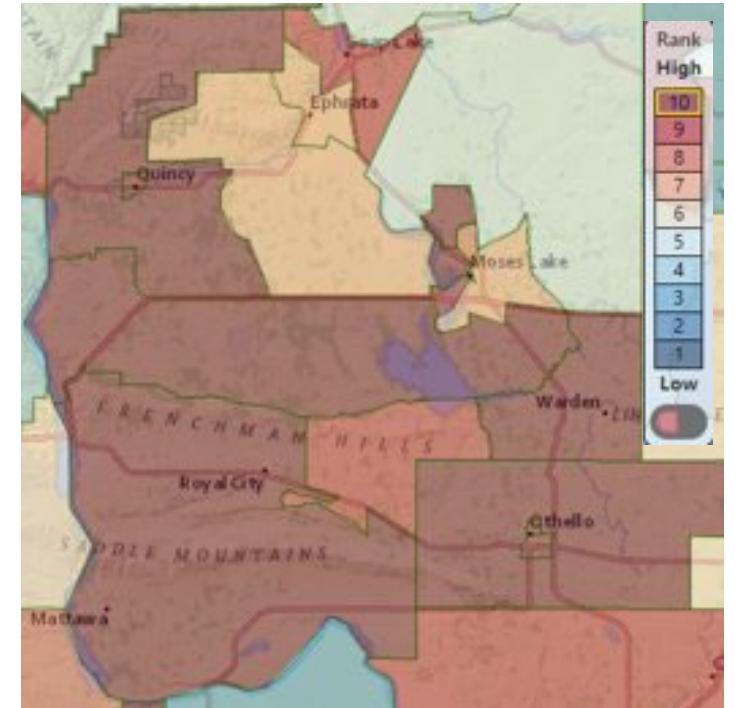
- Providing low-income Senior and Disabled discounts
 - Opened the qualifications for low-income Senior and Disabled discounts to 200% of poverty level from 150%
- Community outreach and advertising low-income rebates
- Conducting Home Energy Assessments

Future:

- Receive Washington State Auditor Office (SAO) results in the next couple of months
- Explore carbon-free credit allowances to potentially help fund low-income programs
- Open the low-income Senior and Disabled discounts to include all low-income customers
- Increase community outreach efforts
- Create additional low-income programs (rebate, increase discount %, weatherization)

Dependent Upon
Commission Approval

Energy Services



Washington Environmental Disparities Map

Irrigation Demand Response (IDR)

What is Demand Response?

Demand response refers to balancing the demand on power grids by encouraging customers to shift electricity demand to times when electricity is more plentiful or other demand is lower, typically through prices or monetary incentives.

Program Summary:

The IDR program will be a voluntary demand response program available to Grant PUD's agricultural irrigation customers. IDR will pay irrigation customers a financial incentive for the ability to turn off participating irrigation pumps on high energy use days. Grant PUD estimates future capacity needs through the Integrated Resource Plan (IRP) and then plans resources to mitigate shortfalls. IDR is a result of this planning process, and the program's success will be measured by the amount of demand reduction available to Grant PUD during periods of high energy demand for other system needs.

Current:

- Determining if standing up a Demand Response program is viable
- Developing the potential program and incentive structure for a pilot

Future:

- Select 50 irrigators that will give a realistic representation
- If deemed viable, start the pilot with 50 irrigators in 2025

Net Metering

What is Net Metering?

A Net Meter system is like a battery for the customer. Instead of charging a battery they are “charging” our system with their excess generation, and they get to draw from our system that which they put in, free of charge.

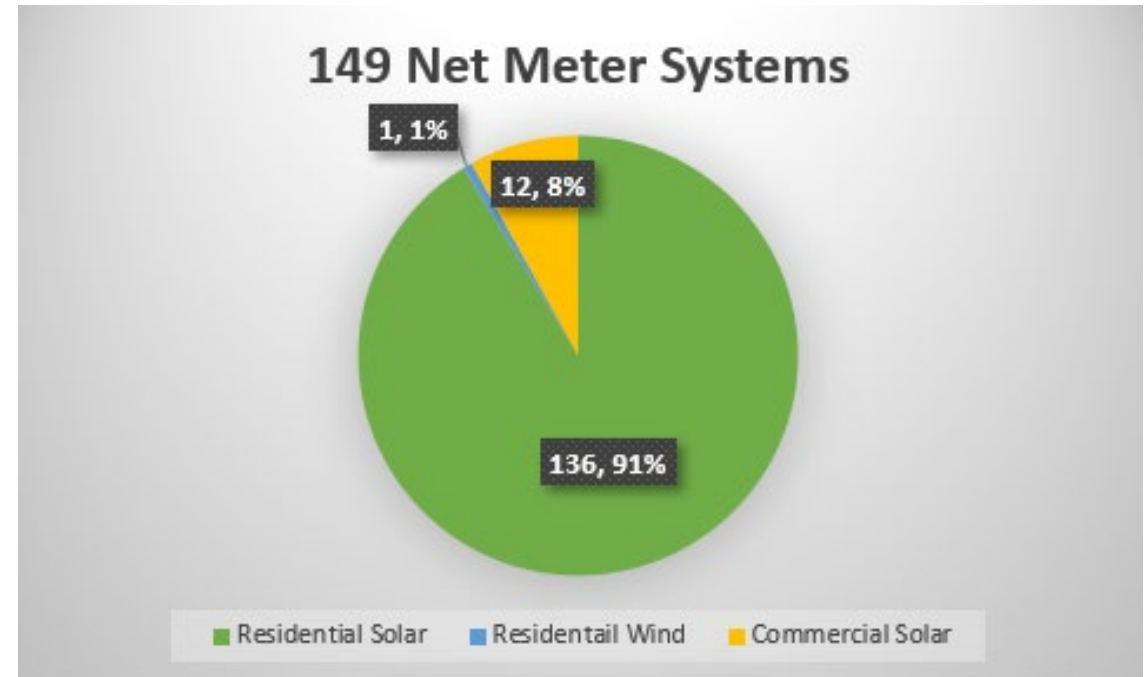
RCW 80.60 currently limits interconnection of generation for net metering to 0.25% of the District’s peak demand during 1996.

Program Summary:

RCW 80.60.020 requires Grant PUD to make net metering available to eligible customers-generators. Eligible customer-generators need to produce renewable energy. Renewable Energy means “energy generated by a facility that uses water, wind, solar energy, or biogas from animal waste as a fuel.” Only Net Metering systems with a maximum electrical generating capacity of 100 kW or less are allowed.

Currently:

- Grant is at 7% of the allowed system capacity by the state
- Average system size is 9.7 kW per house
- 1,448 kW of generation



Thank You



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Internal Audit Report

Semi-Annual Report

Dmitriy Turchik, Senior Manager of Internal Audit



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Meeting Agenda

- Review 2023-24 audit plan
 - Status of open audits
 - Proposed plan updates
- Emerging risks
- Additional discussion and questions

2023-24 Audit Plan

- Vendor Payments – *field work*
- Human Resource Policy Compliance
 - Employee Recognition Policy (management leave recognition) – *field work*
 - Kept On Salary Policy – *field work*
- Customer Billing and Adjustments
- Payroll Processing – *emerging risk*
- System Access – Roles and Responsibilities
- Inventory
- Small and Attractive Assets
- Purchase Cards (P-Card)
- Overtime

2023-24 Audit Plan – continued

- Other Reports Issued
 - Concerns regarding payroll processing
- Statutory Expenditure Review & Other Requests
 - Weekly voucher review
 - Bi-weekly payroll review
 - Policy review
- Emerging Risk and Audit Requests
- Follow-up: Monitor Audit Recommendations

Moving Forward

- Washington State Auditor's Office
 - 2021 and 2022 compliance audit
- Internal Audit Program Development
 - Audit Charter Updates – new standards will be applicable beginning of 2024
 - Improve audit department framework
- Deferred Compensation Plan Audit
- Co-sourcing Audit Engagements
 - Relying on the work of others

Thank You



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