AGENDA

GRANT COUNTY PUBLIC UTILITY DISTRICT 30 C Street SW – Commission Meeting Room Ephrata, Washington COMMISSION MEETING Tuesday, December 12, 2023

An Executive Session may be called at any time for purposes authorized by the Open Public Meetings Act

8:30 a.m. Executive Session

9:00 a.m. Commission Convenes

Review and Sign Vouchers

<u>9:30 a.m.</u> Reports from staff

10:00 a.m. Central Washington Power Agency (CWPA) Annual Meeting

12:00 Noon Lunch

1:00 p.m. Safety Briefing

Pledge of Allegiance

Attendance

Public requests to discuss agenda items/non-agenda items

Correspondence Business Meeting

1. Consent Agenda

Approval of Vouchers

Meeting minutes of November 28, 2023

9034 – Resolution Appointing a Representation and Alternates to the Board of Directors of the Central Washington Power Agency.

9035 – Resolution Appointing a Representative and Alternates to the Board of Directors of Energy Northwest.

9036 – Resolution Appointing a Representative and Alternates to the Board of Directors of the Washington Public Utility Districts' Association.

2. Regular Agenda

9037 – Resolution Establishing the Public Utility District No. 2 of Grant County, Washington 10-Year Conservation Potential Plan and Two-Year Conservation Target Pursuant to RCW Chapter 19.285.

9038 – Resolution Accepting a Bid and Awarding Contract 170-11879, for Supplying 336 AAC and 795 AAC Overhead Conductor.

9039 – Resolution Superseding Resolution No. 8768 and Setting Rate Policy.

9040 – Resolution Pre-Qualifying Contractor to Perform Electrical Work for Grant PUD.

Motion naming the following slate of officers effective January 1, 2024 and shall remain in effect until the next election of officers: (3461)

President Tom Flint Vice President Terry Pyle

Secretary Larry Schaapman
Commissioner Judy Wilson
Commissioner Nelson Cox

Motion authorizing the General Manager/CEO to execute Change Order No. 8 to Contract 430-4179 with DataPro Solutions, Inc., increasing the not-to-exceed contract amount by \$77,081.42 for a new contract total of \$601,593.31, extending the contract completion date to December 31, 2024, and resetting the delegated authority levels to the authority granted to the General Manager/CEO per Resolution No. 8609 for charges incurred as a result of Change Order No. 8. (3462)

Motion authorizing transfer of \$45,000,000.00 from the Electric Revenue Fund into the Rate Stabilization portion of the Electric System R&C Fund effective December 31, 2023. (3463)

Motion authorizing Interlocal Agreement 230-12115 with Grant County Fire District 8 and Interlocal Agreement 430-12116 with all Grant County Fire Districts for fire protection and emergency medical services. (3464)

Motion authorizing the General Manager/CEO to execute Amendment No. 3 to Contract 430-10759 for Cooperative Service Agreement with the USDA, increasing the not-to-exceed contract amount by \$684,244.88 for a new contract total of \$1,557,636.88, extending the contract completion date to December 31, 2025, and resetting the delegated authority levels to the authority granted to the General Manager/CEO per Resolution No. 8609 for charges incurred as a result of Amendment No. 3. (3465)

3. Review Items For Next Business Meeting

XXXX – Resolution Superseding Resolution Nos. 9006 and 9008, Relating to Amending Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, 17 and 85.

4. Calendar

5. Reports from Staff (if applicable)

Adjournment

CONSENT AGENDA

Draft – Subject to Commission Review

REGULAR MEETING OF PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY

November 28, 2023

The Commission of Public Utility District No. 2 of Grant County, Washington, convened at 8:30 a.m. at Grant PUD's Main Headquarters Building, 30 C Street SW, Ephrata, Washington and via Microsoft Teams Meeting / +1 509-703-5291 Conference ID: 596 502 173# with the following Commissioners present: Nelson Cox, President; Tom Flint, Vice-President; Terry Pyle, Secretary; Larry Schaapman, Commissioner (via Microsoft Teams during a.m. session) and Judy Wilson, Commissioner.

An executive session was announced at 8:31 a.m. to last until 9:00 a.m. to review performance of a public employee pursuant to RCW 42.30.110(1)(g), to discuss pending litigation pursuant to RCW 42.30.110(1)(i) and to discuss lease or purchase of real estate if disclosure would increase price pursuant to RCW 42.30.110(1)(b). The executive session concluded at 9:00 a.m. and the regular session resumed.

The Commission convened to review vouchers and correspondence.

The Commission recessed at 9:13 a.m.

The Commission resumed at 9:30 a.m.

A round table discussion was held regarding the following topics: request for technology support; inquiry into the contract completion report noting contract close out dates between 2019 and 2022; and challenges with Multi Factor Authenticator (MFA).

The Commission recessed at 9:39 a.m.

The Commission resumed at 9:45 a.m.

Craig Bressan, Senior Manager of Safety, provided the November Safety Report.

Sarah Sutton, Senior Business Systems Analyst – Enterprise Technology Quality Assurance, presented "Insufficient Sleep" safety training.

Aaron Kuntz, Senior Manager of EPMO, and Eric Hull, Project Manager, provided the EPMO report.

The Commission recessed at 11:07 a.m.

The Commission resumed at 11:17 a.m.

Jennifer Sager, Senior Manager of Accounting, and Angelina Johnson, Senior Manager of Treasury and Financial Planning, reviewed a proposed R&C Fund transfer.

Randi Hovland, Executive Services Coordinator, led a discussion regarding 2024 officers and trade association representation.

Trade association and committee reports were reviewed.

The Commission held a brief discussion regarding Grant's position on Lower Snake River Dam (LSRD) initiatives.

The Commission recessed at 11:45 a.m.

The Commission resumed at 12:00 p.m.

The Commission attended a lunch meeting with Grant County Commissioners.

Consent agenda motion was made Mr. Flint and seconded by Mrs. Wilson to approve the following consent agenda items:

Payment Number	137373	through	137859	\$54,351,820.95
Payroll Direct Deposit	227383	through	228166	\$2,547,710.85
Payroll Tax and Garnishments	20231115A	through	20231115B	\$1,067,898.18

Meeting minutes of November 14, 2023.

After consideration, the above consent agenda items were approved by unanimous vote of the Commission.

Resolution No. 9033 relative to accepting a bid and awarding a contract was presented to the Commission. Motion was made by Mr. Flint and seconded by Mrs. Wilson to approve Resolution No. 9033. After consideration, the motion passed by unanimous vote of the Commission.

RESOLUTION NO. 9033

A RESOLUTION ACCEPTING A BID AND AWARDING CONTRACT 130-12026H, FOR Dock Crew 2024-2025

Recitals

- 1. Bids were publicly opened on October 5, 2023 for Contract 130-12026H, for Dock Crew 2024-2025;
- 2. Bid proposals were received from the following suppliers/contractors and evaluated by Grant PUD's staff;

•	Palouse Power LLC	\$13,392,300.10
•	International Line Builders, Inc.	\$14,379,560.90
•	Potelco, Inc.	\$14,407,419.80
•	Henkles & McCoy, Inc.	\$15,386,175.40
•	Cannon Constructors LLC	\$15,594,707.90
•	Wilson Construction Company	\$17,829,717.00
•	Sturgeon Electric Company, Inc.	\$18,005,274.50

- 3. The low bid, submitted by Palouse Power LLC is both commercially and technically compliant with Grant PUD's contract requirements;
- 4. The bid is less than the Engineer's Estimate of \$17,438,535.77; and
- 5. Grant PUD's Senior Manager of Power Delivery Construction Maintenance and Chief Operating Officer concur with staff and recommend award to Palouse Power LLC as the lowest responsible and best bid based on Grant PUD's plan and specifications.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that the General Manager is authorized to enter into a contract, Contract 130-12026H, for Dock Crew 2024-2025 with Palouse Power LLC of Quincy, Washington in the amount of \$13,392,300.10 plus applicable sales tax, upon receipt of the required payment and performance bond in a manner satisfactory to Grant PUD's Counsel.

PASSED AND APPROVED by the Commission of Public Utility District No. 2 of Grant County, Washington, this 28th day of November 2023.

Motion was made by Mr. Flint and seconded by Mr. Pyle authorizing the General Manager/CEO, on behalf of Grant PUD, to execute Contract 430-12000 with Brazil Quality Services LTDA for approval of Professional Services in regards to the Priest Rapids Upgrades for a total not to exceed contract price of

\$6,600,000.00 with a contract completion date of December 31, 2030. After consideration, the motion passed by unanimous vote of the Commission.

Motion was made by Mr. Flint and seconded by Mrs. Wilson authorizing the General Manager/CEO, on behalf of Grant PUD, to execute Contract 430-11765 with Absher Construction + Integrus Architecture + Huitt-Zollars Design Build Team (DB Team) in an amount not to exceed \$3,999,891.00 to execute the Validation Period for the new Service Center (SC1) project, utilizing the Progressive Design-Build approach with an estimated contract completion by year-end 2027. After consideration, the motion passed by unanimous vote of the Commission.

The Commissioners reviewed future agenda items.

The Commission calendar was reviewed.

The Commission recessed at 1:23 p.m.

The Commission resumed at 1:30 p.m.

A Public Hearing was held to review the Clean Energy Information Act (CETA) / I937 Energy Efficiency Targets. No public comments were received.

A Financial Statement Suite was presented to the board with the following presenters presenting on specific topics:

- Jennifer Sager, Senior Manager of Accounting, reviewed the Finance/Business Services Quarterly Finance Report (QFR).
- Charles Meyer, Managing Director of Enterprise Technology, reviewed the Enterprise
 Technology Quarterly Finance Report (QFR) and the Enterprise Technology Capital Budget
 versus Actuals Report.
- Fallon Long, Managing Director of Integrated Operational Services, reviewed the Integrated Operational Services Quarterly Finance Report (QFR) and the Integrated Operational Services Capital Budget versus Actuals Report.
- Randi Hovland, Executive Services Coordinator/Clerk of the Board, reviewed the Executive Services Quarterly Finance Report (QFR).
- Chris Roseburg, Senior Manager of Operational Excellence, reviewed the Business Advancement Quarterly Finance Report (QFR).
- Chuck Allen, Senior Manager of External Affairs and Communications, reviewed Customer Services and Communications Quarterly Finance Report (QFR).
- Rich Flanigan, Senior Manager of Wholesale Marketing and Supply, reviewed the Customer/Market Analytics Quarterly Finance Report (QFR).
- Thomas Stredwick, Senior Manager of Employee Experience, reviewed the Employee Services Quarterly Finance Report (QFR).
- Jacob Johnson, Electric Shop Supervisor, reviewed the Fiber Quarterly Finance Report (QFR) and the Wholesale Fiber Capital Budget versus Actuals Report.
- Ron Alexander, Managing Director of Power Delivery, reviewed the Power Delivery
 Quarterly Finance Report (QFR) and the Power Delivery Capital Budget versus Actuals
 Report.
- Ben Pearson, Senior Manager of Hydro Generation, reviewed the Power Production
 Quarterly Finance Report (QFR) and the Power Production Capital Budget versus Actuals
 report.

Jennifer Sager, Senior Manager of Accounting; Angelina Johnson, Senior Manager of Treasury and Financial Planning; and Bryndon Ecklund, Lead Financial Analyst; reviewed the Financial Reports.

The Commission recessed at 3:15

The Commission resumed at 3:20 p.m.

An executive session was announced at 3:20 p.m. to last until 3:50 p.m. to review performance of a public employee with legal counsel present pursuant to RCW 42.30.110(1)(g) and to discuss pending litigation with legal counsel present pursuant to RCW 42.30.110(1)(i). The executive session concluded at 3:50 p.m. and the regular session resumed.

There being no further business to d 3:50 p.m.	iscuss, the November 28 meeting officially adjourned at
	Nelson Cox, President
ATTEST:	
Terry Pyle, Secretary	Tom Flint, Vice President
Larry Schaapman, Commissioner	Judy Wilson, Commissioner

A RESOLUTION APPOINTING A REPRESENTATIVE AND ALTERNATES TO THE BOARD OF DIRECTORS OF THE CENTRAL WASHINGTON POWER AGENCY

BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that Commissioner Larry Schaapman is hereby appointed as representative of Grant PUD to the Board of Directors of the Central Washington Power Agency, effective January 1, 2024 and will serve until his successor is appointed.

BE IT FURTHER RESOLVED that Commissioners Terry Pyle, Nelson Cox, Judy Wilson and Tom Flint are appointed as alternate representatives to said Board to serve in the absence or disability of Commissioner Schaapman.

BE IT FURTHER RESOLVED that the above named representative and alternates shall serve until a successor or successors have been appointed by resolution adopted by the Commission; and, provided further, that the members of the Commission may from time to time, by resolution, appoint other members of the Board as representative or alternate in the place and stead of those above named.

	Nelson Cox, President
ATTEST:	
Terry Pyle, Secretary	Tom Flint, Vice President
	 Larry Schaapman, Commissioner

A RESOLUTION APPOINTING A REPRESENTATIVE AND ALTERNATES TO THE BOARD OF DIRECTORS OF ENERGY NORTHWEST

BE IT RESOLVED by the Commission of the Public Utility District No. 2 of Grant County, Washington, that Commissioner Tom Flint is hereby appointed as the representative of Grant PUD to the Board of Directors of Energy Northwest, effective January 1, 2024 and will serve until his successor is appointed.

BE IT FURTHER RESOLVED that Commissioners Nelson Cox, Judy Wilson, Terry Pyle and Larry Schaapman are appointed as alternate representatives to said Board of Directors to serve in the absence or disability of Commissioner Flint.

BE IT FURTHER RESOLVED that the above named representative and alternates shall serve until a successor or successors have been appointed by resolution adopted by the Commission; and, provided further, that the members of the Commission may from time to time, by resolution, appoint other members of the Board as representative or alternate in the place and stead of those above named.

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

A RESOLUTION APPOINTING A REPRESENTATIVE AND ALTERNATES TO THE BOARD OF DIRECTORS OF THE WASHINGTON PUBLIC UTILITY DISTRICTS' ASSOCIATION

BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that Commissioner Terry Pyle is hereby appointed as representative of Grant PUD to the Board of Directors of the Washington Public Utility Districts' Association, effective January 1, 2024, and will serve until his successor is appointed.

BE IT FURTHER RESOLVED that Commissioners Nelson Cox, Tom Flint, Larry Schaapman and Judy Wilson are hereby appointed as alternate representatives to said Board of Directors to serve in the absence or disability of Commissioner Pyle. Other Commissioners will not be precluded.

BE IT FURTHER RESOLVED that the above-named representative and alternates shall serve until a successor or successors have been appointed by resolution adopted by the Commission.

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

REGULAR AGENDA

A RESOLUTION ESTABLISHING THE PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY, WASHINGTON 10-YEAR CONSERVATION POTENTIAL PLAN AND TWO-YEAR CONSERVATION TARGET PURSUANT TO RCW CHAPTER 19.285

Recitals

- 1. Public Utility District No. 2 of Grant County, Washington ("Grant PUD") is subject to RCW Chapter 19.285, the Energy Independence Act (EIA) and also known as Initiative 937;
- 2. EIA requires Grant PUD to set targets for energy conservation and use of eligible renewable resources by identifying achievable cost-effective conservation potential through 2033;
- 3. Beginning January 1, 2024, Grant PUD must begin acquiring all conservation that is cost effective, reliable, and feasible to meet our EIA compliance target;
- 4. The 2024 ten-year conservation potential plan and two-year conservation target has been reviewed and updated;
- 5. It is in Grant PUD's best interest to adopt a ten-year conservation potential plan and two-year conservation target;
- 6. Every two years Grant PUD must review and update its ten-year conservation potential plan, establish a biennial acquisition target, and meet that target during the subsequent two-year period; and
- 7. A legal advertisement will be published in local newspapers notifying customers of noticed public hearing to be held on November 28, 2023 regarding Grant PUD's efforts to establish the ten-year conservation potential plan and two-year conservation target.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that:

<u>Section 1</u>. Grant PUD has established the ten-year conservation potential plan of 163,374 MWH and two-year conservation target of 33,376 MWH.

Section 2. Grant PUD's biennial target is its pro rata share of its ten-year conservation potential plan.

Section 3. Grant PUD is acquiring all conservation that is cost-effective, reliable, and feasible.

Section 4. Grant PUD reviewed the plan and target as set forth in RCW 19.285.

ATTEST:	President	
Secretary	Vice President	
Commissioner	Commissioner	

MEMORANDUM November 28, 2023

TO: Richard Wallen, General Manager/Chief Executive Officer

VIA:

Ty Ehrman, Chief Customer Officer F/C Cary West, Senior Manager of Customer Solutions CSW

Christopher Buchmann, Customer Solutions Program Supervisor CGOKFROM:

2024-2025 Energy Independence Act (EIA) Conservation Potential and Biennial Target SUBJECT:

Purpose: To seek approval from the Commission of Grant PUD's 2024-2033 ten-year conservation potential and biennial target per the requirements of the Energy Independence Act (AKA EIA or "I-937") as contained in RCW 19.285 and WAC 194-34.

Discussion: Grant PUD is required per the provisions of the EIA to develop a ten-year conservation potential and a biennial conservation target every two years. These are to be provided to the Commission in a public hearing after which the Commission may approve them. On November 28th, 2023, the Commission will hold a public hearing to review the ten-year conservation potential and biennial target. Grant PUD staff contracted with EES Consulting to prepare a Utility Specific Analysis ("USA") to assist staff efforts to determine Grant PUD's conservation potential. From this potential Grant PUD's biennial conservation target is determined. The tables below show the 2024-2033 ten-year potential and 2024-2025 biennial target prepared in 2023 compared to those prepared in 2015, 2017, 2019, and 2021.

Potential and Target Comparisons

	Ten Year Potential	Two year/Biennial Target
Prepared in 2015	175,550 MWH	27,418 MWH
Prepared in 2017	195,523 MWH	32,149 MWH
Prepared in 2019	218,562 MWH	35,828 MWH
Prepared in 2021	161,272 MWH	40,033 MWH
Prepared in 2023	163,374 MWH	33,376 MWH

The 2-year Biennial target has decreased from the 2021 Conservation Potential Assessment (CPA), largely due to the uncertainty of data center projects. The assessment shows a high data center potential in 2024 and then ramping down due to uncertainty in data center savings. Potential in other sectors has decreased compared with the previous CPA due to increased efficiency baselines, program participation, and updated ramp rates that reflect Grant PUD's historic program achievement.

The table below shows the future Cost Effective Potential for Grant PUD. Note the quantities shown below are cumulative, not annual aMW potential.

Cost-Effective Potential (aMW)				
	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

OTHER LEGISLATIVE CONSIDERATIONS: Washington state enacted several laws that impact conservation planning. Washington HB 1444 enacts efficiency standards for a variety of appliances. Washington also enacted a clean energy law, SB 5116, commonly referred to as the Clean Energy Transformation Act (CETA). CETA (2019) requires the use of specific values for avoided greenhouse gas emissions. The study follows the CETA requirements to value energy efficiency savings at the prescribed value established by the Department of Ecology. Finally, CETA requires all retail sales of electricity be greenhouse gas neutral by 2030 and greenhouse gas free by 2045. This provision has been incorporated into the assumptions of the CPA. Specifically, this impacts the avoided cost of conservation, as described in detail in the CPA report.

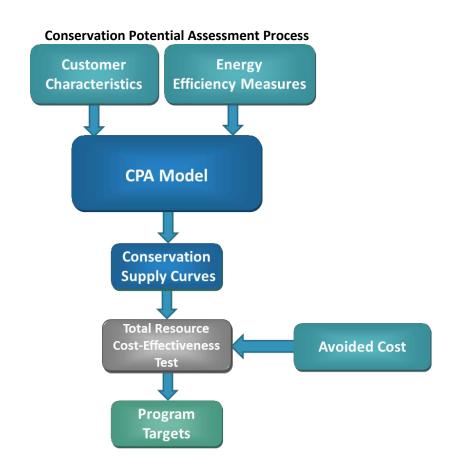
STUDY UNCERTAINTIES: The savings estimates presented in the study are subject to the uncertainties associated with the input data. The study utilized the best available data at the time of its development; however, the results of future studies will change as the planning environment evolves. Specific areas of uncertainty include the following:

- **Customer Characteristic Data** Residential and commercial building data and appliance saturations are in many cases based on regional studies and surveys. There are uncertainties related to the extent that Grant PUD's service area is similar to that of the region, or that the regional survey data represents the population.
- Measure Data In particular, savings and cost estimates (when comparing to current market conditions), as prepared by the Northwest Power and Conservation Council (Council) and the Regional Technical Forum (RTF), will vary across the region. In some cases, measure applicability or other attributes have been estimated by the Council or the RTF based on professional judgment or limited market research.
- Market Price Forecasts Market prices (and forecasts) are continually changing. The market
 price forecasts for electricity and natural gas utilized in this analysis represent a snapshot in
 time. Given a different snapshot in time, the results of the analysis would vary. However,
 different avoided cost scenarios are included in the analysis to consider the sensitivity of the
 results to fluctuating market prices over the study period.
- **Utility System Assumptions** Credits have been included in this analysis to account for the avoided costs of transmission and distribution system expansion. Though potential transmission and distribution system cost savings are dependent on local conditions, the Council considers these credits to be representative estimates of these avoided costs. A value for generation capacity was also included but may change as the Northwest market continues to evolve.
- **Discount Rate** The Council develops a real discount rate as well as a finance rate for each power plan. The finance rate is based on the relative share of the cost of conservation and the cost of capital for the various program sponsors. The Council has estimated these figures using the most current available information. This study reflects the current borrowing market although changes in borrowing rates will likely vary over the study period.

- Forecasted Load and Customer Growth The CPA bases the 20-year potential estimates on forecasted loads and customer growth provided by the utility. These forecasts include a level of uncertainty especially considering the recovery from COVID related load impacts.
- Load Shape Data The Council provides conservation load shapes for evaluating the timing of energy savings. In practice, load shapes will vary by utility based on weather, customer types, and other factors. The assessment uses the hourly load shapes used in the Seventh Plan to estimate peak demand savings over the planning period, based on shaped energy savings. Since the load shapes are a mix of older Northwest and California data, peak demand savings presented in this report may vary from actual peak demand savings.
- Frozen Efficiency Consistent with the Council's methodology, the measure baseline efficiency levels and end-using devices do not change over the planning period. In addition, it is assumed that once an energy efficiency measure is installed, it will remain in place over the remainder of the study period.

Due to these uncertainties and the changing environment, under the EIA, qualifying utilities must update their CPAs every two years to reflect the best available information.

BASIC MODELING METHODOLOGY: The basic methodology used for the assessment is illustrated below. A key factor is the kilowatt hours saved annually from the installation of an individual energy efficiency measure. The savings from each measure is multiplied by the total number of measures that could be installed over the life of the program. Savings from each individual measure are then aggregated to produce the total potential.



CUSTOMER CHARACTERISTIC DATA: Assessment of customer characteristics includes estimating both the number of locations where a measure could be feasibly installed as well as the share—or saturation—of measures that have already been installed. For the analysis, the characterization of our baseline was determined using our historical data, the Northwest Energy Efficiency Alliance's (NEEA) commercial and residential building stock assessments, and census data. Details of data sources and assumptions are described for each sector in greater detail in the full report.

The assessment primarily sourced baseline measure saturation data from the Council's Seventh Plan measure workbooks. The Council's data was developed from NEEA's Building Stock Assessments, studies, market research and other sources. This data was updated with NEEA's 2016 Residential Building Stock Assessment and Grant PUD's historic conservation achievement data, where applicable.

AVOIDED COST: Each component of the avoided cost of energy efficiency measure savings is described below. Additional information regarding the avoided cost forecast is included in the full report, in Appendix IV.

Energy: The avoided cost of energy is the cost avoided through the acquisition of energy efficiency in lieu of other resources. Avoided costs are used to value energy savings benefits when conducting cost effectiveness tests and are included in the numerator in a benefit-cost test. The avoided costs typically include energy-based values (\$/MWh) and values associated with the demand savings (\$/kW) provided by energy efficiency. These energy benefits are often based on the cost of a generating resource, a forecast of market prices, or the avoided resource identified in the IRP process.

Social Cost of Carbon: The social cost of carbon is a cost society incurs when fossil fuels are burned to generate electricity. Both the EIA rules and CETA requires CPAs include the social cost of carbon when evaluating cost effectiveness using the total resource cost test (TRC). CETA further specifies the social cost of carbon values to be used in conservation and demand response studies. These values are shown in the table below and were the same values used in the 2023 CPA.

Social Cost of Carbon Values

Year in Which Emissions Occur	Social Cost of Carbon Dioxide	Social Cost of Carbon Dioxide
or Are Avoided	(in 2018dollars per metric ton)	(in 2023 dollars per metric ton)
2020	\$74	\$80
2025	\$81	\$88
2030	\$87	\$94
2035	\$93	\$101
2040	\$100	\$108

According to WAC 194-40-110, values may be adjusted for any taxes, fees or costs incurred by utilities to meet portfolio mandates. For example, the social cost of carbon is the full value of carbon emissions which includes the cost to utilities and ratepayers associated with moving to non-emitting resources. Rather than adjust the social cost of carbon for the cost of Renewable Energy Credits (RECs) or renewable energy, the values for RECS and renewable energy are excluded from the analysis to avoid double counting.

The emissions intensity of the marginal resource (market) is used to determine the \$/MWh value for the social cost of carbon. Ecology states that unspecified resources should be given a carbon intensity value

of 0.437 metric tons of CO2e/MWh of electricity (0.874 lbs/kWh). This is an average annual value applied to in all months in the conservation potential model. The resulting levelized cost of carbon is \$34/MWh over the 20-year study.

Transmission and Distribution System: The EIA requires that deferred capacity expansion benefits for transmission and distribution systems be included in the assessment of cost effectiveness. To account for the value of deferred transmission and distribution system expansion, a distribution system credit value of \$8.53/kW-year and a transmission system credit of \$3.83/kw-year were applied to peak savings from conservation measures, at the time of the regional transmission and Grant PUD's local distribution system peaks (adjusted to 2023 dollars). These values were developed by Council staff in preparation for the 2021 Power Plan.

Generation Capacity: Grant PUD used the PowerSIMM modeling platform to develop the 2022 Integrated Resource Plan (IRP) that looks at projected growth in the county's demand for electricity, requirements of the state's Clean Energy Transformation Act, renewable portfolio standards, the risk of low-water flows in the Columbia River, changing power markets, adequacy of power resources, how power would be delivered and the least-expensive, robust solution.

The modeling, given all those variables, shows that by 2025, the utility will need to bring in additional power resources to meet customers' needs. When that happens, the IRP model recommended that additional power resources the utility should consider include solar, solar hybrid (solar coupled with batter storage), wind and power generated by natural gas.

Risk: With the generation capacity value explicitly defined, the Council's analysis found a risk credit did not need to be defined as part of its cost-effectiveness test. In the CPA, risk was modeled by varying the base case input assumptions. In doing so, the CPA addresses the uncertainty of the inputs and looks at the sensitivity of the results. The avoided cost components that were varied included the energy prices and generation capacity value. Through the variance of these components, implied risk credits of up to \$11/MWh and \$39/kW-year were included in the avoided cost. Note the capacity value of energy efficiency measures is associated with more uncertainty compared with the energy value. Because of the upcoming implementation of the energy imbalance market (EIM) in the Pacific Northwest, and increased renewables in the region, capacity values are expected to be more volatile compared with energy market prices.

Additional information regarding the avoided cost forecast and risk mitigation credit values is included in the full report in Appendix IV.

Power Planning Act Credit: Finally, a 10% benefit was added to the avoided cost as required by the Pacific Northwest Electric Power Planning and Conservation Act.

Grant PUD plans to continue to invest in energy efficiency by offering incentives to all sectors. The results of the CPA will help Energy Services structure energy efficiency program offerings, establish appropriate incentive levels, comply with the EIA and CETA requirements and provide continued energy efficiency as a customer service.

<u>Justification:</u> Grant PUD staff have worked with EES Consulting to identify, by the start of our next biennium, January 1, 2024, cost effective conservation as prescribed by the EIA. The analysis performed

by EES Consulting is similar in scope to analysis's they have done with other utilities in the State with details and numbers unique to Grant PUD.

While carbon-emitting natural gas power carries a penalty that would be imposed by the state, limited amounts of it when every other generating resource is inadequate could still prove to be a viable option. **Financial Consideration:** Energy Services has worked with Wholesale Marketing Supply Department, within the scope of the EIA rules to identify Grant PUD's cost effective conservation. This analysis limits Grant PUD's exposure to the penalties outlined in the EIA.

Recommendation: We recommend the Commission approve, after the public hearing, the proposed 10-year conservation potential and biennial conservation target. A Resolution is provided for that purpose.

<u>Legal Review</u>: See attached e-mail.

Grant County Public Utility District

Conservation Potential Assessment: 2024-2043
Draft Report

October 24, 2023





October 24, 2023

Mr. Chris Buchmann Grant County Public Utility District P.O. Box 1519 Moses Lake, WA 98837

SUBJECT: 2023 Conservation Potential Assessment – Draft Report

Dear Mr. Buchmann:

Please find attached the draft report summarizing the 2023 Grant County Public Utility District Conservation Potential Assessment (CPA). This report covers the 20-year time period from 2024 through 2043.

The 2-year potential has decreased from the 2021 CPA, largely due to increased efficiency baselines, program participation, and lower avoided costs. The resulting potential estimated for the 2024-2025 biennium is 3.81 aMW.

Very truly yours,

Amber Gschwend

Managing Director, EES Consulting

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1 Executive Summary

This report describes the methodology and results of the 2023 Conservation Potential Assessment (CPA) Grant County Public Utility District (the District). This assessment provides estimates of energy savings by sector for the period 2024 to 2043. The assessment considers a wide range of conservation resources that are reliable, available, and cost-effective within the 20-year planning period.

1.1 BACKGROUND

The District provides electricity service to over 46,900 customers located in Grant County, Washington. Over half of the District's load requirements are for serving commercial and industrial customers. The District has completed conservation potential assessments every two years since the Energy Independence Act (EIA) was effective in 2010. The EIA requires that utilities with more than 25,000 customers (known as qualifying utilities) pursue all cost-effective conservation resources and meet conservation targets set using a utility-specific conservation potential assessment methodology.

Washington's Energy Independence Act (EIA), effective January 1, 2010, requires that utilities with more than 25,000 customers (known as qualifying utilities) pursue all cost-effective conservation resources and meet conservation targets set using a utility-specific conservation potential assessment methodology.

The EIA sets forth specific requirements for setting, pursuing, and reporting on conservation targets. The methodology used in this assessment complies with RCW 19.285.040 and WAC 194-37-070 Section 5 parts (a) through (d) and is consistent with the methodology used by the Northwest Power and Conservation Council (Council) in developing the 2021 Power Plan. Thus, this Conservation Potential Assessment will support the District's compliance with EIA requirements.

This assessment was built on the technical workbooks developed for the Final 2021 Power Plan. The primary model assumptions included the following changes since the previous study:

- Avoided Costs
 - Recent forecast of power market prices prepared by the Council in April 2023
 - Avoided generation capacity value updated with recent wholesale rates
- Updated Customer Characteristics Data
 - Residential home counts
 - Commercial floor area based on recent load growth
 - Industrial sector consumption based on recent load growth
- Measure Updates
 - Measure savings, costs, and lifetimes were updated based on the latest data available the 2021 Power Plan supply curves
- Accounting for Recent Achievements
 - Internal programs
 - NEEA programs

The first step of this assessment was to carefully define and update the planning assumptions using the new data. The Base Case conditions were defined as the most likely market conditions over the planning

horizon, and the conservation potential was estimated based on these assumptions. Additional scenarios were also developed to test a range of conditions.

1.2 RESULTS

Table 1-1 shows the high-level results of this assessment, the cost-effective potential by sector in 2, 6, 10, and 20-year increments. The total 20-year energy efficiency potential is 29.23 aMW. The most important numbers per EIA are the 10-year potential of 18.64 aMW, and the two-year potential of 3.81 aMW. These numbers are also illustrated in Figure 1-1 below.

These estimates include energy efficiency achieved through the District's own utility programs and through its share of the Northwest Energy Efficiency Alliance (NEEA) accomplishments. Some of the potential may be achieved through code and standards changes, especially in later years. In some cases, the savings from those changes will be quantified by NEEA or through BPA's Momentum Savings work.

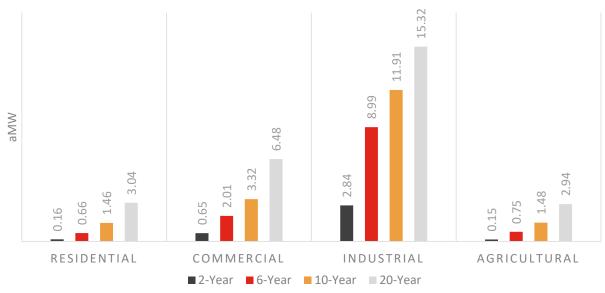
TABLE 1-1: COST-EFFECTIVE POTENTIAL (aMW)

2-Year 6-Year 10-

	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

Note: Numbers in this table and others throughout the report may not add to total due to rounding.

FIGURE 1-1: COST-EFFECTIVE ENERGY EFFICIENCY POTENTIAL ESTIMATE



Energy efficiency also has the potential to reduce peak demands. Estimates of peak demand savings are calculated for each measure using the Council's ProCost tool, which uses hourly load profiles developed for the 2021 Power Plan and a District-specific definition of when peak demand occurs. These unit-level estimates are then aggregated across sectors and years in the same way that energy efficiency measure

savings potential is calculated. The reductions in peak demand provided by energy efficiency are summarized in Table 1-2 below.

The savings from most energy efficiency measures are concentrated in those periods when energy is being used, and not evenly throughout the day. Thus, the peak demand reduction, measured in MW, is greater than the annual average energy savings. The District's annual peak occurs most frequently on summer evenings, between 4 and 6 PM. In addition to these peak demand savings, demand savings would occur in varying amounts throughout the year.

TABLE 1-2: COST-EFFECTIVE DEMAND SAVINGS (MW)

	2-Year	4-Year	10-Year	20-Year
Residential	0.52	2.10	4.83	10.69
Commercial	0.50	1.53	2.51	4.78
Industrial	2.86	9.06	12.02	15.48
Agricultural	0.01	0.12	0.40	0.70
Total	3.89	12.82	19.77	31.66

The 20-year energy efficiency potential is shown on an annual basis in Figure 1-2. This assessment shows potential starting around 3.2 aMW in 2024 and ramping down over the period due to uncertainty in data center savings. In the other sectors, potential also gradually decreases after 2024 as the remaining retrofit measure opportunities diminish over time.

3.5 3.0 Cost-Effective aMW 2.5 2.0 1.5 1.0 0.5 2024 2026 2028 2030 2032 2034 2036 2038 2040 2042 Commercial ■ Industrial ■ Distribution Efficiency Residential Agricultural

FIGURE 1-2: 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. While the District has historically relied on data center projects in meeting its targets, future savings potential is uncertain. The estimates for 2026 and beyond are based on average historic values that decline over the 20-year period. Future savings will depend significantly on future load growth, which

is inherently impacted by multiple factors and uncertainties. The District will continue to update this study in future reporting periods with the best available information.

The second largest share of conservation is available in the District's commercial sector. The potential in the commercial sector is higher compared with the potential estimated in the 2021 CPA. The District has also achieved significant savings in lighting measures in recent years, leaving limited remaining savings. Savings in the commercial sector are spread across numerous end uses, but the primary areas for opportunity are in the HVAC end use. Notable measures in this area include:

- Residential Sized and Commercial-Sized Heat Pump Water Heaters
- Heat Recovery Ventilation
- Chillers and AC
- Commercial Lighting
- Refrigeration

Only 15% of the potential is in the residential sector. The largest contributing measure categories for residential applications include water heating and HVAC. Measures with notable potential in this end use include:

- Smart Thermostat
- Low Flow Shower Heads Efficiency 1.5 gallons per minute (gpm) or better
- Faucet Aerators
- Water Heater Circulator Controls and Circulators
- Air Source Heat Pump

This study identified lower potential in the industrial sector relative to the 2021 CPA due mostly to customer participation in energy efficiency programs.

1.3 COMPARISON TO PREVIOUS ASSESSMENT

Table 1-3 shows a comparison of the 2, 10, and 20-year Base Case conservation potential by customer sector for this assessment and the results of the District's 2021 CPA.

TABLE 1-3: COMPARISON OF 2021 CPA AND 2023 CPA COST-EFFECTIVE POTENTIAL

	2-Year			10-Year			20-Year		
			%			%			%
	2021	2023	Change	2021	2023	Change	2021	2023	Change
Residential	0.13	0.16	27%	2.57	1.46	-43%	7.01	3.04	-57%
Commercial	0.43	0.65	52%	6.63	3.32	-50%	20.68	6.48	-69%
Industrial	3.98	2.84	-29%	8.71	11.91	37%	18.13	15.32	-15%
Agricultural	0.02	0.15	651%	0.50	1.48	195%	1.33	2.94	121%
Total	4.56	3.81	-16%	18.41	18.65	1%	47.15	29.23	-38%

^{*}Note that the 2021 columns refer to the CPA completed in 2021 for the time period of 2022 through 2041. The 2023 assessment is for the timeframe: 2024 through 2043.

The change in conservation potential estimated since the 2021 study is the result of several changes to the input assumptions, including measure data and avoided cost assumptions. Additionally, new measures

were added to the assessment and ramp rates were adjusted to account for program maturity, lingering COVID impacts, and 2021 Power Plan assumptions. A detailed analysis is provided in the Results section of this study.

1.3.1 Measure Data

Measure data was updated to include the Final 2021 Power Plan supply curve data.

1.3.2 Avoided Cost

An updated forecast of market prices was used to value energy savings. This forecast is lower than the forecast used in the 2021 assessment. Other avoided cost assumptions remained largely the same.

1.3.3 Customer Characteristics

No changes were made from the last CPA. However, growth in usage and number of customers was accounted for in the base year assumptions.

1.4 TARGETS AND ACHIEVEMENT

Figure 1-3 compares the District's historic achievement with its targets. The estimated potential for 2024 and 2025 is based on the Base Case scenario presented in this report and represents approximately an 16% reduction over the 2022-23 biennium. A decrease was expected based on higher efficiency baselines since the 2021 Power Plan was finalized plus the lower value of energy based on the Council's 2023 market price forecast. The figure below also shows that the District has consistently met its biennial energy efficiency targets, and that the potential estimates presented in this report are achievable through the District's various programs and the District's share of NEEA savings.

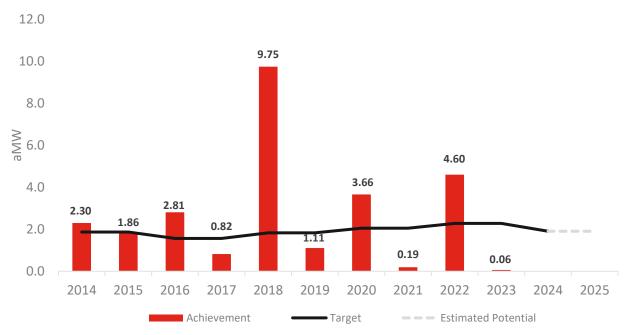


FIGURE 1-3: HISTORIC ACHIEVEMENT AND TARGETS

1.5 CONCLUSION

This report summarizes the CPA conducted for the District for the 2024 to 2043 timeframe. Many components of the CPA are updated from previous CPA models including items such as energy market price forecast, code and standard changes, recent conservation achievements, revised savings values and ramp rates for RTF and Council measures, and multiple scenario analyses.

The near-term results of this assessment are lower than the previous assessment, primarily due to the large amount of efficiency already achieved both regionally and by the District and the updated efficient baselines resulting from building codes and the 2021 Power Plan baselines. The results show a total 10-year cost- effective potential of 18.64 aMW and a two-year potential of 3.81 aMW for the 2024-25 biennium, which is an 16% decrease from the target for the previous biennium. This decrease is due primarily to reduced cost-effectiveness for some measures, program achievements, and updated program ramp rates that account slower adoption post COVID-19.

2 Introduction

2.1 OBJECTIVES

The objective of this report is to describe the results of the Grant Public Utility District (the District) 2023 Electric Conservation Potential Assessment (CPA). This assessment provides estimates of energy savings by sector for the period 2023 to 2044, with the primary focus on the initial 10 years. This analysis has been conducted in a manner consistent with requirements set forth in RCW 19.285 (EIA) and 194-37 WAC (EIA implementation) and Washington Clean Energy Transformation Act (CETA) and is part of the District's compliance documentation. The results and guidance presented in this report will also assist the District in strategic planning for its conservation programs. Finally, the resulting conservation supply curves can be used in the District's Integrated Resource Plan (IRP).

The conservation measures used in this analysis are based on the measures that were included in the Council's 2021 Power Plan. The assessment considered a wide range of conservation resources that are reliable, available, and cost effective within the 20-year planning period.

2.2 ELECTRIC UTILITY RESOURCE PLAN REQUIREMENTS

According to Chapter RCW 19.280, utilities with at least 25,000 retail customers are required to develop IRPs by September 2008 and biennially thereafter. The legislation mandates that these resource plans include assessments of commercially available conservation and efficiency measures. This CPA is designed to assist in meeting these requirements for conservation analyses. The results of this CPA may be used in the next IRP due to the state by September 2024. More background information is provided below.

2.3 ENERGY INDEPENDENCE ACT

Chapter RCW 19.285, the Energy Independence Act, requires that, "each qualifying utility pursue all available conservation that is cost-effective, reliable and feasible." The timeline for requirements of the Energy Independence Act is detailed below:

- By January 1, 2010 Identify achievable cost-effective conservation potential through 2019 using methodologies consistent with the Pacific Northwest Power and Conservation Council's (Council) latest power planning document.
- Beginning January 2010, each utility shall establish a biennial acquisition target for cost-effective conservation that is no lower than the utility's pro rata share for the two-year period of the cost-effective conservation potential for the subsequent ten years.
- On or before June 1, 2012, each utility shall submit an annual conservation report to the department (the Department of Commerce or its successor). The report shall document the utility's progress in meeting the targets established in RCW 19.285.040.
- Beginning on January 1, 2014, cost-effective conservation achieved by a qualifying utility in excess of its biennial acquisition target may be used to help meet the immediately subsequent two biennial acquisition targets, such that no more than twenty percent of any biennial target may be met with excess conservation savings.

Beginning January 1, 2014, a qualifying utility may use conservation savings in excess of its biennial target from a single large facility to meet up to an additional five percent of the immediately subsequent two biennial acquisition targets.¹

This report summarizes the preliminary results of a comprehensive CPA conducted following the requirements of the EIA and additions made by the passage of CETA. A checklist of how this analysis meets EIA requirements is included in Appendix III.

2.4 OTHER LEGISLATIVE CONSIDERATIONS

Washington state enacted several laws that impact conservation planning. Washington HB 1444 enacts efficiency standards for a variety of appliances. Washington also enacted a clean energy law, SB 5116. CETA (2019) requires the use of specific values for avoided greenhouse gas emissions. This study follows the CETA requirements to value energy efficiency savings at the prescribed value established by the Department of Ecology. Finally, CETA requires that all sales of electricity be greenhouse gas neutral by 2030 and greenhouse gas free by 2045. This provision has been incorporated into the assumptions of this CPA. Specifically, this impacts the avoided cost of conservation, as described in Appendix IV.

2.5 STUDY UNCERTAINTIES

The savings estimates presented in this study are subject to the uncertainties associated with the input data. This study utilized the best available data at the time of its development; however, the results of future studies will change as the planning environment evolves. Specific areas of uncertainty include the following:

- Customer Characteristic Data Residential and commercial building data and appliance saturations are in many cases based on regional studies and surveys. There are uncertainties related to the extent that the District's service area is similar to that of the region, or that the regional survey data represents the population.
- Measure Data In particular, savings and cost estimates (when comparing to current market conditions), as prepared by the Council and RTF, will vary across the region. In some cases, measure applicability or other attributes have been estimated by the Council or the RTF based on professional judgment or limited market research.
- Market Price Forecasts Market prices (and forecasts) are continually changing. The market price forecasts for electricity and natural gas utilized in this analysis represent a snapshot in time. Given a different snapshot in time, the results of the analysis would vary. However, different avoided cost scenarios are included in the analysis to consider the sensitivity of the results to fluctuating market prices over the study period.
- Utility System Assumptions Credits have been included in this analysis to account for the avoided costs of transmission and distribution system expansion. Though potential transmission and distribution system cost savings are dependent on local conditions, the Council considers these credits

¹ The EIA requires that the savings must be cost-effective and achieved within a single biennial period at a facility whose average annual load before conservation exceeded 5 aMW. In addition, the law requires that no more than 25% of a biennial target may be met with excess conservation savings, inclusive of provisions listed in this section.

to be representative estimates of these avoided costs. A value for generation capacity was also included but may change as the Northwest market continues to evolve.

- Discount Rate The Council develops a real discount rate as well as a finance rate for each power plan. The finance rate is based on the relative share of the cost of conservation and the cost of capital for the various program sponsors. The Council has estimated these figures using the most current available information. This study reflects the current borrowing market although changes in borrowing rates will likely vary over the study period.
- Forecasted Load and Customer Growth The CPA bases the 20-year potential estimates on forecasted loads and customer growth provided by the utility. These forecasts include a level of uncertainty especially considering the recovery from COVID related load impacts.
- Load Shape Data The Council provides conservation load shapes for evaluating the timing of energy savings. In practice, load shapes will vary by utility based on weather, customer types, and other factors. This assessment uses the hourly load shapes used in the 2021 Plan to estimate peak demand savings over the planning period, based on shaped energy savings. Since the load shapes are a mix of older Northwest and California data, peak demand savings presented in this report may vary from actual peak demand savings.
- Frozen Efficiency Consistent with the Council's methodology, the measure baseline efficiency levels and end-using devices do not change over the planning period. In addition, it is assumed that once an energy efficiency measure is installed, it will remain in place over the remainder of the study period.

Due to these uncertainties and the changing environment, under the EIA, qualifying utilities must update their CPAs every two years to reflect the best available information.

2.6 COVID IMPACTS

Impacts from COVID-19 have been incorporated into this study in various ways such as:

- Load levels have largely recovered since the 2020 pandemic. The baseline load and customer counts reflect current and future usage levels.
- Ramp rates, in some cases, were adjusted due to the slowdown of program uptake since the pandemic began. At first, projects were stopped due to concerns over spreading the virus. In addition to the lower participation rates, supply chain issues have delayed many projects. Largely, the 2021 Power Plan draft ramp rates were applied for each measure; however, some measure ramp rates were slowed to reflect recent achievements despite the District's efforts to promote programs.

The above considerations have been modeled in this study.

2.7 REPORT ORGANIZATION

The report is organized with the following main sections:

- Methodology CPA methodology along with some of the overarching assumptions
- Recent Conservation Achievement The District's recent achievements and current energy efficiency programs
- Customer Characteristics Housing and commercial building data for updating the baseline conditions
- Results Energy Savings and Costs Primary base case results
- Scenario Results Results of all scenarios
- Summary
- References & Appendices

3 CPA Methodology

This study is a comprehensive assessment of the energy efficiency potential in the District's service area. The methodology complies with RCW 19.285.040 and WAC 194-37-070 Section 5 parts (a) through (d) and is consistent with the methodology used by the Northwest Power and Conservation Council (Council) in developing the 2021 Power Plan. This section provides a broad overview of the methodology used to develop the District's conservation potential target. Specific assumptions and methodology as they pertain to compliance with the EIA and CETA are provided in Appendix III of this report.

3.1 BASIC MODELING METHODOLOGY

The basic methodology used for this assessment is illustrated in Figure 3-1. A key factor is the kilowatt hours saved annually from the installation of an individual energy efficiency measure. The savings from each measure are multiplied by the total number of measures that could be installed over the life of the program. Savings from each individual measure are then aggregated to produce the total potential.

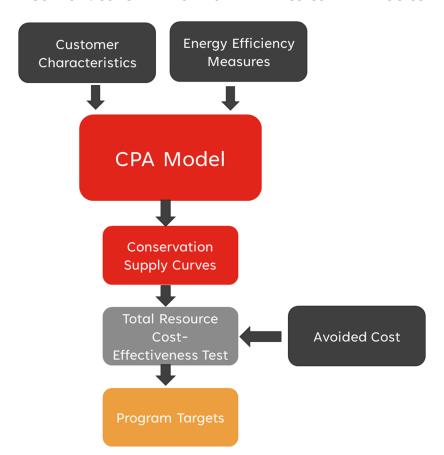


FIGURE 3-1: CONSERVATION POTENTIAL ASSESSMENT PROCESS

3.2 CUSTOMER CHARACTERISTIC DATA

Assessment of customer characteristics includes estimating both the number of locations where a measure could be feasibly installed as well as the share—or saturation—of measures that have already been installed. For this analysis, the characterization of the District's baseline was determined using data

provided by the District, NEEA's commercial and residential building stock assessments, and census data. Details of data sources and assumptions are described for each sector later in the report.

This assessment primarily sourced baseline measure saturation data from the Council's 2021 Plan measure workbooks. The Council's data was developed from NEEA's Building Stock Assessments, studies, market research and other sources. This data was updated with NEEA's 2016 Residential Building Stock Assessment and the District's historic conservation achievement data, where applicable. The District's historic achievement is discussed in detail in the next section.

3.3 ENERGY EFFICIENCY MEASURE DATA

The characterization of efficiency measures includes measure savings, costs, and lifetime. Other features, such as measure load shape, operation and maintenance costs, and non-energy benefits are also important for measure definition. The Council's 2021 Power Plan is the primary source for conservation measure data.

The measure data includes adjustments from raw savings data for several factors. The effects of space-heating interaction, for example, are included for all lighting and appliance measures, where appropriate. For example, if an electrically heated house is retrofitted with efficient lighting, the heat that was originally provided by the inefficient lighting will have to be made up by the electric heating system. These interaction factors are included in measure savings data to produce net energy savings. Other financial-related data needed for defining measure costs and benefits include discount rate, line losses, and deferred capacity-expansion benefits.

A list of measures by end-use is included in Appendix VI.

3.4 TYPES OF POTENTIAL

Once the customer characteristics and energy efficiency measures are fully described, energy efficiency potential can be quantified. Three types of potential are used in this study: technical, achievable, and economic or cost-effective potential. Technical potential is the theoretical maximum efficiency available in the service territory if cost and market barriers are not considered. Market barriers and other consumer acceptance constraints reduce the total potential savings of an energy efficient measure. When these factors are applied, the remaining potential is called the achievable potential. Economic potential is a subset of the achievable potential that has been screened for cost effectiveness through a benefit-cost test. Figure 3-2 illustrates the four types of potential followed by more detailed explanations.



FIGURE 3-2: TYPES OF ENERGY EFFICIENCY POTENTIAL²

Technical – Technical potential is the amount of energy efficiency potential that is available, regardless of cost or other technological or market constraints, such as customer willingness to adopt a given measure. It represents the theoretical maximum amount of energy efficiency that is possible in a utility's service territory absent these constraints.

Estimating the technical potential begins with determining a value for the energy efficiency measure savings. Additionally, the number of applicable units must be estimated. Applicable units are the units across a service territory where the measure could feasibly be installed. This includes accounting for units that may have already been installed. The value is highly dependent on the measure and the housing stock. For example, a heat pump measure may only be applicable to single family homes with electric space heating equipment. A saturation factor accounts for measures that have already been completed.

In addition, technical potential considers the interaction and stacking effects of measures. For example, interaction occurs when a home installs energy efficient lighting and the demands on the heating system rise due to a reduction in heat emitted by the lights. If a home installs both insulation and a high-efficiency heat pump, the total savings of these stacked measures is less than if each measure were installed individually because the demands on the heating system are lower in a well-insulated home. Interaction is addressed by accounting for impacts on other energy uses. Stacked measures within the same end use are often addressed by considering the savings of each measure as if it were installed after other measures that impact the same end use.

The total technical potential is often significantly more than the amount of achievable and economic potential. The difference between technical potential and achievable potential is a result of the number

² Reproduced from U.S. Environmental Protection Agency. *Guide to Resource Planning with Energy Efficiency*. Figure 2-1, November 2007.

of measures assumed to be affected by market barriers. Economic potential is further limited due to the number of measures in the achievable potential that are not cost-effective.

Achievable Technical — Achievable technical potential, also referred to as achievable potential, is the amount of potential that can be achieved with a given set of market conditions. It takes into account many of the realistic barriers to adopting energy efficiency measures. These barriers include market availability of technology, consumer acceptance, non-measure costs, and the practical limitations of ramping up a program over time. The level of achievable potential can increase or decrease depending on the given incentive level of the measure. In the Seventh Power Plan, the Council assumes that 85% of technical potential can be achieved over the 20-year study period. This is a consequence of a pilot program offered in Hood River, Oregon where home weatherization measures were offered at no cost. The pilot was able to reach over 90% of homes. These assumptions will be updated in the next study based on a measure-by-measure analysis of maximum achievability rates as finalized in the forthcoming 2021 Power Plan. The Council also uses a variety of ramp rates to estimate the rate of achievement over time. This CPA follows the Council's methodology, including both the achievability and ramp rate assumptions.

Economic – Economic potential is the amount of potential that passes an economic benefit-cost test. In Washington State, EIA requirements stipulate that the total resource cost test (TRC) be used to determine economic potential. The TRC evaluates all costs and benefits of the measure regardless of who pays the cost or receives the benefit. Costs and benefits include the following: capital cost, O&M cost over the life of the measure, disposal costs, program administration costs, environmental benefits, distribution and transmission benefits, energy savings benefits, economic effects, and non-energy savings benefits. Non-energy costs and benefits can be difficult to enumerate, yet non-energy costs are quantified where feasible and realistic. Examples of non-quantifiable benefits might include added comfort and reduced road noise from better insulation or increased real estate value from new windows. A quantifiable non-energy benefit might include reduced detergent costs or reduced water and sewer charges from energy efficient clothes washers.

For this potential assessment, the Council's ProCost model was used to determine cost effectiveness for each energy efficiency measure. The ProCost model values measure energy savings by time of day using conservation load shapes (by end-use) and segmented energy prices. The version of ProCost used in the 2021 CPA evaluates measure savings on an hourly basis, but ultimately values the energy savings during two segments covering high and low load hour time periods.

3.5 AVOIDED COST

Each component of the avoided cost of energy efficiency measure savings is described below. Additional information regarding the avoided cost forecast is included in Appendix IV.

3.5.1 Energy

The avoided cost of energy is the cost that is avoided through the acquisition of energy efficiency in lieu of other resources. Avoided costs are used to value energy savings benefits when conducting cost effectiveness tests and are included in the numerator in a benefit-cost test. The avoided costs typically include energy-based values (\$/MWh) and values associated with the demand savings (\$/kW) provided by energy efficiency. These energy benefits are often based on the cost of a generating resource, a forecast of market prices, or the avoided resource identified in the IRP process.

3.5.2 Social Cost of Carbon

The social cost of carbon is a cost that society incurs when fossil fuels are burned to generate electricity. Both the EIA rules and CETA require that CPAs include the social cost of carbon when evaluating cost effectiveness using the total resource cost test (TRC). CETA further specifies the social cost of carbon values to be used in conservation and demand response studies. These values are shown in Table 3-1 below and were the same value used in the 2023 CPA.

TABLE 3-1: SOCIAL COST OF CARBON VALUES³

Year in Which Emissions Occur or Are Avoided	Social Cost of Carbon Dioxide \$2018/metric ton	Social Cost of Carbon Dioxide \$2023/short ton ¹
2020	\$74	\$80
2025	\$81	\$88
2030	\$87	\$94
2035	\$93	\$101
2040	\$100	\$108

^{*}ProCost model inputs for \$/CO2 are in short tons. In the modeling, 2023 dollars are converted to \$2016 to be consistent with the 2021 Power Plan measure data.

According to WAC 194-40-110, values may be adjusted for any taxes, fees or costs incurred by utilities to meet portfolio mandates.⁴ For example, the social cost of carbon is the full value of carbon emissions which includes the cost to utilities and ratepayers associated with moving to non-emitting resources. Rather than adjust the social cost of carbon for the cost of RECs or renewable energy, the values for RECS and renewable energy are excluded from the analysis to avoid double counting.

The emissions intensity of the marginal resource (market) is used to determine the \$/MWh value for the social cost of carbon. Ecology states that unspecified resources should be given a carbon intensity value of 0.437 metric tons of CO₂e/MWh of electricity (0.874 lbs/kWh).⁵ This is an average annual value applied to in all months in the conservation potential model.⁶ The resulting levelized cost of carbon is \$34/MWh over the 20-year study.

³ WAC 194-40-100. Available at :https://apps.leg.wa.gov/wAc/default.aspx?cite=194-40-100&pdf=true.

⁴ WAC 194-40-110 (b).

⁵ WAC 173-444-040 (4).

⁶ The seasonal nature of carbon intensity is not modeled due to the prescriptive annual value established by Ecology in WAC 173-444-040.

3.5.3 Renewable Portfolio Standard Cost

Renewable energy purchases need to meet both RPS and CETA and can be avoided through conservation. Utilities may meet Washington RPS through either bundled energy purchases such as purchasing the output of a wind resource where the non-energy attributes remain with the output, or they may purchase unbundled RECs. As stated above, the value of avoided renewable energy credit purchases resulting from energy efficiency is accounted for within the social cost of carbon construct. The social cost of carbon already considers the cost of moving from an emitting resource to a non-emitting resource. Therefore, it is not necessary to include an additional value for renewable energy purchases prior to 2045 when all energy must be non-emitting or renewable.

Beginning in 2045, the social cost of carbon may no longer be an appropriate adder in resource planning. However, prior to 2045 utilities may still use offsets to meet CETA requirements. Since the study period of this evaluation ends prior to 2045, the avoided social cost of carbon is included in each year. For future studies that extend to 2045 and beyond, it would be appropriate to include renewable energy or non-emitting resource costs as the avoided cost of energy rather than market plus the social cost of carbon.

3.5.4 Transmission and Distribution System

The EIA requires that deferred capacity expansion benefits for transmission and distribution systems be included in the assessment of cost effectiveness. To account for the value of deferred transmission and distribution system expansion, a distribution system credit value of \$8.53/kW-year and a transmission system credit of \$3.83/kw-year were applied to peak savings from conservation measures, at the time of the regional transmission and the District's local distribution system peaks (adjusted to \$2023). These values were developed by Council staff in preparation for the 2021 Power Plan.⁷

3.5.5 Generation Capacity

Beginning in October 2023, the District will be a load following customer of BPA. As a load following customer, the District's avoided cost of capacity is built into BPA's preference rates. BPA demand rates are escalated 3% each rate period (every two years). Over the 20-year analysis period, the resulting cost of avoided capacity is \$104/kW-year (2023\$) in levelized terms.

In the Council's 2021 Power Plan,⁸ a generation capacity value of \$143/kW-year was explicitly calculated (\$2023). This value is used in the high scenario.

⁷ Northwest Power and Conservation Council Memorandum to the Power Committee Members. Subject; Updated Transmission & Distribution Deferral Value for the 2021 Power Plan. March 5, 2019. Available at: https://www.nwcouncil.org/sites/default/files/2019_0312_p3.pdf.

⁸ https://www.nwcouncil.org/energy/powerplan/7/home/.

3.5.6 Risk

With the generation capacity value explicitly defined, the Council's analysis found that a risk credit did not need to be defined as part of its cost-effectiveness test. In this CPA, risk was modeled by varying the base case input assumptions. In doing so, this CPA addresses the uncertainty of the inputs and looks at the sensitivity of the results. The avoided cost components that were varied included the energy prices and generation capacity value. Through the variance of these components, implied risk credits of up to \$11/MWh and \$39/kW-year were included in the avoided cost. Note that the capacity value of energy efficiency measures is associated with more uncertainty compared with the energy value. Because of the upcoming implementation of the energy imbalance market (EIM) in the Pacific Northwest, and increased renewables in the region, capacity values are expected to be more volatile compared with energy market prices.

Additional information regarding the avoided cost forecast and risk mitigation credit values is included in Appendix IV.

3.5.7 Power Planning Act Credit

Finally, a 10% benefit was added to the avoided cost as required by the Pacific Northwest Electric Power Planning and Conservation Act.

3.6 DISCOUNT AND FINANCE RATE

The Council develops a real discount rate for each of its Power Plans. In preparation for the 2021 Power Plan, the Council proposed using a discount rate of 3.75%. This discount rate was used in this CPA. The discount rate is used to convert future costs and benefits into present values. The present values are then used to compare net benefits across measures that realize costs and benefits at different times and over different useful lives.

4 Recent Conservation Achievement

The District has pursued conservation and energy efficiency resources for many years. Currently, the utility offers a variety of programs for residential, commercial, industrial, and agricultural customers. These include residential weatherization, Energy Star® appliance rebates, new construction programs for commercial customers, and energy-efficiency audits. In addition to utility programs, the District receives credit for market-transformation activities that are accomplished by the Northwest Energy Efficiency Alliance (NEEA) in its service territory.

Figure 4-1 shows the distribution of conservation among the District's customer sectors and through Northwest Energy Efficiency Alliance (NEEA) efforts over the past five years. NEEA's work helps bring energy efficient emerging technologies, like ductless heat pumps and heat pump water heaters to the Northwest markets. Note that savings achievement for 2020 were lower than historic achievements primarily due to the COVID-19 pandemic. Economic factors and risk for COVID-19 transmission both likely contributed to fewer measures being implemented in the District's service area. More detail of these savings is provided below for each sector.

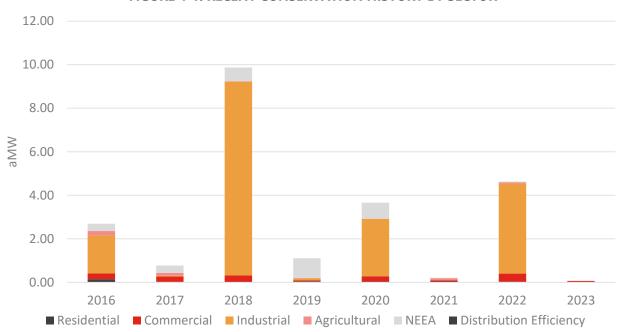


FIGURE 4-1: RECENT CONSERVATION HISTORY BY SECTOR

4.1 RESIDENTIAL

Figure 4-2 shows historic conservation achievement by end use in the residential sector. Savings from HVAC and lighting measures account for most of the savings. Note that in the figure below, HVAC includes weatherization measures. The "Other" category includes energy star appliances and consumer electronics.

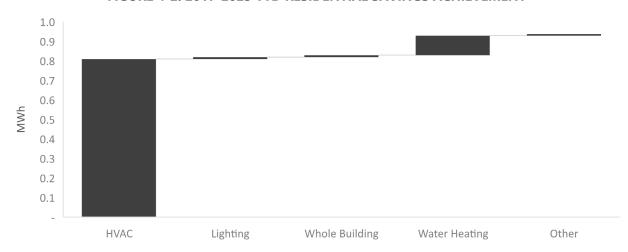


FIGURE 4-2: 2017-2023 YTD RESIDENTIAL SAVINGS ACHIEVEMENT

4.2 COMMERCIAL & INDUSTRIAL

Historic achievement in the commercial and industrial sectors is primarily due to lighting, Strategic Energy Management, and custom HVAC projects. Figures 4-3 and 4-4 show the breakdown of commercial and industrial savings, respectively, from 2017 to 2023 year to date.

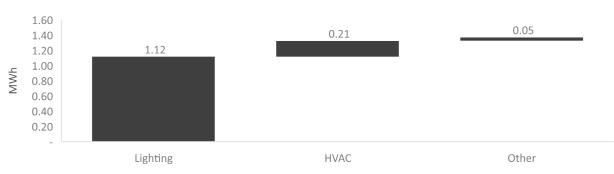
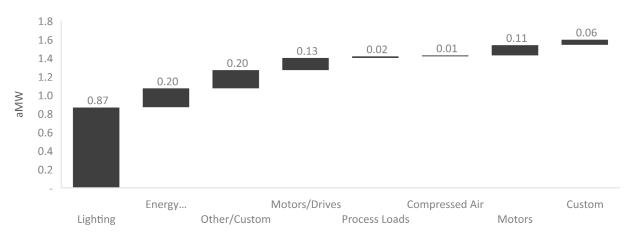


FIGURE 4-3: 2017-2023 YTD COMMERCIAL SAVINGS





4.3 AGRICULTURE

Agriculture program achievement has been acquired through irrigation hardware and other system upgrades, such as variable frequency drives. Achievement from 2016-2023 in this sector totals 0.55 aMW.

4.4 CURRENT CONSERVATION PROGRAMS

The District offers a wide range of conservation programs to its customers. These programs include many types of deemed conservation rebates, energy audits, net metering, and custom projects. The current programs offered by the District are detailed below.

4.4.1 Residential

- Weatherization This program provides rebates for both windows and insulation.
- HVAC Rebates This program provides rebates for a variety of space conditioning upgrades including rebates for HVAC upgrades and conversions.

4.4.2 Commercial and Industrial

- Lighting Energy Efficiency Program (LEEP) Owners of commercial buildings can apply for a lighting energy audit. Applicable rebate amounts are determined upon completion of the audit.
- Custom Projects Rebates The District offers rebates for special projects that improve efficiency or
 process related systems including, but not limited to, compressed air, variable frequency drives,
 industrial lighting interactive with HVAC systems, and refrigeration. Rebates for this program vary.

4.4.3 Agriculture

 Agricultural Rebate Program – This program offers incentives for irrigation sprinklers, nozzles, and regulators as well as replacement.

4.5 SUMMARY

The District plans to continue to invest in energy efficiency by offering incentives to all sectors. The results of this CPA will help the District program managers to structure energy efficiency program offerings, establish appropriate incentive levels, comply with the EIA and CETA requirements and provide continued energy efficiency as a customer service.

5 Customer Characteristics Data

The District serves over 37,000 electric customers in Grant County PUD County, Washington, with a service area population of approximately 104,579. A key component of an energy efficiency assessment is to understand the characteristics of these customers—primarily the building and end-use characteristics. These characteristics for each customer class are described below.

5.1 RESIDENTIAL

For the residential sector, the key characteristics include house type, space heating fuel, and water heating fuel. Tables 5-1, 5-2, 5-3 and 5-4 show relevant residential data for single family, multi-family and manufactured homes in the District's service territory as analyzed in the 2019 CPA. Residential characteristics are based on data collected through home audits provided by Grant PUD. This data provides estimates of the current residential characteristics in Grant PUD's service territory and are utilized as the baseline in this study.

TABLE 5-1: RESIDENTIAL BUILDING CHARACTERISTICS

Heating Zone	Cooling Zone	Solar Zone	Residential Households	Total Population
1	3	3	41,956	104,579

TABLE 5-2: HOME HEATING & COOLING SYSTEM SATURATIONS

	Single Family	Multifamily - Low Rise	Manufactured
Electric Forced Air Furnace	25%	1%	85%
Heat Pump	35%	1%	15%
Ductless Heat Pump	1%	2%	0%
Electric Zonal/Baseboard	39%	96%	0%
Central Air Conditioning	48%	2%	11%
Room Air Conditioning	42%	35%	3%

TABLE 5-3: EXISTING HOMES – APPLIANCE SATURATIONS

	Single Family	Multifamily - Low Rise	Manufactured
DHW buffer	79%	77%	94%
Refrigerator	129%	103%	121%
Freezer	53%	4%	43%
Clothes Washer	99%	47%	99%
Clothes Dryer	98%	47%	95%
Dishwasher	89%	78%	77%
Microwave	96%	96%	96%
Electric Oven	49%	40%	56%
RAC	53%	35%	38%

TABLE 5-4: NEW HOMES – APPLIANCE SATURATIONS

	Single Family	Multifamily - Low Rise	Manufactured
DHW buffer	79%	77%	94%
Refrigerator	138%	104%	117%
Freezer	39%	0%	43%
Clothes Washer	96%	53%	100%
Clothes Dryer	91%	49%	100%
Dishwasher	84%	68%	84%
Microwave	96%	96%	96%
Electric Oven	49%	40%	56%
RAC	53%	35%	38%

5.2 COMMERCIAL

Building floor area is the key parameter in determining conservation potential for the commercial sector as many of the measures are based on savings as a function of building area. Generally, floor area additions are analyzed by reviewing kWh growth in a utility's service area. The District provided floor area estimates for new buildings constructed since 2021. This data is added to the 2022 floor area estimate from the previous assessment.

The 2018 data was developed by coding each general service customer based on the Commercial Building Stock Assessment (CBSA)⁹ building definitions. The appropriate EUI is then applied to the sum of kWh for each building type resulting in estimated square feet. Table 5-5 compares the 2022 estimates with the 2024 estimates. After 2024, a 1% growth rate is applied to commercial building floor area growth.

⁹ Navigant Consulting. 2014. *Northwest Commercial Building Stock Assessment: Final Report.* Portland, OR: Northwest Energy Efficiency Alliance.

TABLE 5-5: COMMERCIAL BUILDING SQUARE FOOTAGE BY SEGMENT

Segment	2022 Floor Area Estimate	2024 Floor Area Estimate
Large Office	22,128	22,128
Medium Office	777,053	777,053
Small Office	1,035,713	1,066,031
Extra Large Retail Space	-	730,992
Large Retail	956,650	225,658
Medium Retail	773,412	807,090
Small Retail	1,723,534	1,787,953
School (K-12)	4,019,941	4,019,941
University	883,927	883,927
Warehouse	23,158,268	23,646,652
Supermarket	348,008	348,008
Mini Mart	203,509	204,169
Restaurant	467,747	475,984
Lodging	2,137,264	2,147,396
Hospital	632,421	639,477
Residential Care	42,059	42,059
Assembly	1,434,465	1,434,465
Other Commercial	5,640,209	5,652,806
Total	44,256,309	44,911,790

5.3 INDUSTRIAL

The methodology for estimating industrial potential is different than the approaches used for the residential and commercial sectors primarily because most energy efficiency opportunities are unique to specific industrial segments. The Council and this study use a "top-down" methodology that utilizes annual consumption by industrial segment and then disaggregates total usage by end-use shares. Estimated measure savings are applied to each sector's end-use shares.

The 2020 usage for industrial customers was updated by applying historic and forecast growth rates from the District's load forecast. Overall, industrial load growth is projected to increase by 1.8% from 2020 to 2024. Individual industrial customer usage is summed by industrial segment in Table 5-6. Data Center loads are shown separately.

TABLE 5-6: INDUSTRIAL SECTOR LOAD BY SEGMENT, MWH

Industry	2020 Loads	2024 Forecast
Paper	16,587	16,954
Foundries	42,202	43,137
Frozen Food	229,975	235,073
Other Food	76,313	78,004
Silicon	9,929	10,149
Metal Fabrication	-	-
Equipment/Transportation	21,741	22,223
Cold Storage	34,919	35,693
Fruit Storage	47,471	48,523
Refinery	70,956	72,529
Chemical	595,547	608,748
Miscellaneous Manufacturing	241,641	246,997
Total	1,387,280	1,418,029
Data Centers	1,531,597	2,260,080

5.4 AGRICULTURE

To determine agriculture sector characteristics in the District's service territory, EES utilized data provided by the United States Department of Agriculture (USDA) as shown in Table 5-7. The USDA conducts a census of farms and ranches in the U.S. every five years. The most recent available data for this analysis is from the 2017 census, which was published in 2019.

TABLE 5-7: AGRICULTURAL INPUTS

Dairy Production, 1,000 lbs	763,182
Total Irrigated Acreage	393,015
Total Number of Pumps	4,199
Total Number of Farms	1,635
Stock Tanks	711
Back-Up Generator	4

6 Results – Energy Savings and Costs

6.1 ACHIEVABLE CONSERVATION POTENTIAL

Achievable potential is the amount of energy efficiency potential that is available regardless of cost. Figure 6-1, below, shows a supply curve of 20-year achievable potential. A supply curve is developed by plotting cumulative energy efficiency savings potential (aMW) against the levelized cost (\$/MWh) of the savings when measures are sorted in order of ascending cost. The potential shown in Figure 6-1 has not been screened for cost-effectiveness. Costs are levelized, allowing for the comparison of measures with different lifetimes. The supply curve facilitates comparison of demand-side resources to supply-side resources and is often used in conjunction with integrated resource plans. Figure 6-1 shows that approximately 32 aMW of cumulative saving potential are available for less than \$50/MWh.

45 40 35 Cumulative aMW 30 25 20 15 -\$100 -\$50 \$0 \$50 \$100 \$150 \$200 Levelized Cost, \$/MWh

FIGURE 6-1: 20-YEAR ACHIEVEABLE POTENTIAL LEVELIZED COST SUPPLY CURVE, EXCLUDING DATA CENTERS

6.2 ECONOMIC CONSERVATION POTENTIAL

Economic or cost-effective potential is the amount of potential that passes the Total Resource Cost (TRC) test. This means that the present value of the benefits attributed to the conservation measure exceeds the present value of the measure costs over its lifetime.

Table 6-1 shows the economic potential by sector in 2, 6, 10 and 20-year increments. Compared with the technical and achievable potential, it shows that 15.6 aMW of the total 40 aMW is cost-effective for the District. The last section of this report discusses how these values could be used for setting targets.

TABLE 6-1: COST-EFFECTIVE ACHIEVABLE POTENTIAL – BASE CASE (aMW)

	2-Year	6-Year	10-Year	20-Year
Residential	0.16	0.66	1.46	3.04
Commercial	0.65	2.01	3.32	6.48
Industrial excluding Data Centers	0.21	0.63	0.99	1.69
Agricultural	0.15	0.75	1.48	2.94
Total	1.19	4.17	7.72	15.60

6.3 SECTOR SUMMARY

Figure 6-2 shows economic potential by sector on an annual basis. In this figure, estimated data center savings are shown separately from other industrial process potential.

3.5 3.0 Cost-Effective aMW 2.5 2.0 1.5 1.0 0.5 2024 2026 2028 2030 2032 2034 2036 2038 2040 2042 Residential Commercial Industrial ■ Distribution Efficiency ■ Agricultural

FIGURE 6-2: ANNUAL COST-EFFECTIVE POTENTIAL BY SECTOR

Second to data centers, the largest share of the potential is in the commercial sector followed by savings potential in the residential and agricultural sectors. Ramp rates from the 2021 Power Plan were used to establish reasonable conservation achievement levels. In some cases, alternate ramp rates were assigned to reflect the District's current rate of program achievement. Achievement levels are affected by factors including timing of equipment turnover and new construction, supply chain delays, economic factors, program and technology maturity, market trends, and current utility staffing and funding.

6.3.1 Residential

Near-term residential conservation potential is higher than what was identified in the 2019 assessment. Savings potential has been impacted by new measures added by the Council for the 2021 Power Plan, the avoided cost updates, and program achievement.

Within the residential sector, water heating and HVAC (including weatherization) measures make up the largest share of savings (Figure 6-3). This is due, in part, to the fact that the District's residential customers

rely mostly on electricity for space and water heating. Many weatherization measures are no longer costeffective due to changes in costs and in energy savings values. The large amount of potential for water heating is primarily due to 1.5 gpm or lower shower heads, efficient clothes washers, aerators, and heat pump water heaters.

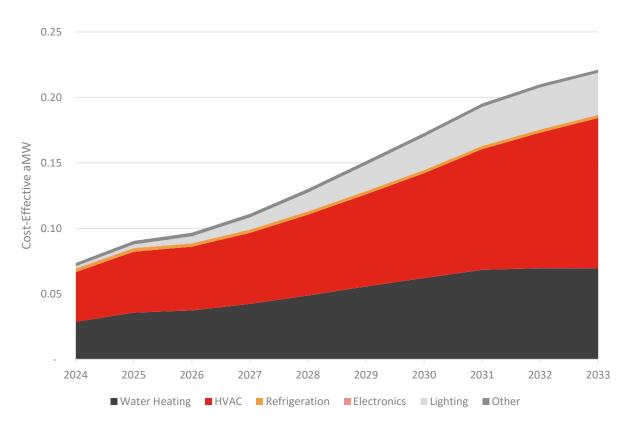


FIGURE 6-3: ANNUAL RESIDENTIAL COST-EFFECTIVE POTENTIAL BY END USE

Figure 6-4 shows how the 10-year residential potential breaks down into end uses and key measure categories. The area of each block represents its share of the total 10-year residential potential.

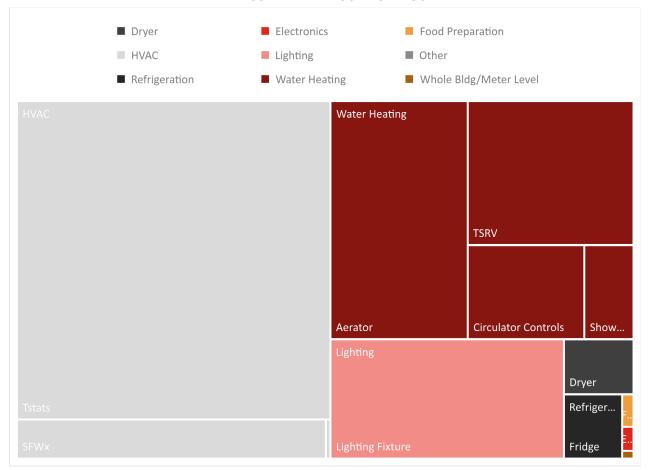


FIGURE 6-4: RESIDENTIAL COST-EFFECTIVE POTENTIAL BY END USE AND MEASURE CATEGORY

Table 6-2 compares how the savings potential has changed since the 2021 CPA. The primary drivers are reduced cost effectiveness as well as updated measure baselines.

TABLE 6-2: COMPARISON RESIDENTIAL 20-YEAR ECONOMIC ACHIEVABLE POTENTIAL, AMW

End Use	2021 CPA	2023 CPA	Discussion
Water Heating	3.63	0.97	Reduced cost-effectiveness
HVAC	1.64	1.68	Added measure permutations
Lighting	0.00	0.30	Reduced cost-effectiveness
Electronics	0.27	0.00	Updated computer measures, reduced cost-effectiveness
Food Preparation	0.00	0.00	Reduced cost-effectiveness
Dryer	0.00	0.04	Updated to 2021 Plan methodology/measures
Refrigeration	0.00	0.05	Updated saturation
Whole Bldg./Meter Level	0.00	0.00	Updated saturation/applicability, Reduced cost-effectiveness
Well Pumps	5.54	0.00	Well pumps not cost-effective
Total	3.63	3.04	

6.3.2 Commercial

The diverse nature of commercial building energy efficiency is reflected in the variety of end-uses and corresponding measures as shown in Figure 6-5. Beyond HVAC and lighting, additional sources of potential are available in water heating, electronics, motors, food preparation and process loads.

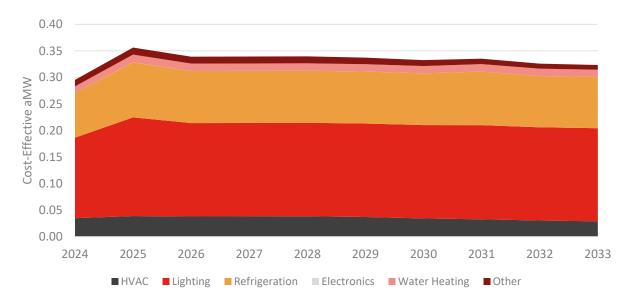


FIGURE 6-5: ANNUAL COMMERCIAL COST-EFFECTIVE POTENTIAL BY END USE

The key end uses and measures within the commercial sector are shown in Figure 6-6. The area of each block represents its share of the 10-year commercial potential.

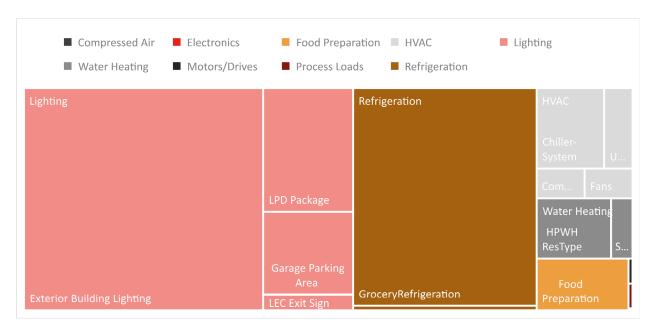


FIGURE 6-6: COMMERCIAL COST-EFFECTIVE POTENTIAL BY END USE AND MEASURE CATEGORY

Table 6-3 provides a summary of the differences between the 2021 assessment and this 2023 CPA by enduse.

End Use 2021 CPA 2023 CPA Discussion **Food Preparation** 0.18 Updated measure data/baselines 0.21 Lighting 3.33 3.50 Growth in floor area Updated measure data/baselines Electronics 0.00 0.00 Refrigeration 0.87 1.93 Reduced costs, added measures **Process Loads** 0.09 0.00 Not cost effective Compressed Air 0.26 0.00 Updated to 2021 Plan methodology/measures HVAC 0.58 Reduced cost-effectiveness, Adjusted applicability 1.56 Motors/Drives 0.00 Reduced cost-effectiveness, Added Commercial Clean Water 0.28 **Pumps** 0.34 0.27 Reduced cost-effectiveness; removed older water heating Water Heating measures, adjusted applicability based on building type **Total** 13.25 6.48

TABLE 6-3: COMPARISON COMMERCIAL 20-YEAR ECONOMIC ACHIEVABLE POTENTIAL, AMW

6.3.3 Industrial

6.3.3.1 Data Centers

Approximately 60% of the District's industrial loads are in data center and cryptocurrency processes. The Council does not provide measures or savings analysis for large, centralized data centers. Historically, the District's CPAs have utilized commercial sector server measures to estimate data center potential. Beginning in 2021, savings for data centers have been evaluated for new customers at the project level. This study continues this methodology by efficiency evaluation based on the District's loads and unique

nature of large data center operations. The bulleted list below from the 2021 study summarizes some of the issues identified in developing large data center energy efficiency potential estimates.

- Large data centers are often willing to work with the District at the time of new service to identify, measure, and verify energy efficiency improvements. Through its relationship with existing customers, the District has learned that existing loads are continually optimized without measurement and verification practices in place. Due to the unique nature of data center loads, customers are incentivized to choose the most efficient hardware when regular updates are made. Because these improvements are happening naturally and cannot be claimed through the State's audit process for compliance with targets, the potential for savings in existing data center loads is excluded from the target and future potential estimates.
- Historic data center project savings have been significant, saving up to 10% of new data center total load. However, this historic savings amount cannot be applied to future load growth estimates due to the nature of how energy use is evolving for large data centers. Specifically, historic savings have been achieved through cooling measures as data centers have been housed inside buildings requiring specific HVAC equipment. New data centers are typically housed in containers or other non-building structures removing a large portion of the HVAC savings potential.
- Data center measures are largely cost-effective from the utility and ratepayer perspectives. The
 analysis does not explicitly evaluate the benefits and costs form a TRC perspective. Rather, due to
 their low incremental costs compared with savings potential, it is assumed that the measures are
 cost-effective from a total resource cost perspective.
- The District plans to update the data center savings potential every two years for the purposes of defining an accurate 2-year savings target based on planned new loads. Scenario analysis provides a range of potential savings over the longer-term study period.

If the growth in data centers continues, and the District is able to reduce future baseline energy use by 9%, the District can expect approximately 13.6 aMW in data center savings over the 20-year study period. If future savings are not achieved at the same rate of 9% baseline usage, these savings estimates are reduced to 7.6 aMW (assuming 5% savings). Finally, it's expected that state energy codes will be updated in the near-term thereby eliminating future potential savings.

6.3.3.2 Other Industrial

The other 40% of the District's industrial load is composed primarily of food processing and chemical facilities. Lighting and HVAC measures comprise the majority of non-data center industrial potential (Figure 6-7). In Figure 6-7, the Other category is largely comprised of savings in refrigeration and fan systems, as well as smaller amounts of savings from compressed air and pump systems.



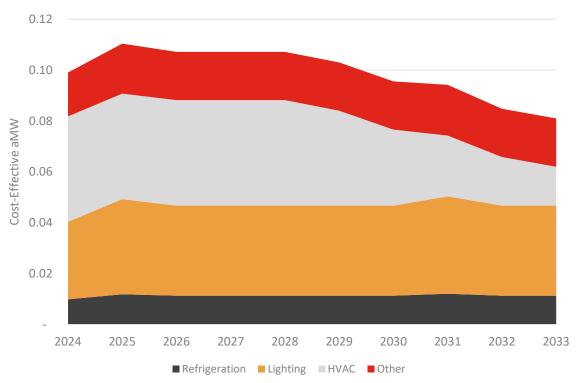
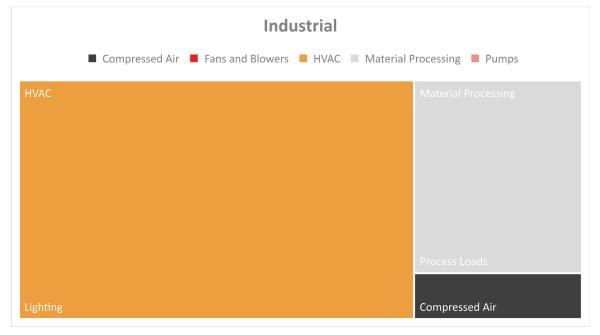


Figure 6-8 shows how the 10-year industrial potential breaks down by end use and measure categories.

FIGURE 6-8: INDUSTRIAL COST-EFFECTIVE POTENTIAL BY END USE AND MEASURE CATEGORY



The most impactful change in the industrial savings potential is the adjustment for recent program achievements. The District has completed over 1 aMW in energy efficiency projects since 2016. This is reflected in the updated results in the table below. Table 6-4 compares the potential estimated in this study to the 2021 assessment. The end use categories have been updated to align with the 2021 Plan Industrial Tool.

TABLE 6-4: COMPARISON INDUSTRIAL 20-YEAR ECONOMIC ACHIEVABLE POTENTIAL, AMW

End Use	2021 CPA	2023 CPA
Data Centers (2-year)	3.90	2.63
Compressed Air	0.43	0.05
Energy Project Management	1.70	NA
Fans	1.25	0.00
Food Processing	1.42	NA
Food Storage	1.74	NA
Hi-Tech	0.19	NA
Integrated Plant Energy Management	1.50	NA
Lighting	1.55	0.71
Material Handling	0.02	NA
Metals	0.01	NA
Municipal Sewage Treatment	0.26	NA
Paper	0.02	NA
Plant Energy Management	1.37	NA
Pumps	2.77	0.00
HVAC	NA	0.38
Low Temp Refrigeration	NA	0.20
Med Temp Refer	NA	0.02
All Electric	NA	0.00
Material Processing	NA	0.23
Material Handling	NA	0.10
Melting and Casting	NA	0.00
Other	NA	0.00
Total	14.26	4.32

6.3.4 Agriculture

Potential in agriculture is a product of total acres under irrigation in the District's service territory, number of pumps, and the number of farms. As shown in Figure 6-9, most of the cost-effective conservation potential is due to irrigation pump motors. There are some dairy farms in Grant County; however, most of the dairy efficiency measures were not cost-effective.

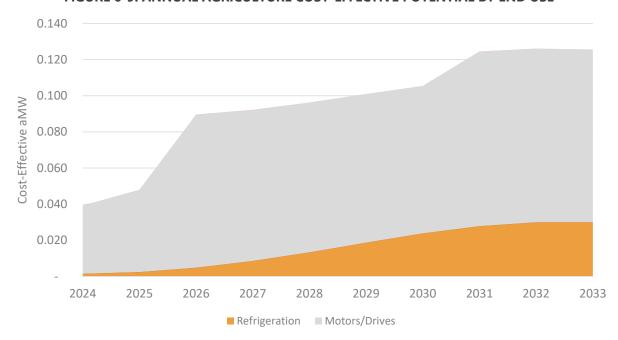


FIGURE 6-9: ANNUAL AGRICULTURE COST-EFFECTIVE POTENTIAL BY END USE

Table 6-5 compares the results of the 2021 CPA with this updated assessment.

TABLE 6-5: COMPARISON AGRICULTURAL 20-YEAR ECONOMIC ACHIEVABLE POTENTIAL, AMW

End Use	2021 CPA	2023 CPA	Discussion
Irrigation	1.03	0.00	Reduced cost-effectiveness for irrigation hardware
Lighting	0.09	0.00	Updated applicability
Dairy Efficiency/	0.04	0.28	New measures
Refrigeration			
HVAC	NA	0.00	New measures not cost-effective.
Motors/Drives	0.16	1.60	Updated irrigation pump measures
Process Loads	NA	0.001	Added energy free stock tanks
Total	1.33	1.85	

6.4 COST

Budget costs can be estimated at a high level based on the incremental cost of the measures (Table 6-6). The assumptions in this estimate include 20 percent of measure cost for administrative costs and 35 percent of the incremental measure costs is assumed to be paid by the utility as incentives. A 20 percent allocation of measure costs to administrative expenses is a standard assumption for conservation programs. This figure was used in the Council's 2021 Power Plan. The 35 percent utility-share of measure costs is used in all sectors except in the utility distribution efficiency category, where the District is likely to pay the entire cost of any measures implemented and no incentives will be paid. These assumptions are consistent with the District's previous CPA.

This chart shows that the District can expect to spend over \$3.4 million to realize estimated savings over the next two years including program administration costs. The bottom row of Table 6-6 shows the cost per MWh of first year savings.

TABLE 6-6: UTILITY PROGRAM COSTS (2023\$) EXCLUDING DATA CENTERS

	2-Year	6-Year	10-Year	20-Year
Residential	\$740,000	\$2,910,000	\$6,250,000	\$12,200,000
Commercial	\$1,730,000	\$5,310,000	\$8,760,000	\$16,980,000
Industrial	\$660,000	\$1,990,000	\$3,140,000	\$5,520,000
Agricultural	\$260,000	\$1,340,000	\$2,680,000	\$5,290,000
Total	\$3,430,000	\$11,970,000	\$22,510,000	\$45,130,000
\$/First Year MWh	\$330	\$328	\$333	\$330

The cost estimates presented in this report are conservative estimates for future expenditures since they are based on historic values. Future conservation achievement may be more costly than historic conservation achievement since utilities often choose to implement the lowest cost programs first. In addition, as energy efficiency markets become more saturated, it may require more effort from the District to acquire conservation through its programs. Although not included in the above estimates, residential Low-Income programs are also significantly more costly to implement due to rebates being paid at 3 to 5 times the level of non-low-income residential programs. The additional effort may result in increased administrative costs.

TABLE 6-7: TRC LEVELIZED COST (2023\$/MWH) EXCLUDING DATA CENTERS

	2-Year	4-Year	10-Year	20-Year
Residential	\$50	\$51	\$53	\$56
Commercial	\$31	\$31	\$30	\$30
Industrial	\$72	\$70	\$66	\$59
Agricultural	\$16	\$16	\$17	\$17
Total	\$35	\$34	\$33	\$32

7 Scenario Results

The costs and savings discussed throughout the report thus far describe the Base Case avoided cost scenario. Under this scenario, annual potential for the planning period was estimated by applying assumptions that reflect the District's expected avoided costs. In addition, the Council's 20-year ramp rates were applied to each measure and then adjusted to more closely reflect the District's recent level of achievement.

Additional scenarios were developed to identify a range of possible outcomes that account for uncertainties over the planning period. In addition to the Base Case scenario, this assessment tested low and high scenarios to test the sensitivity of the results to different future avoided cost values. The avoided cost values in the low and high scenarios reflect values that are realistic and lower or higher, respectively, than the Base Case assumptions.

To understand the sensitivity of the identified savings potential to avoided cost values alone, all other inputs were held constant while varying avoided cost inputs.

Table 7-1 summarizes the Base, Low, and High avoided cost input values. Relative to the values used in the 2019 CPA, many of the avoided cost assumptions have decreased including energy and capacity estimates. These changes reduced the 20-year potential estimate due to decreased cost-effectiveness; however, the adjusted ramp rates for the new time horizon increase the near-term potential slightly compared with the 2019 results.

Rather than using a single generic risk adder applied to each unit of energy, the Low and High avoided cost values consider lower and higher potential future values for each avoided cost input. These values reflect potential price risks based upon both the energy and capacity value of each measure. The final row tabulates the implied risk adders for the Low and High scenarios by summarizing all additions or subtractions relative to the Base Case values. Risk adders are provided in both energy and demand savings values. The first set of values is the maximum (or minimum in the case of negative values). The second set of risk adder values are the average values in energy terms. Further discussion of these values is provided in Appendix IV.

TABLE 7-1: AVOIDED COST ASSUMPTIONS BY SCENARIO, \$2023

	Base	Low	High
Energy	NWPCC April	10% Lower than	NWPCC April
	2023 Baseline	NWPCC April	2023 High
	Price Forecast	2023 Baseline	Westside Demand
		Price Forecast	
Social Cost of Carbon, \$/short ton	WAC 194-40-100	WAC 194-40-100	WAC 194-40-100
	\$34/MWh	\$34/MWh	\$34/MWh
Avoided Cost of RPS Compliance	Included in Social Cost of Carbon		
Distribution System Credit, \$/kW-yr	\$8.53	\$8.53	\$8.53
Transmission System Credit, \$/kW-yr	\$3.83	\$3.83	\$3.83
Deferred Generation Capacity Credit, \$/kW-yr	\$104	\$0	\$143.18
Implied Risk Adder, 20-year Levelized	N/A	Average:	Average:
\$/MWh		-\$1/MWh and	\$11/MWh and
\$/kW-yr		-\$104/kW-yr	\$39/kW-year

Table 7-2 summarizes results across each avoided input scenario, using Base Case load forecasts and measure acquisition rates.

TABLE 7-2: COST-EFFECTIVE POTENTIAL – AVOIDED COST SCENARIO COMPARISON

	2-Year	4-Year	10-Year	20-Year
Base Case	3.8	12.5	18.6	29.9
Low Scenario	3.7	12.6	18.8	30.2
High Scenario	4.3	14.0	21.4	35.0

Figure 7-1 compares the results of the scenario analysis with the base case form the 2021 assessment.

4.50 4.00 3.50 3.00 2.50 2.00 1.50 1.00 0.50 4 11 12 13 16 -2021 Study Base Case Base Case Low Scenario High Scenario

FIGURE 7-1: SCENARIO COMPARISON

In all cases, the 20-year economic achievable potential is lower compared with the 2021 study due to the factors described in this analysis including changes to the avoided cost, increased efficiency, and historic achievements.

8 Summary

This report summarizes the results of the 2021 CPA conducted for the District. The assessment provides estimates of energy savings by sector for the period 2024 to 2043 with a focus on the first 10 years of the planning period, as required by the EIA. The assessment considered a wide range of conservation resources that are reliable, available, and cost effective within the 20-year planning period.

The cost-effective potential identified in this report is a low cost and low risk resource and helps to keep future electricity costs to a minimum. Additionally, conservation achievements inherently provide capacity savings to the District. Relative to the values used in the 2021 CPA, many of the avoided cost assumptions have decreased including energy value estimates. These changes reduced the 20-year potential estimate due to decreased cost-effectiveness.

8.1 METHODOLOGY AND COMPLIANCE WITH STATE MANDATES

The energy efficiency potential reported in this document is calculated using methodology consistent with the Council's methodology for assessing conservation resources. Appendix III documents the development of conservation targets for each WAC 194-37-070 requirement and describes how each item was completed. Utility-specific data regarding customer characteristics, service-area composition, and historic conservation achievements were used, in conjunction with the measures identified by the Council, to determine available energy-efficiency potential. This close connection with the Council methodology enables compliance with the Washington EIA.

Three types of energy-efficiency potential were calculated: technical, achievable, and economic. Most of the results shown in this report are the economic potential, or the potential that is cost effective in the District's service territory. The economic and achievable potential considers savings that will be captured through utility program efforts, market transformation and implementation of codes and standards. Often, realization of full savings from a measure will require efforts across all three areas. Historic efforts to measure the savings from codes and standards have been limited, but regional efforts to identify and track savings are increasing as they become an important component of the efforts to meet aggressive regional conservation targets.

8.2 CONSERVATION TARGETS

The EIA states that utilities must establish a biennial target that is "no lower than the qualifying utility's pro rata share for that two-year period of its cost-effective conservation potential for the subsequent ten-year period."¹⁰ However, the State Auditor's Office has stated that:

The term pro-rata can be defined as equal portions but it can also be defined as a proportion of an "exactly calculable factor." For the purposes of the Energy

¹⁰ RCW 19.285.040 Energy conservation and renewable energy targets.

Independence Act, a pro-rata share could be interpreted as an even 20 percent of a utility's 10-year assessment but state law does not require an even 20 percent.¹¹

The State Auditor's Office expects that qualifying utilities have analysis to support targets that are more or less than the 20 percent of the ten-year assessments. This document serves as support for the target selected by the District and approved by its Commission.

8.3 SUMMARY

This study shows a range of conservation target scenarios. These scenarios are estimates based on the set of assumptions detailed in this report and supporting documentation and models. Due to the uncertainties discussed in the Introduction section of this report, actual available and cost-effective conservation may vary from the estimates provided in this report.

¹¹ State Auditor's Office. Energy Independence Act Criteria Analysis. Pro-Rata Definition. CA No. 2011-03. https://www.sao.wa.gov/local/Documents/CA_No_2011_03_pro-rata.pdf.

9 References

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Appendix I – Acronyms

ALH – Average Load Hours

aMW – Average Megawatt

BCR - Benefit-Cost Ratio

BPA – Bonneville Power Administration

CETA – Clean Energy Transformation Act

CPA – Conservation Potential Assessment

DVR - Demand voltage reduction

EIA – Energy Independence Act

ERWH - Electric Resistance Water Heater

EUI - Energy Use Intensity

GPM - Gallons per minute

HLH – Heavy load hour energy

HPWH - Heat Pump Water Heater

HVAC - Heating, ventilation and air-conditioning

IRP - Integrated Resource Plan

kW - kilowatt

kWh – kilowatt-hour

LED - Light-emitting diode

LLH – Light load hour energy

MW – Megawatt

MWh – Megawatt-hour

NEEA - Northwest Energy Efficiency Alliance

NPV - Net Present Value

O&M – Operation and Maintenance

RPS - Renewable Portfolio Standard

RTF - Regional Technical Forum

TRC – Total Resource Cost

UC – Utility Cost

Appendix II – Glossary

7th Power Plan: Seventh Northwest Conservation and Electric Power Plan, Feb 2016. A regional resource plan produced by the Northwest Power and Conservation Council (Council).

2021 Power Plan: A regional resource plan produced by the Northwest Power and Conservation Council (Council). At the time of this study, the Final plan is scheduled to be released in early 2022.

Average Megawatt (aMW): Average hourly usage of electricity, as measured in megawatts, across all hours of a given day, month or year.

Avoided Cost: Refers to the cost of the next best alternative. For conservation, avoided costs are usually market prices.

Achievable Potential: Conservation potential that takes into account how many measures will actually be implemented after considering market barriers. For lost-opportunity measures, there is only a certain number of expired units or new construction available in a specified time frame. The Council assumes 85% of all measures are achievable. Sometimes achievable potential is a share of economic potential, and sometimes achievable potential is defined as a share of technical potential.

Cost Effective: A conservation measure is cost effective if the present value of its benefits is greater than the present value of its costs. The primary test is the Total Resource Cost test (TRC), in other words, the present value of all benefits is equal to or greater than the present value of all costs. All benefits and costs for the utility and its customers are included, regardless of who pays the costs or receives the benefits.

Economic Potential: Conservation potential that considers the cost and benefits and passes a cost-effectiveness test.

Levelized Cost: Resource costs are compared on a levelized-cost basis. Levelized cost is a measure of resource costs over the lifetime of the resource. Evaluating costs with consideration of the resource life standardizes costs and allows for a straightforward comparison.

Lost Opportunity: Lost-opportunity measures are those that are only available at a specific time, such as new construction or equipment at the end of its life. Examples include heat-pump upgrades, appliances, or premium HVAC in commercial buildings.

MW (megawatt): 1,000 kilowatts of electricity. The generating capacity of utility plants is expressed in megawatts.

Non-Lost Opportunity: Measures that can be acquired at any time, such installing low-flow shower heads.

Northwest Energy Efficiency Alliance (NEEA): The alliance is a unique partnership among the Northwest region's utilities, with the mission to drive the development and adoption of energy-efficient products and services.

Northwest Power and Conservation Council "The Council": The Council develops and maintains a regional power plan and a fish and wildlife program to balance the Northwest's environment and energy needs. Their three tasks are to: develop a 20-year electric power plan that will guarantee adequate and reliable energy at the lowest economic and environmental cost to the Northwest; develop a program to protect and rebuild fish and wildlife populations affected by hydropower development in the Columbia River Basin; and educate and involve the public in the Council's decision-making processes.

Regional Technical Forum (RTF): The Regional Technical Forum (RTF) is an advisory committee established in 1999 to develop standards to verify and evaluate conservation savings. Members are appointed by the Council and include individuals experienced in conservation program planning, implementation and evaluation.

Renewable Portfolio Standards: Washington state utilities with more than 25,000 customers are required to meet defined percentages of their load with eligible renewable resources by 2012, 2016, and 2020.

Retrofit (discretionary): Retrofit measures are those that can be replaced at any time during the unit's life. Examples include lighting, shower heads, pre-rinse spray heads, or refrigerator decommissioning.

Technical Potential: Technical potential includes all conservation potential, regardless of cost or achievability. Technical potential is conservation that is technically feasible.

Total Resource Cost Test (TRC): This test is used by the Council and nationally to determine whether or not conservation measures are cost effective. A measure passes the TRC if the ratio of the present value of all benefits (no matter who receives them) to the present value of all costs (no matter who incurs them) is equal to or greater than one.

Appendix III – Documenting Conservation Targets

References:

- 1) Report "GCPUD Public Utilities 2023 Conservation Potential Assessment". Final Report October XX, 2023.
- 2) Model "EES CPA Model-v4.0.xlsm" and supporting files
 - a. MC_and_Loadshape-GCPUD-Base.xlsm referred to as "MC and Loadshape file" contains price and load shape data

	NWPCC Methodology	EES Consulting Procedure	Reference
a)	Technical Potential: Determine the amount of conservation that is technically feasible, considering measures and the number of these measures that could physically be installed or implemented, without regard to achievability or cost.	The model includes estimates for stock (e.g. number of homes, square feet of commercial floor area, industrial load) and the number of each measure that can be implemented per unit of stock. The technical potential is further constrained by the amount of stock that has already completed the measure.	Model – the technical potential is calculated as part of the achievable potential, described below.
b)	Achievable Potential: Determine the amount of the conservation technical potential that is available within the planning period, considering barriers to market penetration and the rate at which savings could be acquired.	The assessment conducted for the District used ramp rate curves to identify the amount of achievable potential for each measure. Those assumptions are for the 20-year planning period. An additional factors ranging from 85% to 95% were included to account for market barriers in the calculation of achievable potential. This factor comes from a study conducted in Hood River where home weatherization measures were offered for free and program administrators were able to reach more than 85% of home owners.	Model – the use of these factors can be found on the sector measure tabs, such as 'Residential Measures'. Additionally, the complete set of ramp rates used can be found on the 'Ramp Rates' tab.

	NWPCC Methodology	EES Consulting Procedure	Reference
c)	Potential: Establish the economic achievable potential, which is the conservation potential that is cost-effective, reliable, and feasible, by comparing the total resource cost of conservation measures to the cost of other resources available to meet expected demand for electricity and capacity.	Benefits and costs were evaluated using multiple inputs; benefit was then divided by cost. Measures achieving a benefit-cost ratio greater than one were tallied. These measures are considered achievable and costeffective (or economic).	Model – Benefit-Cost ratios are calculated at the individual level by ProCost and passed up to the model.
d)	Total Resource Cost: In determining economic achievable potential, perform a life-cycle cost analysis of measures or programs	The life-cycle cost analysis was performed using the Council's ProCost model. Incremental costs, savings, and lifetimes for each measure were the basis for this analysis. The Council and RTF assumptions were utilized.	Model – supporting files include all of the ProCost files used in the 2021 Power Plan. The life-cycle cost calculations and methods are identical to those used by the Council.
e)	Conduct a total resource cost analysis that assesses all costs and all benefits of conservation measures regardless of who pays the costs or receives the benefits	Cost analysis was conducted per the Council's methodology. Capital cost, administrative cost, annual O&M cost and periodic replacement costs were all considered on the cost side. Energy, non-energy, O&M and all other quantifiable benefits were included on the benefits side. The Total Resource Cost (TRC) benefit cost ratio was used to screen measures for costeffectiveness (i.e., those greater than one are cost-effective).	Model – the "Measure Info Rollup" files pull in all the results from each avoided cost scenario, including the BC ratios from the ProCost results. These results are then linked to by the Conservation Potential Assessment model. The TRC analysis is done at the lowest level of the model in the ProCost files.
f)	Include the incremental savings and incremental costs of measures and replacement measures where resources or measures have different measure lifetimes	Savings, cost, and lifetime assumptions from the Council's Final 2021 Power Plan Supply Curves, and RTF were used.	Model – supporting files include all of the ProCost files used in the 2021 Plan, with later updates made by the RTF. The life-cycle cost calculations and methods are identical to those used by the Council.

	NWPCC Methodology	EES Consulting Procedure	Reference
g)	Calculate the value of energy saved based on when it is saved. In performing this calculation, use time differentiated avoided costs to conduct the analysis that determines the financial value of energy saved through conservation	The Council's 2021 Power Plan measure load shapes were used to calculate time of day of savings and measure values were weighted based upon peak and off-peak pricing. This was handled using the Council's ProCost tool, so it was handled in the same way as the 2021 Power Plan models.	Model – See MC_AND_LOADSHAPE files for load shapes. The ProCost files handle the calculations.
h)	Include the increase or decrease in annual or periodic operations and maintenance costs due to conservation measures	Operations and maintenance costs for each measure were accounted for in the total resource cost per the Council's assumptions.	Model – the ProCost files contain the same assumptions for periodic O&M as the Council and RTF.
i)	Include avoided energy costs equal to a forecast of regional market prices, which represents the cost of the next increment of available and reliable power supply available to the utility for the life of the energy efficiency measures to which it is compared	The Council's April 2023 Baseline market price forecast was used to value energy in the Base Case Scenario.	Report –See Appendix IV. Model – See MC_AND_LOADSHAPE files ("Base Market Forecast" worksheet).
j)	Include deferred capacity expansion benefits for transmission and distribution systems	Deferred transmission capacity expansion benefits were given a benefit of \$3.83/kW-year in the costeffectiveness analysis. A distribution system credit of \$8.83/kW-year was also used (\$2023). These values were developed by the Council in preparation for the 2021 Power Plan.	Model – this value can be found on the ProData page of each ProCost file.
k)	Include deferred generation benefits consistent with the contribution to system peak capacity of the conservation measure	Deferred generation capacity expansion benefits were given a value of \$ 104/kW-year in the cost effectiveness analysis for the Base Case Scenario. This is based upon the District's marginal cost for generation capacity. See Appendix IV for further discussion of this value.	Model – this value can be found on the ProData page of the ProCost Batch Runner file.
l)	Include the social cost of carbon emissions from avoided non-conservation resources	This CPA uses the social cost of carbon values specified in WAC 194-40-100	The MC_AND_LOADSHAPE files contain the carbon cost assumptions for each avoided cost scenario.

	NWPCC Methodology	EES Consulting Procedure	Reference
m)	Include a risk mitigation credit to reflect the additional value of conservation, not otherwise accounted for in other inputs, in reducing risk associated with costs of avoided non- conservation resources	In this analysis, risk was considered by varying avoided cost inputs and analyzing the variation in results. Rather than an individual and nonspecific risk adder, our analysis included a range of possible values for each avoided cost input.	The scenarios section of the report documents the inputs used and the results associated. Appendix IV discusses the risk adders used in this analysis.
n)	Include all non-energy impacts that a resource or measure may provide that can be quantified and monetized	Quantifiable non-energy benefits were included where appropriate. Assumptions for non-energy benefits are the same as in the Council's 2021 Power Plan. Non-energy benefits include, for example, water savings from clothes washers.	Model – the ProCost files contain the same assumptions for non-power benefits as the Council and RTF. The calculations are handled in ProCost.
0)	Include an estimate of program administrative costs	Total costs were tabulated and an estimated 20% of the total was assigned as the administrative cost. This value is consistent with regional average and BPA programs. The 20% value was used in the Fifth, Sixth, Seventh Power plans and 2021 Power Plan.	Model – this value can be found on the ProData page of the ProCost Batch Runner file.
p)	Include the cost of financing measures using the capital costs of the entity that is expected to pay for the measure	Costs of financing measures were included utilizing the same assumptions from the 2021 Power Plan.	Model – this value can be found on the ProData page of the ProCost Batch Runner file.
q)	Discount future costs and benefits at a discount rate equal to the discount rate used by the utility in evaluating non- conservation resources	Discount rates were applied to each measure based upon the Council's methodology. A real discount rate of 3.75% was used, based on the Council's most recent analyses in support of the 2021 Power Plan.	Model – this value can be found on the ProData page of the ProCost Batch Runner file.
r)	Include a ten percent bonus for the energy and capacity benefits of conservation measures as defined in 16 U.S.C. § 839a of the Pacific Northwest Electric Power Planning and Conservation Act	A 10% bonus was added to all measures in the model parameters per the Conservation Act.	Model – this value can be found on the ProData page of the ProCost V.4.006 ProData page.

Appendix IV – Avoided Cost and Risk Exposure

The 2021 District (District) Conservation Potential Assessment (CPA) was conducted for the period 2022 through 2041 as required under RCW 19.285 and WAC 194.37. According to WAC 197.37.070, the District must evaluate the cost-effectiveness of conservation by setting avoided energy costs equal to a forecast of regional market prices. In addition, several other components of the avoided cost of energy efficiency savings must be evaluated including generation capacity value, transmission and distribution costs, risk, and the social cost of carbon.

This appendix describes each of the avoided cost assumptions and provides a range of values that were evaluated in the 2021 CPA. The 2023 CPA considers three avoided cost scenarios: Base, Low, and High. Each of these is discussed below.

AVOIDED ENERGY VALUE

For the purposes of the 2023, EES used the Council's April 2023 market price forecasts. The Baseline forecast is used in the Base and Low scenarios. This price forecast reflects the large amount of renewable energy forecast to come online in the next 20 years. The high scenario assumes the High Westside Demand forecast scenario developed by the Council. In this scenario, electricity demand is increased on the West side of the Region due to aggressive electrification goals.

AVOIDED COST ADDERS AND RISK

From a total resource cost perspective, energy efficiency provides multiple benefits beyond the avoided cost of energy. These include deferred capital expenses on generation, transmission, and distribution capacity; as well as the reduction of required renewable energy credit (REC) purchases, avoided social costs of carbon emissions, and the reduction of utility resource portfolio risk exposure. Since energy efficiency measures provide both peak demand and energy savings, these other benefits are monetized as value per unit of either kWh or kW savings.

FIGURE IV-1: OVERVIEW OF PORTFOLIO REQUIREMENTS

Energy-Based Social Cost of Carbon Renewable Energy Credits GHG-Free or Neutral Resources Risk Reduction Premium

Capacity Based

- Generation Capacity Deferral
- Transmission Capacity Deferral
- Distribution Capacity Deferral

The estimated values and associated uncertainties for these avoided cost components are based on relevant portfolio requirements from the Clean Energy Transformation Act (CETA). The timeline below summarizes the relevant milestones for portfolio planning. The type of energy the District will need to procure is based on these requirements; therefore, the requirements set the avoided cost as it relates to capacity, renewable, and GHG-free power supply.

FIGURE IV-2: OVERVIEW OF PORTFOLIO REQUIREMENTS



Through 2030, the District must meet the renewable portfolio standard (RPS) set for Washington State Utilities of 15% of the system load. The RPS can be met through either bundled or unbundled RECs. Next, CETA establishes a 100% GHG neutral requirement by 2030. The requirement states that at least 80% of a utility's portfolio must be sourced directly from either renewable¹² or non-emitting resources.¹³ A utility may then meet the mandate by purchasing no more than 20% of its portfolio in offsets such as unbundled REC purchases. The offsets will then be phased out by 2045 as shown in Figure IV-3.

¹² Renewable resources include water, wind, solar energy, geothermal, renewable natural gas, renewable hydrogen, wave, ocean or tidal power, and biodiesel not derived from crops raised on land cleared from old growth forest or first growth, or biomass. (Chapter 173-444 WAC available at: https://ecology.wa.gov/DOE/files/c0/c08b45ae-7140-4b30-a3c2-faf8aa042651.pdf).

¹³ Non-emitting resources are those that generate electricity, or provide capacity of ancillary services to an electric utility that do not emit greenhouse gases as a by-product. *See id*.

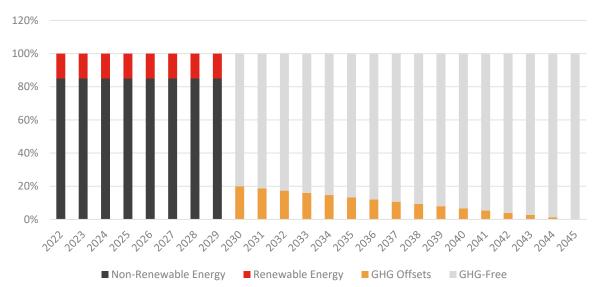


FIGURE IV-3: SUMMARY OF RPS AND CETA PORTFOLIO REQUIREMENTS

Social Cost of Carbon

The social cost of carbon is a cost that society incurs when fossil fuels are burned to generate electricity. Both the EIA rules and CETA requires that CPAs include the social cost of carbon when evaluating cost effectiveness using the total resource cost test (TRC). CETA further specifies the social cost of carbon values to be used in conservation and demand response studies. These values are shown in Table IV-1 below.

TABLE IV-1: SOCIAL COST OF CARBON VALUES¹⁴

Year in Which Emissions Occur or Are Avoided	Social Cost of Carbon Dioxide (in 2007 dollars per metric ton)	Social Cost of Carbon Dioxide (in 2018 dollars per metric ton)
2020	\$62	\$74
2025	\$68	\$81
2030	\$73	\$87
2035	\$78	\$93
2040	\$84	\$100
2045	\$89	\$106
2050	\$95	\$113

¹⁴ WAC 194-40-100. Available at: https://apps.leg.wa.gov/wAc/default.aspx?cite=194-40-100&pdf=true.

According to WAC 194-40-110, values may be adjusted for any taxes, fees or costs incurred by utilities to meet portfolio mandates.¹⁵ For example, the social cost of carbon is the full value of carbon emissions which includes the cost to utilities and ratepayers associated with moving to non-emitting resources. Rather than adjust the social cost of carbon for the cost of RECs or renewable energy, the values for RECS and renewable energy are excluded from the analysis to avoid double counting.

The emissions intensity of the marginal resource (market) is used to determine the \$/MWh value for the social cost of carbon. Ecology states that unspecified resources should be given a carbon intensity value of 0.437 metric tons of CO_2e/MWh of electricity (0.874 lbs/kWh).¹⁶ This is an average annual value applied to in all months in the conservation potential model.¹⁷

Avoided Renewable Energy Purchases

Renewable energy purchases need to meet both RPS and CETA and can be avoided through conservation. Utilities may meet Washington RPS through either bundled energy purchases such as purchasing the output of a wind resource where the non-energy attributes remain with the output, or they may purchase unbundled RECs.

As stated above, the value of avoided renewable energy credit purchases resulting from energy efficiency is accounted for within the social cost of carbon construct. The social cost of carbon already considers the cost of moving from an emitting resource to a non-emitting resource. Therefore, it is not necessary to include an additional value for renewable energy purchases prior to 2045 when all energy must be non-emitting or renewable.

Beginning in 2045, the social cost of carbon may no longer be an appropriate adder in resource planning. However, prior to 2045 utilities may still use offsets to meet CETA requirements. Since the study period of this evaluation ends prior to 2045, the avoided social cost of carbon is included in each year. For future studies that extend to 2045 and beyond, it would be appropriate to include renewable energy or non-emitting resource costs as the avoided cost of energy rather than market plus the social cost of carbon.

Risk Adder

In general, the risk that any utility faces is that energy efficiency will be undervalued, either in terms of the value per kWh or per kW of savings, leading to an under-investment in energy efficiency and exposure to higher market prices or preventable investments in infrastructure. The converse risk—an over-valuing of energy and subsequent over-investment in energy efficiency—is also possible, albeit less likely. For example, an over-investment would occur if an assumption is made that economies will remain basically

¹⁵ WAC 194-40-110 (b).

¹⁶ WAC 173-444-040 (4).

¹⁷ The seasonal nature of carbon intensity is not modeled due to the prescriptive annual value established by Ecology in WAC 173-444-040.

the same as they are today, and subsequent sector shifts or economic downturns cause large industrial customers to close their operations. Energy efficiency investments in these facilities may not have been in place long enough to provide the anticipated low-cost resource.

In order to address risk, the Council develops a risk adder (\$/MWh) for its cost-effectiveness analysis of energy efficiency measures. This adder represents the value of energy efficiency savings not explicitly accounted for in the avoided cost parameters. The risk adder is included to ensure an efficient level of investment in energy efficiency resources under current planning conditions. Specifically, in cases where the market price has been low compared to historic levels, the risk adder accounts for the likely possibility that market prices will increase above current forecasts.

The value of the risk adder has varied depending on the avoided cost input values. The adder is the result of stochastic modeling and represents the lower risk nature of energy efficiency resources. In the Sixth Power Plan the risk adder was significant (up to \$50/MWh for some measures). In the Seventh Power Plan the risk adder was determined to be \$0/MWh after the addition of the generation capacity deferral credit. The 2021 Power Plan used the same methodology as the Seventh Plan. While the Council uses stochastic portfolio modeling to value the risk credit, utilities conduct scenario and uncertainty analysis. The scenarios modeled in the District's CPA include an inherent value for the risk credit such has higher market prices due to a number of factors including electrification, and increased renewables integrated onto the grid.

For the District's 2023 CPA, the avoided cost parameters have been estimated explicitly, and a scenario analysis is performed. Therefore, no risk adder was used for the base case. Variation in other avoided cost inputs covers a range of reasonable outcomes and is sufficient to identify the sensitivity of the cost-effective energy efficiency potential to a range of outcomes. The scenario results present a range of cost-effective energy efficiency potential, and the identification of the District's biennial target based on the range modeled is effectively selecting the utility's preferred risk strategy and associated risk credit.

Deferred Transmission and Distribution System Investment

Energy efficiency measure savings reduce capacity requirements on both the transmission and distribution systems. The Council's 2021 Power assumes these avoided costs are \$3.83/kW-year and \$8.5/kW-year for transmission and distribution systems, respectively (\$2023).¹⁸ These assumptions are used in all scenarios in the CPA.

Deferred Investment in Generation Capacity

Beginning in October 2023, the District will be a load following customer of BPA. As a load following customer, the District's avoided cost of capacity is built into BPA's preference rates. BPA demand rates

¹⁸ Northwest Power and Conservation Council Memorandum to the Power Committee Members. Subject; Updated Transmission & Distribution Deferral Value for the 2021 Power Plan. March 5, 2019. Available at: https://www.nwcouncil.org/sites/default/files/2019_0312_p3.pdf.

are escalated 3% each rate period (every two years). ¹⁹ Over the 20-year analysis period, the resulting cost of avoided capacity is \$104/kW-year (2023\$) in levelized terms.

In the Council's 2021 Power Plan,²⁰ a generation capacity value of \$143/kW-year was explicitly calculated (\$2023). This value is used in the high scenario.

SUMMARY OF SCENARIO ASSUMPTIONS

Table IV-2 summarizes the recommended scenario assumptions. The Base Case represents the most likely future.

TABLE IV-2 AVOIDED COST ASSUMPTIONS BY SCENARIO, \$2023

	Base	Low	High		
Energy	NWPCC April	10% lower than	NWPCC April		
	2023 Baseline	NWPCC April	2023 High		
	Price Forecast	2023 Price	Westside Demand		
		Forecast			
Social Cost of Carbon, \$/short ton	WAC 194-40-100	WAC 194-40-100	WAC 194-40-100		
	\$34/MWh	\$34/MWh	\$34/MWh		
Avoided Cost of RPS Compliance	Includ	led in Social Cost of C	arbon		
Distribution System Credit, \$/kW-yr	\$8.53	\$8.53	\$8.53		
Transmission System Credit, \$/kW-yr	\$3.83	\$3.83	\$3.83		
Deferred Generation Capacity Credit, \$/kW-yr	\$104	\$0	\$143.18		
Implied Risk Adder, 20-year Levelized	N/A	Average:	Average:		
\$/MWh		-\$1/MWh and	\$11/MWh and		
\$/kW-yr		-\$104/kW-yr	\$39/kW-year		

¹⁹ BP-24 Rate Proceeding. July 2023. BP-24-A-02-AP01 Available online: https://www.bpa.gov/-/media/Aep/rates-tariff/bp-24/Final-Proposal/Appendix-BFinal-Proposal-Power-Rate-Schedules-and-GRSPsBP24A02AP01Rev-1.pdf.

²⁰ https://www.nwcouncil.org/energy/powerplan/7/home/.

Appendix V – Ramp Rate Documentation

This section is intended to document how ramp rates were adjusted to align near term potential with recent achievements of the District programs.

Modelling work began with the 2021 Power Plan ramp rate assignments for each measure. The District's program achievements from 2020 and estimates for 2021 were compared at a sector level with the first two years of the study period, 2024-2025. This allowed for the identification of sectors where ramp rate adjustments may be necessary.

Table V-1 below shows the results of the comparison by sector after ramp rate adjustments were made.

TABLE V-1 COMPARISON OF SECTOR LEVEL PROGRAM ACHIEVEMENT AND POTENTIAL (AMW)

Program History			CPA Potential			
	2020	2021	2022*	20-'22 Avg	2024	2025
Residential	0.12	0.12	0.12	0.12	0.07	0.09
Commercial	0.19	0.40	0.09	0.23	0.30	0.36
Industrial	0.14	0.94	0.14	0.40	0.06	0.06
Agricultural	0.00	0.00	0.00	0.00	0.08	0.10
Distribution Efficiency	0.00	0.01	0.02	0.01	0.00	0.01
NEEA	0.64	0.69	0.13	0.49		
Total	1.08	2.17	0.50	1.25	0.51	0.61

^{*}Projected

When viewing the achievement and potential at the sector level, adjustments were found to be necessary in the residential and commercial sectors. The 2021 Power Plan ramp rates were found to be a good match for the District programs in the industrial, agricultural, and distribution system sectors. The draft 2021 Power Plan assigns a fast ramp rate to exterior commercial lighting. The ramp rate for these measures was adjusted to smooth potential over the 20-year period (moving from Fast 80 to 20-year ramp rates. This adjustment accounts for COVID impacts in supply chain and program participation observed in 2020 and continuing into 2023. The 2021 Power Plan documents do not consider COVID impacts, therefore, it is appropriate to make the adjustments to the potential in the near-term for purposes of target setting.

Appendix VI – Measure List

This appendix provides a high-level measure list of the energy efficiency measures evaluated in the 2023 CPA. The CPA evaluated thousands of measures; the measure list does not include each individual measure; rather it summarizes the measures at the category level, some of which are repeated across different units of stock, such as single family, multifamily, and manufactured homes. Specifically, utility conservation potential is modeled based on incremental costs and savings of individual measures. Individual measures are then combined into measure categories to more realistically reflect utility-conservation program organization and offerings. For example, single family attic insulation measures are modeled for a variety of upgrade increments: R-0 to R-38, R-0 to R-49, or R-19 to R-38. The increments make it possible to model measure savings and costs at a more precise level. Each of these individual measures are then bundled across all housing types to result in one measure group: attic insulation.

The following tables list the conservation measures (at the category level) that were used to model conservation potential presented in this report. Measure data was sourced from the Council's 2021 Plan workbooks. Please note that some measures may not be applicable to an individual utility's service territory based on characteristics of the utility's customer sectors.

	Table VI-1 Residential End Uses and Measures	
End Use	Measures/Categories	Data Source
Appliances	Heat Pump Clothes Dryer	2021 Power Plan
Appliances	Clothes Dryer	2021 Power Plan
	Oven	2021 Power Plan
	Advanced Power Strips	2021 Power Plan
	Desktop	2021 Power Plan
Electronics	Laptop	2021 Power Plan
Liectionics	Monitor	2021 Power Plan
	Air Cleaners	2021 Power Plan
Food Preparation	Electric Oven	2021 Power Plan
	Microwave	2021 Power Plan
	Air Source Heat Pump	2021 Power Plan
	Controls, Commissioning, and Sizing	2021 Power Plan
	Central Air Conditioning	2021 Power Plan
	Ductless Heat Pump	2021 Power Plan
	Ducted Heat Pump	2021 Power Plar
	Duct Sealing	2021 Power Plar
	Ground Source Heat Pump	2021 Power Plan
HVAC	Heat Recovery Ventilation	2021 Power Plar
	Attic Insulation	2021 Power Plar
	Floor Insulation	2021 Power Plar
	Wall Insulation	2021 Power Plan
	Windows	2021 Power Plan
	Cellular Shades	2021 Power Plan
	Whole House Fan	2021 Power Plar
	Wi-Fi Enabled Thermostats	2021 Power Plar
	Linear Fluorescent Lighting	2021 Power Plar
	Floor/Table Lamps	2021 Power Plar
	Ceiling and Wall Flush Mount	2021 Power Plan
	Downlight Fixture	2021 Power Plan
Lighting	Exterior Porch	2021 Power Plan
0 0	Linear Porch	2021 Power Plar
	Track Lighting	2021 Power Plan
	Linear Base	2021 Power Plan
	Decorative Base	2021 Power Plan
	Freezer	2021 Power Plan
Refrigeration	Refrigerator	2021 Power Plan
	Aerator	2021 Power Plan
	Water Heater Pipe Insulation	2021 Power Plan
	Clothes Washer	2021 Power Plan
	Dishwasher	2021 Power Plan
		2021 Power Plan
Water Heating	Heat Pump Water Heater	
	Showerheads	2021 Power Plan
	Solar Water Heater	2021 Power Plan
	Circulator Controls	2021 Power Plan
	Thermostatic Valve	2021 Power Plan
Mile al a Destilation	Wastewater Heat Recovery	2021 Power Plan
Whole Building	EV Charging Equipment	2021 Power Plan
	Behavior	2021 Power Plan

	Table VI-1	
	Residential End Uses and Measures	
End Use	Measures/Categories	Data Source
	Well Pump	2021 Power Plan

	Table VI-2			
Commercial End Uses and Measures				
End Use	Measures/Categories	Data Source		
Compressed Air	Controls, Equipment, & Demand Reduction	2021 Power Plan		
	Desktop Computer	2021 Power Plan		
5 1	Laptop Computer	2021 Power Plan		
Electronics	Smart Plug Power Strips	2021 Power Plan		
	Data Center Measures	2021 Power Plan		
	Combination Ovens	2021 Power Plan		
	Convection Ovens	2021 Power Plan		
5 15	Fryers	2021 Power Plan		
Food Preparation	Hot Food Holding Cabinet	2021 Power Plan		
	Steamer	2021 Power Plan		
	Pre-Rinse Spray Valve	2021 Power Plan		
	Advanced Rooftop Controller	2021 Power Plan		
	Chiller Upgrade	2021 Power Plan		
	Commercial Energy Management	2021 Power Plan		
	Demand Control Ventilation	2021 Power Plan		
HVAC	Ductless Heat Pumps	2021 Power Plan		
	Economizers	2021 Power Plan		
	Secondary Glazing Systems	2021 Power Plan		
	Variable Refrigerant Flow	2021 Power Plan		
	Web-Enabled Programmable Thermostat	2021 Power Plan		
	Fans	2021 Power Plan		
	PTPH	2021 Power Plan		
	Bi-Level Stairwell Lighting	2021 Power Plan		
	Exterior Building Lighting	2021 Power Plan		
	Exit Signs	2021 Power Plan		
Lighting	Lighting Controls	2021 Power Plan		
	Interior Lighting	2021 Power Plan		
	Garage Lighting	2021 Power Plan		
	Street & Roadway Lighting	2021 Power Plan		
Matars/Drives	ECM for Variable Air Volume	2021 Power Plan		
Motors/Drives	Motor Rewinds	2021 Power Plan		
Process Loads	Municipal Water Supply	2021 Power Plan		
Pofrigoration	Grocery Refrigeration Bundle	2021 Power Plan		
Refrigeration	Freezer	2021 Power Plan		
	Commercial Clothes Washer	2021 Power Plan		
	Showerheads	2021 Power Plan		
Water Heating	Clean Water Pumps	2021 Power Plan		
	Heat Pump Water Heaters	2021 Power Plan		
	Circulator Pumps	2021 Power Plan		
Process Loads	Elevators	2021 Power Plan		
1100033 10003	Engine Block Heater Control	2021 Power Plan		

Table VI-3				
Industrial End Uses and Measures				
End Use	Measures/Categories	Data Source		
Compressed Air	Air Compressor Equipment	2021 Power Plan		
	Demand Reduction	2021 Power Plan		
	Air Compressor Optimization	2021 Power Plan		
	Energy Project Management	2021 Power Plan		
	Fan Energy Management	2021 Power Plan		
	Fan System Optimization	2021 Power Plan		
Energy Management	Cold Storage Tune-up	2021 Power Plan		
<i>5, 5</i>	Chiller Optimization	2021 Power Plan		
	Integrated Plant Energy Management	2021 Power Plan		
	Plant Energy Management	2021 Power Plan		
	Pump Energy Management	2021 Power Plan		
	Pump System Optimization	2021 Power Plan		
Fans	Efficient Centrifugal Fan	2021 Power Plan		
1 0113	Fan Equipment Upgrade	2021 Power Plan		
	Clean Room Filter Strategy	2021 Power Plan		
	Clean Room HVAC	2021 Power Plan		
Hi-Tech	Chip Fab: Eliminate Exhaust	2021 Power Plan		
TH-TECH	Chip Fab: Exhaust Injector	2021 Power Plan		
	Chip Fab: Reduce Gas Pressure	2021 Power Plan		
	Chip Fab: Solid State Chiller	2021 Power Plan		
	Efficient Lighting	2021 Power Plan		
Lighting	High-Bay Lighting	2021 Power Plan		
	Lighting Controls	2021 Power Plan		
Laur C. Mandinum Taman	Food: Cooling and Storage	2021 Power Plan		
Low & Medium Temp	Cold Storage Retrofit	2021 Power Plan		
Refrigeration	Grocery Distribution Retrofit	2021 Power Plan		
NA-t-vi-lila adia-	Material Handling Equipment	2021 Power Plan		
Material Handling	Material Handling VFD	2021 Power Plan		
Metals	New Arc Furnace	2021 Power Plan		
	Synchronous Belts	2021 Power Plan		
Misc.	Food Storage: CO2 Scrubber	2021 Power Plan		
	Food Storage: Membrane	2021 Power Plan		
Motors	Motor Rewinds	2021 Power Plan		
	Efficient Pulp Screen	2021 Power Plan		
	Material Handling	2021 Power Plan		
Paper	Premium Control	2021 Power Plan		
	Premium Fan	2021 Power Plan		
Process Loads	Municipal Sewage Treatment	2021 Power Plan		
	Efficient Agitator	2021 Power Plan		
	Effluent Treatment System	2021 Power Plan		
Pulp	Premium Process	2021 Power Plan		
- r-	Refiner Plate Improvement	2021 Power Plan		
	Refiner Replacement	2021 Power Plan		
Pumps	Equipment Upgrade	2021 Power Plan		
Transformers	New/Retrofit Transformer	2021 Power Plan		
	Hydraulic Press	2021 Power Plan		
Wood	Pneumatic Conveyor	2021 Power Plan		
	i ilcumude conveyor	2021 I OWEL LIGHT		

	Table VI-3 Agriculture End Uses and Measures			
End Use	Measures/Categories	Data Source		
	Efficient Lighting	2021 Power Plan		
Dairy Efficiency	Milk Pre-Cooler	2021 Power Plan		
	Vacuum Pump	2021 Power Plan		
	Low Energy Sprinkler Application	2021 Power Plan		
Irrigation	Irrigation Hardware	2021 Power Plan		
	Line Pressure Reduction	2021 Power Plan		
Lighting	Agricultural Lighting	2021 Power Plan		
	Circulating Block Heater for Back -Up Generator	2021 Power Plan		
Process Loads	Energy Free Stock Tank	2021 Power Plan		
Motors/Drives	Green Motor Rewinds	2021 Power Plan		

Table VI-4 Distribution Efficiency End Uses and Measures			
End Use	Measures/Categories	Data Source	
	ECM-1 LDC Voltage Control without VVO		
Distribution Efficiency	& AMI	2021 Power Plan	
Distribution Efficiency	ECM-2 & ECM 3 LDC Voltage Control with		
	VVO & AMI	2021 Power Plan	

Appendix VII –Energy Efficiency Potential by End-Use

Table VII-	-1			
Residential Economic Potential (aMW)				
	2 Year	6 Year	10 Year	20 Year
Dryer	0.01	0.02	0.02	0.04
Electronics	0.00	0.00	0.00	0.00
Food Preparation	0.00	0.00	0.00	0.00
HVAC	0.09	0.32	0.71	1.68
Lighting	0.00	0.05	0.17	0.30
Refrigeration	0.00	0.01	0.02	0.05
Water Heating	0.06	0.25	0.52	0.97
Whole Bldg/Meter Level	0.00	0.00	0.00	0.00
Total	0.16	0.66	1.46	3.04

Table VII-2				
Commercial Economic Potential (aMW)				
	2 Year	6 Year	10 Year	20 Year
Compressed Air	0.00	0.00	0.00	0.00
Electronics	0.00	0.00	0.00	0.00
Food Preparation	0.02	0.08	0.11	0.18
HVAC	0.07	0.23	0.35	0.58
Lighting	0.34	1.04	1.75	3.50
Motors/Drives	0.00	0.00	0.00	0.00
Process Loads	0.00	0.00	0.00	0.00
Refrigeration	0.19	0.58	0.97	1.93
Water Heating	0.03	0.08	0.14	0.27
Total	0.65	2.01	3.32	6.48

Table VII-3					
Industrial Economic Potential (aMW)					
	2 Year	4 Year	10 Year	20 Year	
Compressed Air	0.01	0.02	0.03	0.05	
Fans	0.00	0.00	0.00	0.00	
Lighting	0.07	0.21	0.35	0.71	
Pumps	0.00	0.00	0.00	0.00	
HVAC	0.08	0.24	0.33	0.38	
Low Temp Refer	0.02	0.06	0.10	0.20	
Med Temp Refer	0.00	0.01	0.01	0.02	
All Electric	0.00	0.00	0.00	0.00	
Material Processing	0.02	0.07	0.11	0.23	
Material Handling	0.01	0.03	0.05	0.10	
Melting and Casting	0.00	0.00	0.00	0.00	
Other	0.00	0.00	0.00	0.00	
Data Centers	2.63	8.36	10.92	14.32	
Total	2.84	8.99	11.91	16.01	

Table VII-4				
Agricultural Economic Potential (aMW)				
	2 Year	4 Year	10 Year	20 Year
Dairy Efficiency	0.00	0.00	0.00	0.00
Irrigation	0.00	0.00	0.00	0.00
Lighting	0.00	0.00	0.00	0.00
Motors/Drives	0.08	0.42	0.79	1.59
Process Loads	0.00	0.00	0.00	0.00
HVAC	0.00	0.00	0.00	0.00
Refrigeration	0.00	0.05	0.16	0.28
Total	0.08	0.42	0.79	1.59

RESOLUTION NO. 9038

A RESOLUTION ACCEPTING A BID AND AWARDING CONTRACT 170-11879, FOR SUPPLYING 336 AAC AND 795 AAC OVERHEAD CONDUCTOR

Recitals

- 1. Bids were publicly opened on July 12, 2023 for Contract 170-11879, for Supplying 336 AAC and 795 AAC Overhead Conductor;
- 2. Bid proposals were received from the following suppliers/contractors and evaluated by Grant PUD's staff;

•	General Pacific, Inc.	\$1,702,040.70
•	Border States	\$2,689,425.80
•	Wesco/Anixter	\$2,479,755.00
•	American Wire Group	\$2,783,510.00

- 3. The low bid, submitted by General Pacific, Inc. is both commercially and technically compliant with Grant PUD's contract requirements;
- 4. The bid is less than the Engineer's Estimate of \$3,045,150.00; and
- 5. Grant PUD's Senior Manager of Power Delivery Engineering and General Manager concur with staff and recommend award to General Pacific, Inc. as the lowest responsible and best bid based on Grant PUD's plan and specifications.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that the General Manager is authorized to enter into a contract, Contract 170-11879, for Supplying 336 AAC and 795 AAC Overhead Conductor with General Pacific, Inc. of Fairview, Oregon in the amount of \$1,702,040.70 plus applicable sales tax, upon receipt of the required payment and performance bond in a manner satisfactory to Grant PUD's Counsel.

PASSED AND APPROVED by the Commission of Public Utility District No. 2 of Grant County, Washington, this 12th day of December, 2023.

	President	
ATTEST:		
Secretary	Vice President	
Commissioner	Commissioner	

MEMORANDUM November 6, 2023

TO: Richard Wallen, General Manager/Chief Executive Officer

VIA: Jeff Grizzel, Chief Operating Officer

Ron Alexander, Managing Director of Power Delivery
Jesus Lopez, Senior Manager of Power Delivery Engineering

Bob Kakaley, Distribution Systems Supervisor

FROM: Kyle Robillard, Project Manager

SUBJECT: Award of Contract 170-11879 for Supplying 336 AAC and 795 AAC Overhead Conductor

<u>Purpose</u>: To request Commission approval to award Contract 170-11879 to General Pacific, Inc. to supply 336.4 AAC and 795 AAC overhead conductor in the amount of \$1,702,040.70, plus sales tax.

<u>Discussion</u>: This Contract will supply 336.4 AAC and 795 AAC overhead conductor for new line extensions, new customer requests, upgrading and/or replacement of existing overhead conductor and inventory for use during emergency situations. Manufacturers are pre-approved and their material must meet or exceed the current District technical specifications.

The District opened bids on July 12, 2023 at 2:00 PM Pacific. The following bids were received:

Bidders	Total Bid Price		
Border States	\$2,689,425.80		
General Pacific*	\$1,702,040.70*		
Wesco/Anixter	\$2,479,755.00		
American Wire Group	\$2,783,510.00		
Engineers Estimate	\$3,045,150.00		

^{*}Recommended to award

All bids were evaluated for commercial and technical compliance. The bid received from General Pacific was both technically and commercially compliant, along with having the lowest bid price.

<u>Justification</u>: These two overhead conductors are key parts of the infrastructure that the District installs for supplying electric service to its customers. This Contract allows the District to procure and keep in stock these conductors, which shall be installed as new infrastructure for load growth, to improve system reliability, and as replacement of existing infrastructure due to upgrading or repairing of damaged infrastructure.

If not approved the District would run out of these conductors and therefore be unable to build out new overhead lines in order to connect new customers, improve reliability or replace damaged material.

These conductors are typically purchased on purchase orders because we typically do not order this quantity at once. The need in this instance to purchase a quantity great enough to trigger a contract is due to the fact that the District is both running low on these conductors and we have projects planned for the near future that will require a large amount of both of these conductors.

<u>Financial Considerations</u>: This contract was a competitively bid contract and will be awarded to the lowest bidder that meets all commercial and technical compliance for each section of bid items. The bid prices and the Engineers Estimate can be reviewed in the table above. All bids came back within an acceptable range of the Engineers Estimate.

<u>Recommendation</u>: It is my recommendation that Commission award contract 170-11879 for Supplying 336 AAC and 795 AAC Overhead Conductor to General Pacific, INC (bidding CME Wire and Cable) for a contract price of \$1,702,040.70, plus sales tax.

<u>Legal Review</u>: See attached e-mail(s).

From: <u>Jeff Grizzel</u>

To: Kyle Robillard; Jesus Lopez

Cc: Emilie DeLong

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Date: Monday, November 20, 2023 1:57:28 PM

Attachments: <u>image001.jpg</u>

I approve of the memo Kyle.

Jeff

From: Kyle Robillard krobillard@gcpud.org **Sent:** Monday, November 20, 2023 8:59 AM

To: Jesus Lopez <Jlopez@gcpud.org>; Jeff Grizzel <Jgrizzel@gcpud.org>

Cc: Emilie DeLong < Edelong@gcpud.org >

Subject: FW: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Jeff/Jesus,

Checking in to see if you have had a chance to review this commission memo recommending an award of contract 170-11879.

You can respond to this email with your approval or let me know if you have any questions/comments.

Thank you, Kyle

From: Kyle Robillard

Sent: Wednesday, November 8, 2023 10:14 AM

To: Bob Kakaley < bkakaley@gcpud.org; Jesus Lopez < Jlopez@gcpud.org; Ron Alexander ralexander@gcpud.org; Jeff Grizzel Jgrizzel@gcpud.org; Ron Alexander

Cc: Emilie DeLong < <u>Edelong@gcpud.org</u>>

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Good morning,

Attached is the commission memo for new contract 170-11879 – Supplying 336 AAC and 795 AAC Overhead Conductor.

Please review and respond to this email with your approval to send to the commission for review. Or send me any questions/comments that you may have.

Thank you,

Kyle Robillard

From: Ron Alexander

To: <u>Kyle Robillard; Bob Kakaley; Jesus Lopez; Jeff Grizzel</u>

Cc: Emilie DeLong

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Date: Wednesday, November 8, 2023 4:30:45 PM

Attachments: <u>image001.jpg</u>

Lapprove. Thank you Kyle.

Ron

From: Kyle Robillard krobillard@gcpud.org Sent: Wednesday, November 8, 2023 10:14 AM

To: Bob Kakaley

bkakaley@gcpud.org>; Jesus Lopez <Jlopez@gcpud.org>; Ron Alexander

<ralexander@gcpud.org>; Jeff Grizzel <Jgrizzel@gcpud.org>

Cc: Emilie DeLong <Edelong@gcpud.org>

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Good morning,

Attached is the commission memo for new contract 170-11879 – Supplying 336 AAC and 795 AAC Overhead Conductor.

Please review and respond to this email with your approval to send to the commission for review. Or send me any questions/comments that you may have.

Thank you,

Kyle Robillard

Distribution Engineering

OFFICE 509.793.1576

EXT. 2203

cell 509.750.3727



grantpud.org

From: Emilie DeLong < Edelong@gcpud.org Sent: Wednesday, November 8, 2023 10:00 AM To: Kyle Robillard krobillard@gcpud.org

Subject: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

From: <u>Jesus Lopez</u>

To:Kyle Robillard; Jeff GrizzelCc:Emilie DeLong; Bob Kakaley

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Date: Monday, November 20, 2023 2:24:14 PM

Attachments: <u>image001.jpg</u>

Thanks for the details. I approve.

Jesus

From: Kyle Robillard krobillard@gcpud.org **Sent:** Monday, November 20, 2023 9:26 AM

To: Jesus Lopez <Jlopez@gcpud.org>; Jeff Grizzel <Jgrizzel@gcpud.org>

Cc: Emilie DeLong <Edelong@gcpud.org>; Bob Kakaley

 Skakaley@gcpud.org>

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

There was some back and forth with the Rep and manufacturer who we are awarding to. Essentially, we needed to make sure that their bid didn't include any price adjustments within it to make sure that they were compliant. They confirmed this after we provided them with a schedule of releases so that they knew when they needed to purchase metal.

We have been in contact with the rep this whole time and they are fine with what we have worked out.

Kyle

From: Jesus Lopez <<u>Jlopez@gcpud.org</u>>

Sent: Monday, November 20, 2023 9:18 AM

To: Kyle Robillard < krobillard@gcpud.org; Jeff Grizzel lgrizzel@gcpud.org>

krobillard@gcpud.org
<a href="

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Hello Kyle,

I apologize for not responding sooner. Just one question on the memo. The memo states that bids were opened on July 12^{th} but the award memo was drafted on November 6^{th} . Is there a reason for the time gap? Isn't there an expiration to the bids?

Thanks, Jesus

From: Kyle Robillard < krobillard@gcpud.org Sent: Monday, November 20, 2023 8:59 AM

To: Jesus Lopez < <u>Jlopez@gcpud.org</u>>; Jeff Grizzel < <u>Jgrizzel@gcpud.org</u>>

Cc: Emilie DeLong < Edelong@gcpud.org>

From: Kyle Robillard
To: Emilie DeLong

Subject: FW: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Date: Wednesday, November 8, 2023 11:52:33 AM

Attachments: <u>image001.jpg</u>

From: Bob Kakaley
 Sent: Wednesday, November 8, 2023 11:50 AM
 To: Kyle Robillard <krobillard@gcpud.org>

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

I approve.

Bob

From: Kyle Robillard < krobillard@gcpud.org Sent: Wednesday, November 8, 2023 10:14 AM

To: Bob Kakaley < <u>bkakaley@gcpud.org</u>>; Jesus Lopez < <u>Jlopez@gcpud.org</u>>; Ron Alexander

<ralexander@gcpud.org>; Jeff Grizzel <<u>Jgrizzel@gcpud.org</u>>

Cc: Emilie DeLong < Edelong@gcpud.org>

Subject: RE: Contract 170-11879 - Supplying 336 AAC and 795 AAC Overhead Conductor - Approvals

Good morning,

Attached is the commission memo for new contract 170-11879 – Supplying 336 AAC and 795 AAC Overhead Conductor.

Please review and respond to this email with your approval to send to the commission for review. Or send me any questions/comments that you may have.

Thank you,

Kyle Robillard

Distribution Engineering

OFFICE 509.793.1576

EXT. 2203

cell 509.750.3727



grantpud.org

RESOLUTION NO. 9039

A RESOLUTION SUPERSEDING RESOLUTION NO. 8768 AND SETTING RATE POLICY

WHEREAS, Public Utility District No. 2 of Grant County, Washington (Grant PUD) is authorized to regulate and control the use, distribution, rates, service, charges, and price of electric energy pursuant to RCW 54.16.040.

WHEREAS, Grant PUD's Board of Commissioners have the sole authority and responsibility to set electric rates.

WHEREAS, the Priest Rapids Project (PRP) was built by Grant PUD to benefit the citizens of the county.

WHEREAS, the amount of PRP generation available for use in Grant County, Washington is limited.

WHEREAS, Resolution No. 8768 that was approved May 12th, 2015 previously had set components of rate policy.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington that Grant PUD's staff is hereby directed to prepare and present draft retail rate schedules for the Commission's consideration in accordance with the following principles and objectives:

- <u>Section 1</u>. Rate schedules shall comply with all applicable laws and regulations.
- Section 2. Rate schedules shall be straightforward and understandable by customers and staff.
- Section 3. Combined total of all rate schedules shall capture all electric retail costs borne by Grant PUD.
- <u>Section 4</u>. Grant PUD shall forecast its revenue requirements in advance and it shall plan to implement rate level changes in small, predictable increases.

<u>Section 5</u>. Rate schedules shall provide for Core Customer preferential access to the low cost embedded power supply resources in place as of the year 2013. Core Customers shall be defined as Residential, General Service (Small Commercial), Irrigation and Large General Service (Large Commercial) customers. Additionally, all customers' first 7,300,000 monthly kwh consumption (10 MW x 1,000 x 8,760/12) will be treated likewise; being considered as preferential access. Preferential access shall provide for "first in line" access to Priest Rapids Project power supply.

<u>Section 6</u>. Changes in rate schedules should be designed to limit impact to customers due to substantial structure change, aka "rate shock". Rate class specific limits set at not less than 0.25x the average total Revenue Requirement level increase and not more than 2.50x the average total Revenue Requirement level increase on an annual increase basis. In a year that no general retail rate increase is put into effect, no increase will be applied to any schedule.

Section 7. Rate class Revenue Requirement shall be guided by cost-of-service analysis.

<u>Section 8</u>. Rate schedules shall be set by Commission directive and may take into consideration cost to serve as well as other factors. Commission has discretionary authority in setting rate components and meeting overall revenue requirements.

<u>Section 9</u>. By December 31, 2024, the rate schedules may be designed such that the differential between the estimated "cost to serve" and the "expected class revenue recovery" for each Rate Class may not exceed +15%/- 20.0%. Annually the long-term plan will be evaluated and, if appropriate, updated to stay on course to meet established targets / policy.

<u>Section 10</u>. Rate targets as established in Section 9 above shall be solved to allow the greatest economic benefit to the core customers as defined in Section 5 above and to first allocate the largest negative revenue to cost differential to those classes that represent the largest population of the rate base. Residential and Irrigation schedules shall receive the largest revenue-cost benefit at -20%. General Service (Small Commercial) and Large General Service (Large Commercial) shall be allocated any remaining economic benefit.

<u>Section 11</u>. Grant PUD shall explore alternative revenue recovery options such as rate contracts when potential for District benefit may exist.

<u>Section 12</u>. A separate rate design protocol document will be developed and serve as guidance on interclass design goals and criteria.

PASSED AND APPROVED by the Commission of Public Utility District No. 2 of Grant County, Washington, this 12th day of December, 2023.

	<u> </u>	
ATTEST:		
Secretary	Vice President	
Commissioner	 Commissioner	

M E M O R A N D U M December 12, 2023

TO: Rich Wallen, General Manager/Chief Executive Officer

VIA: Ty Ehrman, Chief Customer Officer

FROM: Julio Aguirre Carmona, Program Manager of Rates and Pricing

Depree Standley, Financial Analyst

SUBJECT: Amending Grant PUD's Retail Rate Making Policy

Purpose:

To request Commission approval to adopt Resolution 9039, extending Resolution No. 8768 that sets the current retail rate policy.

Discussion:

Staff has presented and reviewed in recent meetings with the Commission the potential rate increases needed to meet the previously set Commission's policy under Resolution No. 8768 for the recovery of retail revenue. Staff proposes some minor language revisions to update the existing Resolution No. 8768 which sets the parameters targeted for Grant PUD's retail rate setting process. Staff's proposed changes are limited to extending the date for the expected class revenue recovery to cost differential targets as set forth in Section 9 of the existing Resolution No. 8768. Additionally, Staff is replacing the word: "shall" with the word: "may", to indicate the possibility of not meeting the established targets, if unattainable.

Staff will continue to work with the Commission in the coming months to further evaluate future rate trajectories for retail classes, the resulting rate class revenue recovery to cost differentials, as well as to explore other alternative rate options that may be implemented as part of the Commission's future rate making policy.

Recommendation: Commission approval to adopt Resolution No. 9039 as proposed.

Legal Review: See attached e-mail(s).

Randi Hovland

From:	Ty Ehrman
Sent:	Wednesday, November 29, 2023 7:44 PM
To:	Julio Aguirre Carmona; Mitchell Delabarre
Cc:	Leah Mauceri; Depree Standley
Subject:	RE: Commission Packets for Revised Retail Rates and Revised Rate Making Policy

Julio, The docs look great and appreciate you and team getting them put together in short order. I do have a few comments below that I would like your answers on. Thanks!

- 1. Assuming all new rates have been peer-checked to ensure accuracy please let me know.
- 2. For RS15, it looks like energy charge for tier 2 is a decrease rather than an increase (0.02880 should be 0.03012). Please adjust.
- 3. Curious why we had previously on RS2 two tiers in energy charges with the same rate?

P.S. Mitch/Leah, appreciate your expedited review - the rates team have worked on a compressed schedule to meet packet deadline for 12/12 meeting following last week's workshop feedback in order to ensure review and approval in separate meetings (to allow public comment) in time for customer solutions to get billing systems set up in new rates and fully tested. Thanks in advance for helping us out on the timeline and please let me know if you have concerns.

Ty Ehrman

DESK 509.793.1587 CELL 509.361.8201

From: Julio Aguirre Carmona <jaguirre@gcpud.org> Sent: Wednesday, November 29, 2023 3:35 PM

To: Mitchell Delabarre <Mdelaba@gcpud.org>; Ty Ehrman <Tehrman@gcpud.org> Cc: Leah Mauceri <Lmaucer@gcpud.org>; Depree Standley <dstandley@gcpud.org> Subject: Commission Packets for Revised Retail Rates and Revised Rate Making Policy

Good afternoon Ty/Mitch,

Please find attached the packet we plan to submit to the Commission for the approval of revised retail rates, effective on 4/1/2024, which follows the Commission's directive provided at the most recent Commission Workshop on 11/21/2023. A link to the redline and clean final versions of the tariffs implementing these changes is provided here as well:

Tariffs - Redline
Tariffs- Clean

Additionally, we are also including a separate Memo and proposed resolution to amend the existing language in Resolution No. 8768 to extend the "expiration date" of the current rate making policy and give us some time to engage with the Commission and come up with a revised policy over the next 12 months that will supersede the existing Resolution 8768.

Please let us know if you have any questions or concerns. In the interest of time, we are proving these to you both concurrently, so we would appreciate it if you could provide us with your legal concurrence (Mitch) and executive approval (Ty), by tomorrow morning if possible, so that we can submit these packets for the Commission's consideration at their 12/12 meeting.

Thank you!

Julio

Julio C. Aguirre

Program Manager, Rates & Pricing

CELL. 505.506.5639

EMAIL jaguirre@gcpud.org



RESOLUTION NO. 9040

A RESOLUTION PRE-QUALIFYING CONTRACTORS TO PERFORM ELECTRCIAL WORK FOR GRANT PUD

Recitals

- 1. RCW 54.04.085 requires that contractors be pre-qualified to do electrical work for Grant PUD, and pursuant thereto, contractors listed in Appendix A have filed applications for pre-qualification with Grant PUD;
- 2. Grant PUD's staff have reviewed all applications and their recommendations with respect to the same are set forth in Appendix A attached hereto;
- 3. Grant PUD's staff recommend rejection of certain contractor pre-qualification requests, and Grant PUD's General Manager concurs with those recommendations; and
- 4. The Commission has reviewed and considered the recommendations of Grant PUD's staff.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that:

<u>Section 1</u>. The various contractor requests received by Grant PUD for pre-qualification are hereby approved and rejected as set forth in Appendix A attached hereto.

<u>Section 2</u>. For these contractors who are pre-qualified as set forth in Appendix A, they shall each designate their employees, and/or subcontractors with electrical contract licenses prior to performing any electrical work for Grant PUD requiring the same.

PASSED AND APPROVED by the Commission of Public Utility District No. 2 of Grant County, Washington, this 12th day of December, 2023

	President	
ATTEST:		
Secretary	Vice President	
Commissioner	Commissioner	

MEMORANDUM

November 30, 2023

TO: Rich Wallen, General Manager/Chief Executive Officer

VIA: Jeff Grizzel, Chief Operating Officer

Ron Alexander, Managing Director – Power Delivery Jesus Lopez, Senior Manager – Power Delivery Engineering

FROM: Sharon Lucas, Administrative Assistant – Power Delivery Engineering

SUBJECT: 2024 Pre-qualification of Contractors for Electrical Work

<u>Purpose</u>: Recommend approval and/or rejection of contractor applications seeking pre-qualification for electrical work as stated in the various categories listed for the District's Electric System in the 2024 construction year, per RCW 54.04.085.

<u>Discussion</u>: The District completed an annual Pre-Qualification process as required and described in RCW 54.04.085. The District advertised for contractors to be pre-approved for District electric system work for the 2024 construction year. A legal notice was published mid-August in the following:

- Grant County Journal
- Columbia Basin Daily Herald
- Wenatchee World
- Daily Journal of Commerce Seattle
- Daily Journal of Commerce Portland
- Spokesman Review
- Tri-City Herald

In addition to the legal notices published, the Pre-Qualification process and application is posted on the District's Contracting Procureware website and can be downloaded by Contractors.

Evaluated contractors completed the standard questionnaire and provided a financial statement. Additionally, contractors provided a statement of work experience, list of previous projects including the associated dollars required to complete the jobs, and a list of key employees to substantiate the categories of work in which they applied. The work categories are described in the table below.

WORK CATEGORIES								
A	Distribution (up to 15kV)	E	Substation Energized Maintenance					
В	Transmission (115kV to 230kV)	F	Lighting					
C	Substation De-energized Construction	G	Storm and Emergency Response					
D	Substation Energized Construction							

A group of employees representing Finance, Power Delivery Construction & Maintenance and Power Delivery Engineering reviewed the applications for the requirements specified in RCW 54.04.085, which are: 1) adequate financial resources; 2) necessary experiences by the company and personnel; 3) organization and technical qualification to perform the work; 4) satisfactory record of performance, integrity, judgment, and skills; and 5) be otherwise qualified and eligible to receive a contract award under applicable laws and regulations.

Recommendation: Approve/Reject Contractors for work categories as described below:

A. The following Pre-qualification Applications are recommended for approval <u>as applied</u> within categories and within the maximum amount of work, expressed in dollars, as submitted by the Contractor. The categories are more fully described in Appendix A.

CONTRACTOR		CATEGORIES						
		В	C	D	E	F	G	Millions
Cascade Cable Constructors LLC	X*		X*					10
DJ's Electrical	X	X	X	X*	X*	X	X	20
Henkels & McCoy Inc	X	X	X	X			X	500
International Line Builders	X	X	X*				X	40
JH Kelly LLC	X*		X	X*		X*		200
Michel's Pacific Energy	X	X	X	X	X	X	X	500
Olympic Electric	X*	X	X*	X*		X*		2
Palouse Power LLC	X	X	X	X	X	X	X	25
Potelco (Quanta)	X	X	X	X*	X*	X	X	50
RiverLine Power LLC	X*	X*	X	X*		X	X	10
Sturgeon Electric (MYR Group)	X	X	X	X*	X	X	X	200
Tice Electric Co.	X*	X*	X	X*				30

X = Recommended Approval

B. The following Pre-qualification Applications are recommended for approval <u>with modifications</u> (some work not approved) within the specific work categories as they were submitted by the Applicant. Rejection of categories for the following contractors was based on insufficient information (showing inadequate evidence of experience and technical qualifications) received on the application. Refer to Appendix A for complete detail of all categories:

CONTRACTOR -		CATEGORIES						
		В	C	D	E	F	G	Millions
Cannon Constructors LLC	X	X	X	R*		X		25
EC Source	X	X	X	R*	X*	X	X	Unlimited
Summit Line Construction (Quanta)	X	X	X	R*	R*			20
Wilson Construction	X	X	X	R*	X*	X	X	300

A = Approval R = Rejected

C. Contractors rejected for the work categories listed below were rejected for failure to provide adequate financial documentation or evidence of experience and technical qualifications in performing the required functions for the specific work category.

				CATEGORIES					\$ Amt
CONTRACTOR	Financial	A	В	C	D	E	F	G	Millions
	Documentation								IVIIIIOIIS
KVA Electric INC	Rejected								\$5
Ness & Campbell Crane	Rejected								Unlimited
Power Technology INC	Rejected								20
Western Electric Services	Rejected								10

^{*} see Appendix A for complete detail (partial items requested in certain categories)

^{*} see Appendix A for complete detail (partial items requested in categories or rejected in certain categories)

<u>Legal Review:</u> see attached e-mail(s).

c: Jesus Lopez Patrick Bishop Nicona Butler Sharon Lucas

Nicona Butler

From: Jesus Lopez

Sent: Thursday, November 30, 2023 1:45 PM

To: Sharon Lucas; Ron Alexander

Cc: Nicona Butler

Subject: RE: Signatures needed for HVE Prequal Resolution

Lapprove. Thank you Sharon.

From: Sharon Lucas <Slucas@gcpud.org>
Sent: Thursday, November 30, 2023 12:16 PM

To: Ron Alexander <ralexander@gcpud.org>; Jesus Lopez <Jlopez@gcpud.org>

Cc: Nicona Butler < Nbutler@gcpud.org>

Subject: Signatures needed for HVE Prequal Resolution

Ron & Jesus, can you please approve the following memo and return to Nicona as soon as possible. We are trying to get this in the commission packet today for the next meeting.

Thank you, Sharon Lucas

From: Nicona Butler < Nbutler@gcpud.org Sent: Thursday, November 30, 2023 12:09 PM

To: Sharon Lucas <<u>Slucas@gcpud.org</u>>; Jesus Lopez <<u>Jlopez@gcpud.org</u>>

Subject: HVE PreQual

Legal has approved the Prequalification.

I have attached the final draft, we will need signatures on the memo and then I can submit to the Commission.

Nicona Butler, CPPB, NIGP-CPP

Procurement Officer

OFFICE 509.906.6933

EXT. 3232

EMAIL <u>nbutler@gcpud.org</u>



grantpud.org

Nicona Butler

From: Ron Alexander

Sent: Thursday, November 30, 2023 2:23 PM

To: Sharon Lucas; Jesus Lopez

Cc: Nicona Butler

Subject: Re: Signatures needed for HVE Prequal Resolution

Lapprove. I can't sign it on my phone.

From: Sharon Lucas <Slucas@gcpud.org>

Sent: Thursday, November 30, 2023 12:16:02 PM

To: Ron Alexander <ralexander@gcpud.org>; Jesus Lopez <Jlopez@gcpud.org>

Cc: Nicona Butler < Nbutler@gcpud.org>

Subject: Signatures needed for HVE Prequal Resolution

Ron & Jesus, can you please approve the following memo and return to Nicona as soon as possible. We are trying to get this in the commission packet today for the next meeting.

Thank you, Sharon Lucas

From: Nicona Butler <Nbutler@gcpud.org>
Sent: Thursday, November 30, 2023 12:09 PM

To: Sharon Lucas <Slucas@gcpud.org>; Jesus Lopez <Jlopez@gcpud.org>

Subject: HVE PreQual

Legal has approved the Prequalification.

I have attached the final draft, we will need signatures on the memo and then I can submit to the Commission.

Nicona Butler, CPPB, NIGP-CPP

Procurement Officer

OFFICE 509.906.6933

ехт. 3232

EMAIL nbutler@gcpud.org



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Motion was made by	and seconded by	naming the
following slate of officers effective January 1,	2024 and shall rema	in in effect until the next
election of officers:		

President Tom Flint Vice President Terry Pyle

Secretary Larry Schaapman Commissioner Judy Wilson Commissioner Nelson Cox

Motion was made by	and seconded by	authorizing the General
Manager/CEO to execute Change Order No. 8 to Contract 430-4179 with DataPro Solutions, Inc.,		
increasing the not-to-exceed contract amount by \$77,081.42 for a new contract total of \$601,593.31,		
extending the contract completion date to December 31, 2024, and resetting the delegated authority		
levels to the authority granted to the General Manager/CEO per Resolution No. 8609 for charges		
incurred as a result of Change Order No. 8	8.	

M E M O R A N D U M Date: November 15, 2023

TO: Rich Wallen, General Manager/Chief Executive Officer

VIA: Charles Meyer, Managing Director of Enterprise Technology

FROM: Paula Alley, District Representative

SUBJECT: Contract 430-4179, Change Order No. 8

Purpose:

To request Commission approval of Change Order No. 8 to Contract 430-4179 to increase the awarded contract price with DataPro Solutions, Inc. ("DataPro") and to extend the contract deadline for one year to December 31, 2024. DataPro provides licensing and support for File360.

Discussion:

DataPro provides Grant PUD licensing and support for File360. File360 is an enterprise software application that is critical to District business operations including holding our records and doing revision control of those records.

Annual maintenance for support and licensing of the File360 product is due and will be paid out of this Contract. DataPro requires a contract to be in place for annual support and licensing and cannot be paid by PO.

The existing software licenses and support for File360 expires on December 31, 2023. The District must license the application yearly to continue legal use of the product.

The initial Support and Maintenance Agreement for \$73,143.82 was signed on December 19, 2015. We project we will require this support and licensing for the foreseeable future or until File360 is replaced with a new solution. The cost for our yearly maintenance for 2024 will be \$77,081.42.

Justification:

The records capabilities of the File360 application are critical to the core business operations of Grant PUD, and provides a quality information system to manage the records that Grant needs to maintain and produce if a public request is made.

The District needs to renew the support and licensing because the District cannot source and implement a new solution that meets requirements in the current timeframe, and it would be cost prohibitive.

Change Order History:

See attached change order table.

Recommendation:

Commission approval of Change Order No. 8 to Contract 430-4179 to increase the awarded contract price and to extend the contract through December 31, 2024 with DataPro Solutions, Inc.

Legal Review:

See attached email(s).

From: <u>Charles Meyer</u>

To: Zachery Cooper; Paula Alley

Cc: <u>Michele Mesaros</u>

Subject: RE: Commission Memo Approval CO8 contract 430-4179

Date: Thursday, November 16, 2023 10:53:12 AM

Attachments: <u>image001.png</u>

Approved.

Charles Meyer

Managing Director of Enterprise Technologies

CELL 760.579.1171

EMAIL cmeyer@gcpud.org



grantpud.org

From: Zachery Cooper <zcooper@gcpud.org> **Sent:** Thursday, November 16, 2023 10:46 AM

To: Charles Meyer <cmeyer@gcpud.org>; Paula Alley <Palley@gcpud.org>

Cc: Michele Mesaros <mmesaros@gcpud.org>

Subject: Commission Memo Approval CO8 contract 430-4179

Good afternoon,

Can I get your approval of the commission memo for CO8 on contract 430-4179?

Thank you,

Zachery Cooper

Procurement Officer II

OFFICE 509.760.7617

EMAIL zcooper@gcpud.org

ADDRESS 14352 Hwy 243 S Bldg. 6, Beverly, WA 99321



grantpud.org

From: Paula Alley

To: Zachery Cooper; Charles Meyer

Cc: <u>Michele Mesaros</u>

Subject: RE: Commission Memo Approval CO8 contract 430-4179

Date: Thursday, November 16, 2023 10:51:58 AM

Attachments: <u>image002.jpg</u>

image003.png

Approved.

Paula Alley

Eenterprise Technology, Enterprise Applications Manager

OFFICE 509.754.7697

EXT. 2284

CELL. 509.948.6665 **EMAIL** palley@gcpud.org



grantpud.org

From: Zachery Cooper <zcooper@gcpud.org> **Sent:** Thursday, November 16, 2023 10:46 AM

To: Charles Meyer <cmeyer@gcpud.org>; Paula Alley <Palley@gcpud.org>

Cc: Michele Mesaros <mmesaros@gcpud.org>

Subject: Commission Memo Approval CO8 contract 430-4179

Good afternoon,

Can I get your approval of the commission memo for CO8 on contract 430-4179?

Thank you,

Zachery Cooper

Procurement Officer II

OFFICE 509.760.7617

EMAIL zcooper@gcpud.org

ADDRESS 14352 Hwy 243 S Bldg. 6, Beverly, WA 99321



grantpud.org

CHANGE ORDER NO. 8

Pursuant to Section 5, the following changes are hereby incorporated into this Contract:

- A. Description of Change: Increase the Contract Price and extend the Contract completion date.
 - 1. Contractor shall provide one additional year for Software Maintenance for the base modules in accordance with the Scope of Services Section 1.A, from January 1, 2024 through December 31, 2024, in the amount of \$41,081.42.
 - 2. Contractor shall provide one additional year for Support Services in accordance with Scope of Services Section 1.B,1, 2, and 3, from January 1, 2024 through December 31, 2024, in the amount of \$36,000.00.
- B. <u>Time of Completion</u>: The revised completion date shall be December 31, 2024.
- C. <u>Contract Price Adjustment</u>: As a result of this Change Order, the not to exceed Contract Price shall be increased by the sum of \$77,081.42 plus applicable sales tax. This Change Order shall not provide any basis for any other payments to or claims by the Contractor as a result of or arising out of the performance of the work described herein. The new total revised maximum Contract Price is \$601,593.31, including changes incorporated by this Change Order.
- D. Except as specifically provided herein, all other Contract terms and conditions shall remain unchanged.

Public Utility District No. 2 of Grant County, Washington	DataPro Solutions, Inc.		
Ву:	By:		
Name:	Name:		
Title:	Title:		
Date:	Date:		



Contract Title: Licensing and Support Services for File 360

			
Contract No.	430-4179	Award Date:	12/19/2015
Project Manager:	Paula Alley	Original Contract Amount:	\$73,143.82
District Representative (If Different):	Judy Johnson	Original Contract completion:	12/31/2016
Contractor:	DataPro Solutions	Total CO Cost Change Amt	\$528,449.49

CO#	Change Description	Approved by	Executed Date	Revised Completion Date	Cost Change Amount	Revised Contract Amount	Authority Level Tracking
1	Increase the Contract Price and Extend the Contract completion date.	Dept Mgr	12/01/16	12/31/17	\$63,442.42	\$136,586.24	\$63,442.42
2	Increase the Contract Price and Extend the Contract completion date.	Dept Mgr	12/14/17	12/31/18	\$64,046.15	\$200,632.39	\$127,488.57
3	Increase the Contract Price and Extend the Contract completion date.	Senior Mgr	12/21/18	12/31/19	\$64,635.12	\$265,267.51	\$192,123.69
4	Increase the Contract Price and Extend the Contract completion date.	Senior Mgr	12/02/19	12/31/20	\$65,207.82	\$330,475.33	\$257,331.51
5	Increase the Contract Price and Extend the Contract completion date.	Senior Mgr	10/26/20	12/31/21	\$65,295.43	\$395,770.76	\$322,626.94
6	Increase the Contract Price and Extend the Contract completion date.	Senior Mgr	10/28/21	12/31/22	\$66,525.85	\$462,296.61	\$389,152.79
7	Increase the Contract Price and Extend the Contract completion date.	Senior Mgr	11/29/22	12/31/23	\$62,215.28	\$524,511.89	\$451,368.07
8	Increase the Contract Price and Extend the Contract completion date.	Comm		12/31/24	\$77,081.42	\$601,593.31	\$528,449.49
	Total	Change Ord	der Cost Cha	ange Amount	528,449.49		

Motion was made by	and seconded by	authorizing transfer of
\$45,000,000.00 from the Electric Rev R&C Fund effective December 31, 20		ration portion of the Electric System
nac i una circulve December 31, 20	723.	

M E M O R A N D U M November 16, 2023

TO: Bonnie Overfield, Chief Financial Officer/Treasurer

VIA: Jennifer Sager, Senior Manager of Accounting/Controller

FROM: Angelina Johnson, Senior Manager of Treasury & FP/Deputy Treasurer

SUBJECT: Electric System R&C fund transfer

<u>Purpose</u>: Request approval from the Commission to transfer funds from the Electric System Revenue Fund into the Rate Stabilization portion of the Electric System Reserve & Contingency (R&C) Fund effective December 31, 2023, to decrement debt service coverage in a future year.

<u>Discussion</u>: The R&C Fund was established by Resolution 4112 in 1982 and provided that the Treasurer/Controller establish and maintain the fund, payments from the fund be authorized by the Commission, and for parameters surrounding deposits be established annually in the District's budget. The current adopted financial parameters as included annually in the budget detail that Electric Working Capital beyond \$25 million be transferred to the R&C Fund. Per the current financial forecast managed by Treasury the report presented to the Treasurer October 3rd, 2023, for review supported the available amount per this criterion is \$45 million.

<u>Justification:</u> The financial planning target for debt service coverage in the Electric System is currently set at 2.0x (1.25x per bond covenant). By transferring the recommended \$45 million into the Rate Stabilization portion of the R&C Fund the District would be decrementing the 2024 debt service coverage to place in the reserve fund to offset possible future shortfalls in debt service coverage.

Financial Justification: After the transfer based upon the current financial forecast the consolidated debt service coverage would be 3.37 for 2023, well above the requirement. This would allow in the future if debt service coverage were to drop below 1.25x in future years, funds could be utilized from the Rate Stabilization portion of the R&C Fund and treated as an increase in revenues to help the District reach the 1.25x requirement. If the above recommended transfer is approved, the balance in the R&C Fund would be \$145 million (current approved target being \$100 million). Additionally, the transfer would leave the Electric System Revenue Fund with an estimated remaining balance of \$148 million, allowing for a JLB issuance in January 2024 of \$85 million.

Recommendation: To seek authorization from the Commission to transfer \$45 million from the Electric Revenue Fund into the Rate Stabilization portion of the Electric System R&C Fund effective December 31, 2023.

Legal Review: Please see attached email.

Motion was made by	and seconded by	authorizing Interlocal
Agreement 230-12115 with Grant Co	unty Fire District 8 and Interloc	al Agreement 430-12116 with all
Grant County Fire Districts for fire pro	otection and emergency medicate	al services.

MEMORANDUM

TO:

Rich Wallen, General Manager/Chief Executive Officer

VIA:

Fallon Long, Managing Director Integrated Operational Services

FROM:

Dave Ponozzo, Manager Emergency Preparedness

SUBJECT:

Fire Protection Agreements with Grant County Fire Districts

<u>Purpose</u>: To request Commission approval of Interlocal Agreement 230-12115 with Grant County Fire District 8 and Interlocal Agreement 430-12116 with all Grant County Fire Districts for fire protection and emergency medical services.

<u>Discussion</u>: Grant PUD and the Grant County Fire Districts entered into agreements in 1980 and 1992 for fire protection services. We are recommending new agreements to add clarity where needed and ensure the language and contacts are current.

230-12115 with Grant County Fire District 8

The scope of this agreement is fire protection and emergency medical services for Wanapum Indian Village, located in Yakima County. Yakima County fire officials recognize their nearest facilities are too distant to respond within a reasonable time and agree with Grant County Fire District 8 providing these services. The original agreement, 230-031, was entered into in June 1980 (a copy is attached). This new agreement will replace the 1980 contract.

430-12116 with all Grant County Fire Districts (3, 4, 5, 6, 7, 8, 10, 12, 13, 14, and 15)

The scope of this agreement is fire protection and emergency medical services for all Grant PUD personnel and the property, buildings, and equipment owned or operated by Grant PUD within Grant County located within or adjacent to each of the fire districts. The original agreement, 430-472, was entered into in April 1992 (a copy is attached). This new agreement will replace the 1992 contract. Please note the original agreement included Fire District 11; however, they have since merged with Fire District 10 so they are no longer a separate party to the agreement.

The fire districts have all reviewed the new agreements and approve proceeding.

<u>Recommendation</u>: Commission approval of Interlocal Agreement 230-12115 with Grant County Fire District 8 and Interlocal Agreement 430-12116 with all Grant County Fire Districts for fire protection and emergency medical services.

Legal Review: See attached email.

Interlocal Agreement for Fire Protection and Emergency Medical Services for Wanapum Indian Village

This Interlocal Agreement ("Agreement"), effective January 1, 2024 ("Effective Date"), is by and between Public Utility District No. 2 of Grant County, Washington ("Grant PUD") and Grant County Fire District No. 8 ("Fire District"). Grant PUD and Fire District may be referred to herein individually as a "Party" and collectively as "Parties".

RECITALS

Whereas, Grant PUD is a municipal corporation in the State of Washington and is the owner of real and personal property located in Yakima County and within the boundaries of the Fire District. Such property is commonly known as the Wanapum Indian Village; and

Whereas, the Fire District is a municipal corporation in the State of Washington and is organized and equipped to give fire protection and emergency medical services within its boundaries. It is desirable and of benefit to Grant PUD that the Fire District provide such services for the Wanapum Indian Village; and

Whereas, the Parties are authorized to enter into a contract for fire protection services pursuant to RCW 52.30.020 and RCW Chapter 39.34; and

Whereas, it is the intent of the Parties that this Agreement supersede and replace Fire Protection Agreement 230-031, which was entered into by the Parties on June 18, 1980.

NOW, THEREFORE, in consideration of the mutual covenants herein, the Parties agree as follows:

1. Services

The Fire District shall provide fire protection and emergency medical services ("Services") necessary for the protection and safety of the property, buildings, and equipment owned or operated by Grant PUD within the area shown in Appendix A, located in Yakima County and commonly called Wanapum Indian Village. The duties and responsibilities of the Fire District under this Agreement shall be the same as those owed to the general public and other property owners.

2. Payment

Grant PUD shall pay the Fire District annually for the Services described in Section 1. On or before March 31st of each year, the Fire District shall submit an invoice to Grant PUD using the following formula:

Current assessed valuation of the parcels specified in Appendix A as set by the Yakima County Assessor multiplied by the most current Grant County general and EMS levy rates for Fire District #8 per \$1,000 of valuation:

- (Assessed valuation of the parcel / 1,000) x Fire #8 general levy rate
- + (Assessed valuation of the parcel / 1,000) x Fire #8 EMS levy rate
- = Payment due to Fire District

The Fire District shall submit invoices to <u>AccountsPayable@gcpud.org</u>. Grant PUD shall pay the Fire District within 30 days following receipt of the invoice.

3. Term and Termination

This Agreement shall be effective January 1, 2024, and shall extend for an indefinite period, calendar year to calendar year, unless terminated in accordance with this section. Either Party may terminate this Agreement by giving written notice to the other Party by October 1st of any year, thereby terminating the Agreement as of December 31st of the year in which notice is given.

4. Effect on Other Agreements

This Agreement shall supersede and replace Fire Protection Agreement 230-031, which was entered into by the Parties on June 18, 1980.

Nothing in this Agreement shall modify or alter the rights and responsibilities of the Parties arising under Contract No. 430-12116, Interlocal Agreement for Fire Protection and Emergency Medical Services.

5. Notifications

Any notice or other communication under this Agreement given by either Party shall be sent via email to the email address listed below, or mailed, properly addressed and stamped with the required postage, to the intended recipient at the address and to the attention of the person specified below and shall be deemed served when received and not mailed. Either Party may from time to time change such address by giving the other Party notice of such change.

Grant PUD	Fire District
Public Utility District No. 2	Grant County Fire District No. 8
of Grant County, Washington	Attn: Fire Chief
Attn: Manager, Emergency Preparedness	20643 Rd 22.5 SW
PO Box 878	Mattawa, WA 99349
Ephrata, WA 98823	matth@gcfd8.net
dponozzo@gcpud.org	
With a copy to Legal@gcpud.org	

6. Applicable Law

The Parties agree this Agreement shall be governed by the laws of the State of Washington, and that in the event legal action becomes necessary to enforce any provisions of this Agreement, venue shall be in the Superior Court of Grant County Washington or the U.S. District Court for the Eastern District of Washington. In the event either Party institutes a suit against the other to enforce any provisions of this Agreement, the substantially prevailing Party shall be entitled to reasonable attorneys' fees and reasonable costs of the suit in addition to any other relief allowed.

7. Amendments

Any modification of this Agreement or additional obligations assumed by either Party in connection with this Agreement shall be binding only if evidenced in writing and signed by each Party.

8. <u>Assignment</u>

Neither Party shall assign this Agreement or any of its rights hereunder without the other Party's prior written consent, which shall not be unreasonably withheld. This Agreement shall be binding not only upon the Parties hereto, but upon their assigns and successors as well.

9. Non-Waiver

No waiver of any provision of this Agreement, or any rights or obligations of either Party under this Agreement, shall be effective, except pursuant to a written instrument signed by the Party or Parties waiving compliance, and any such waiver shall be effective only in the specific instance and for the specific purpose stated in such writing. The failure of either Party to require the performance of any term of this Agreement or the waiver of either Party of any breach under this Agreement shall not operate or be construed as a waiver of any other provision hereof, nor shall it be construed as a waiver of any subsequent breach by the other Party hereto.

10. Counterparts and Electronic Signatures

The Parties may execute this Agreement, and any modification to this Agreement that is required to be executed, in any number of counterparts and through electronic signature. Each counterpart and electronic signature will be deemed an original and all counterparts will constitute one agreement binding on both Parties.

11. Filing

The Parties shall, in compliance with RCW 39.34, upon execution of this Agreement, file copies of the Agreement with their respective county auditors or, alternatively, post an electronic copy of the Agreement on the Parties' websites.

12. Authority/Warranties and Representations

Each Party represents that they have been duly authorized to execute this Agreement on behalf of the Parties.

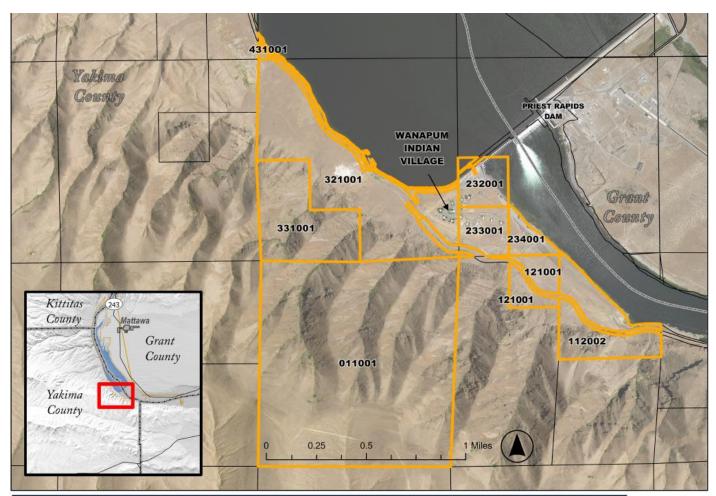
IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives on the date written below.

Public Utility District No. 2 of Grant County, Washington	Grant County Fire District No. 8		
By:	By:		
Name:	Name:		
Title:	Title:		
Date:	Date:		

APPENDIX A - SERVICE AREA

Parcel Numbers:

23130232001	23130321001	23131112002
23130233001	23130331001	23131121001
23130234001	23131011001	23143431001



WANAPUM INDIAN VILLAGE - PARCELS

This mapidata was created for informational, planning, reference and guidance purposes only. Grant PUD makes no warranty, expressed or implied related to the accuracy or content of these materials. NR GIS - 2023



FIRE PROTECTION AGREEMENT FOR WANAPUM INDIAN HOUSING

THIS AGREEMENT between Public Utility District No. 2 of Grant County and Fire Protection District No. 8 of Grant County is entered into for the protection of the Wanapum Indian Housing located near Priest Rapids Dam in Yakima County, State of Washington.

Recital:

The Wanapum Indian Housing is located in Yakima County, State of Washington. The nearest fire protection available in Yakima County is not effective as it is too distant to respond within a reasonable time. Yakima County fire officials recognize the problem and do not object to Grant County Fire Protection District No. 8 providing this protection.

NOW, THEREFORE, IT IS AGREED by the parties hereto as follows:

Ι

The Fire Protection District shall provide fire protection services necessary for the protection and safety of the buildings and equipment located within an area in Yakima County, commonly called Wanapum Indian Housing.

H

Operating procedures governing notification of fire emergencies, the response thereto, and the mutual assistance to be available from each party hereto, shall be developed and placed in effect by the manager of the Fire Protection District and the Hydro Project Engineer.

III

For said fire protection services, the Public Utility District shall, on or before June 30 of each year, pay the Fire Protection District No. 8 a sum as computed by the formula hereinafter set forth.

FORMULA:

Valuation as set by the Yakima County Assessor times \$1.00 per \$1,000 of valuation.

1980 Valuation as established by Yakima County Assessor \$118,000

This contract may be terminated on thirty (30) days written notice by either party to the other, but if not so terminated, this contract shall continue upon a year to year basis thereafter until termination by thirty (30) days written notice from one party to the other, and annual payments will be made to the Fire Protection District by the Public Utility District computed according to the formula set forth above.

DATED this 16 day of June

PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY

ATTEST:

By Enchalters on Secretary

FIRE PROTECTION DISTRICT NO. 8

OF GRANT COUNTY

ATTEST:

Interlocal Agreement for Fire Protection and Emergency Medical Services for Grant PUD Facilities

This Interlocal Agreement ("Agreement"), effective January 1, 2024 ("Effective Date"), is by and between Public Utility District No. 2 of Grant County, Washington ("Grant PUD") and Grant County Fire District Nos. 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, and 15 ("Fire Districts"). Grant PUD and Fire Districts may be referred to herein individually as a "Party" and collectively as "Parties".

RECITALS

Whereas, Grant PUD is a municipal corporation in the State of Washington and is the owner of real and personal property located in Grant County and within the boundaries of the Fire Districts; and

Whereas, each Fire District is a municipal corporation in the State of Washington and is organized and equipped to give fire protection and emergency medical services within its boundaries, and Grant PUD desires that each Fire District provide such services for Grant PUD property and all persons on such property within the boundaries of each Fire District; and

Whereas, the Parties are authorized to enter into a contract for fire protection services pursuant to RCW 52.30.020 and RCW Chapter 39.34; and

Whereas, it is the intent of the Parties that this Agreement supersede and replace Cooperative Fire Protection Agreement 430-472, which was entered into by the Parties in April 1992.

NOW, THEREFORE, in consideration of the mutual covenants herein, the Parties agree as follows:

1. Services

1.1. Each Fire District shall provide fire protection and emergency medical services necessary for the protection and safety of Grant PUD personnel and the property, buildings, and equipment owned or operated by Grant PUD located within or adjacent to such Fire District (see Appendix A, Service Areas). Each Fire District shall make reasonable efforts to protect Grant PUD poles located within such Fire District's boundaries where burnout operations are being used unless firefighter and/or public safety are at risk. Each Fire District shall take measures to prevent fires outside a substation from entering the substation commensurate with measures the Fire District would take to protect a residential structure.

The duties and responsibilities of the Fire District under this Agreement shall be the same as those owed to the general public and other property owners.

1.2. Grant PUD and Fire Districts 8 and 10 shall coordinate annually to review the fire response plans for Wanapum Dam and Priest Rapids Dam and tour the facilities.

2. Term and Termination

- 2.1 This Agreement shall be effective January 1, 2024, and shall extend for an indefinite period, calendar year to calendar year, unless terminated in accordance with this section.
- 2.2 This Agreement may be terminated by mutual written agreement of all Parties by October 1st of any year, thereby terminating the Agreement as of December 31st of the year in which notice is given.

2.3 A Fire District may withdraw from this Agreement by giving written notice to the other Parties by October 1st of any year, thereby terminating the withdrawing Party's rights and obligations under the Agreement as of December 31st of the year in which notice is given. The Agreement shall continue between the remaining Parties.

3. Payment

- 3.1. Grant PUD shall pay the Fire Districts annually for services described in Section 1. The annual payment amount will be calculated in accordance with Section 3.2 below. The Fire Districts are responsible for determining the distribution of each payment. On or before January 1st of each year, the Fire Districts shall provide written notice to Grant PUD at the address specified in Appendix B, directing the appropriate distribution of the payment amongst the Fire Districts for that particular year. Grant PUD shall make the payment accordingly by January 31st or 30 days following receipt of the notification, whichever is later.
- 3.2. For all services to be provided in 2024 and subsequent years, Grant PUD shall pay the Fire Districts a sum as computed by the following formula:

Formula:
$$((A - B) \times C) - D = E$$

- A = Grant County's portion of the PUD Privilege Tax in the preceding calendar year per Grant County Board of Commissioners resolution and the provisions of Chapter 54.28 RCW.
- B = Grant County's portion of the PUD Privilege Tax in the preceding calendar year distributed to cities and towns of Grant County per Grant County Board of Commissioners resolution and the provisions of Chapter 54.28 RCW.
- C = A constant factor of 0.10
- D = Grant County's portion of the PUD Privilege Tax in the preceding calendar year distributed directly to Fire Districts per Grant County Board of Commissioners resolution and the provisions of Chapter 54.28 RCW.
- E = Payment due to Fire Districts

4. <u>Effect on Other Agreements</u>

This Agreement shall supersede and replace Fire Protection Agreement 430-472, which was entered into by the Parties in April 1992.

Nothing in this Agreement shall modify or alter the rights and responsibilities of Grant PUD and Grant County Fire District No. 8 arising under Contract No. 230-12115, Interlocal Agreement for Fire Protection and Emergency Medical Services for Wanapum Village.

5. Notifications

Any notice or other communication under this Agreement given by either Party shall be sent via email or mailed, properly addressed, and stamped with the required postage, to the intended recipient at the address and to the attention of the person specified in Appendix B and shall be deemed served when received and not mailed. Either Party may from time to time change such address by giving the other Party notice of such change.

6. Applicable Law

The Parties agree this Agreement shall be governed by the laws of the State of Washington, and that in the event legal action becomes necessary to enforce any provisions of this Agreement, venue shall be in the Superior Court of Grant County Washington or the U.S. District Court for the Eastern District of Washington. In the event either Party institutes a suit against the other to enforce any provisions of this Agreement, the substantially prevailing Party shall be entitled to reasonable attorneys' fees and reasonable costs of the suit in addition to any other relief allowed.

7. Amendments

Any modification of this Agreement or additional obligations assumed by either Party in connection with this Agreement shall be binding only if evidenced in writing and signed by each Party.

8. Assignment

Neither Party shall assign this Agreement or any of its rights hereunder without the other Party's prior written consent, which shall not be unreasonably withheld. This Agreement shall be binding not only upon the Parties hereto, but upon their assigns and successors as well.

9. Non-Waiver

No waiver of any provision of this Agreement, or any rights or obligations of either Party under this Agreement, shall be effective, except pursuant to a written instrument signed by the Party or Parties waiving compliance, and any such waiver shall be effective only in the specific instance and for the specific purpose stated in such writing. The failure of either Party to require the performance of any term of this Agreement or the waiver of either Party of any breach under this Agreement shall not operate or be construed as a waiver of any other provision hereof, nor shall it be construed as a waiver of any subsequent breach by the other Party hereto.

10. Counterparts and Electronic Signatures

The Parties may execute this Agreement, and any modification to this Agreement that is required to be executed, in any number of counterparts and through electronic signature. Each counterpart and electronic signature will be deemed an original and all counterparts will constitute one agreement binding on both Parties.

11. Filing

The Parties shall, in compliance with RCW 39.34, upon execution of this Agreement, file copies of the Agreement with their respective county auditors or, alternatively, post an electronic copy of the Agreement on the Parties' websites.

12. Authority/Warranties and Representations

Each Party represents that they have been duly authorized to execute this Agreement on behalf of the Parties.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives on the date written below.

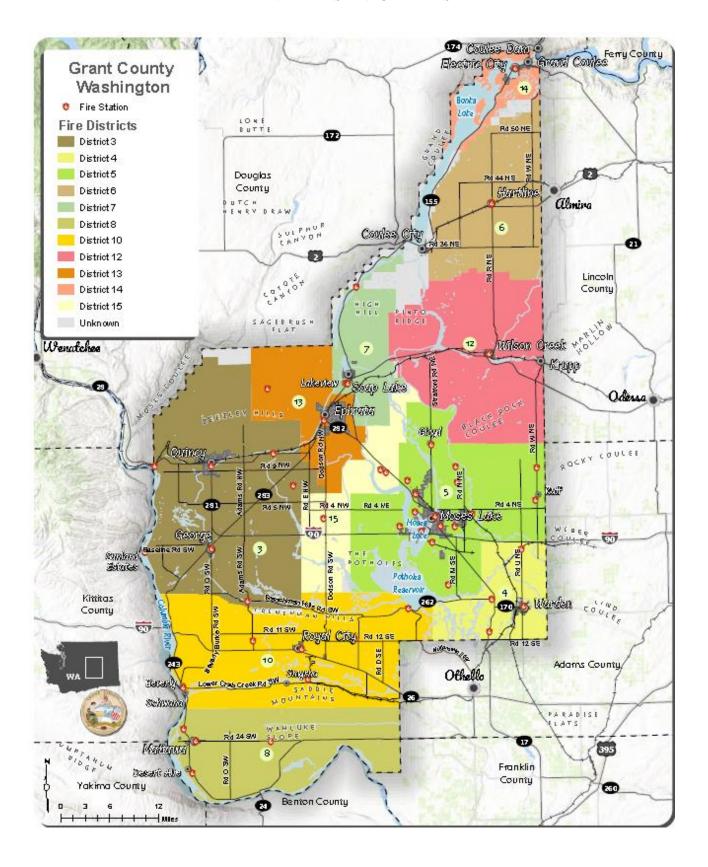
Public Utility District No. 2 of Grant County, Washington	Grant County Fire District No. 3
Ву:	By:
Name:	Name:
Title:	Title:
Date:	Date:
Grant County Fire District No. 4	Grant County Fire District No. 5
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:
Grant County Fire District No. 6	Grant County Fire District No. 7
Ву:	By:
Name:	Name:
Title:	Title:
Date:	Date:

Grant County	Fire D	istrict	No.	8
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Grant County Fire District No. 10

Ву:	By:
Name:	Name:
Title:	Title:
Date:	Date:
Grant County Fire District No. 12	Grant County Fire District No. 13
Ву:	By:
Name:	Name:
Title:	Title:
Date:	Date:
Grant County Fire District No. 14	Grant County Fire District No. 15
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

APPENDIX A – SERVICE AREAS



APPENDIX B – ADDRESSES FOR NOTICES

Grant PUD

Public Utility District No. 2 of Grant County, Washington

Attn: Manager, Emergency Preparedness

PO Box 878

Ephrata, WA 98823

dponozzo@gcpud.org

With a copy to Legal@gcpud.org

Fire Districts - Administrator for Annual Payment Allocation

Grant County Fire District No. 8

Barb Davis

barb@gcfd8.net

Fire Districts – Legal Notices

Grant County Fire District No. 3

Attn: Fire Chief

1201 Central Ave South Quincy, WA 98848

aleibelt@gcfd3.net

Grant County Fire District No. 4

Attn: Fire Chief PO Box 368

Warden, WA 98857

Gcfd401@outlook.com

Grant County Fire District No. 5

Attn: Fire Chief

11058 Nelson Rd NE

Moses Lake, WA 98837

dsmith@gcfd5.org

Grant County Fire District No. 6

Attn: Fire Chief 935 Willard Street Hartline, WA 99135

Grantfire6@gmail.com

Grant County Fire District No. 7

Attn: Fire Chief PO Box 1449

Soap Lake, WA 98851

firechief@gcfd7.org

Grant County Fire District No. 8

Attn: Fire Chief 20643 Rd 22.5 SW Mattawa, WA 99349 matth@gcfd8.net Grant County Fire District No. 10

Attn: Fire Chief

PO Box 220

Royal City, WA 99357 chief@grantfire10.com

Grant County Fire District No. 12

Attn: Fire Chief

PO Box 73

Wilson Creek, WA 98860

scottmortimer59@gmail.com

Grant County Fire District No. 13

Attn: Fire Chief

PO Box 812 Ephrata, WA 98823

chiefstucky@grant13firerescue.org

Grant County Fire District No. 14

Attn: Fire Chief

PO Box 282

Electric City, WA 99123

Marjorie618@gmail.com

Grant County Fire District No. 15

Attn: Fire Chief 11058 Nelson Rd NE

Moses Lake, WA 98837

dsmith@gcfd5.org

COOPERATIVE FIRE PROTECTION AGREEMENT

THIS AGREEMENT between Public Utility District No. 2 of Grant County, Washington (District) and each of the existing Grant County, Washington Fire Protection Districts (Fire Protection Districts), is entered into pursuant to RCW 52.30.020 and RCW Chapter 39.34.

RECITALS:

Public Utility Districts are authorized to enter into contracts for fire protection services with Fire Protection Districts pursuant to RCW 52.30.020 and RCW Chapter 39.34.

The Fire Protection Districts are willing to provide the District fire protection services on the terms and conditions herein.

NOW, THEREFORE, IT IS AGREED by the parties hereto as follows:

- Fire Protection Services. Each Fire Protection District shall provide fire protection services necessary for the protection and safety of the buildings, equipment and other property owned or operated by the District, located within or adjacent to such Fire Protection District, and for the protection and safety of District personnel, excluding however, properties located within the city limits of municipal fire departments and such fire protection services as the District's Manager specifies in writing will be performed by the District's staff and equipment. Should any specialized fire fighting equipment be required for the protection of District property and personnel, the District may purchase the same and make it available to the Fire Protection Districts at a location to be determined by the District. The duties and responsibilities of the Fire Protection Districts under this Agreement shall be the same as those owed to the general public and other property owners within the boundaries of the particular Fire Protection District. Nothing in this agreement shall modify or alter the rights and responsibilities of the District or Fire Protection District No. 8 arising under Contract No. 230-031, dated June 16, 1980.
- 2. Operating Procedures. Any specific operating procedures governing notification of District fire emergencies, the response thereto, or the mutual assistance to be available from each party hereto for protection of District property will be jointly developed by the District and the individual Fire Protection Districts.

Compensation.

A. For fire protection services to be provided during the period of January 1, 1992 through December 31, 1992, the District shall make payment of Eighty-Five Thousand Dollars (\$85,000.00) to the Fire Protection Districts. The Fire Protection Districts shall agree on a distribution of the payment amongst

each of them and notify the District in writing of the same. The District shall make payment upon receipt of: (1) the notification; and (2) copies of this Agreement duly executed by each of the Fire Protection Districts.

B. For fire protection services to be provided for 1993 and subsequent years, the District shall on or before January 31st of each such year pay to the Fire Protection Districts, a sum as computed by the formula hereinafter set forth; provided however, that this sum shall be reduced by any amount which may be paid or provided to the Fire Protection Districts out of the privilege taxes paid by the District and distributed to the counties under the provision of RCW 54.28 et seq.

FORMULA: $(A - B) \times C = D$

- A Amount of privilege tax paid in the preceding calendar year from the revenues of the District and returned to Grant County for distribution by the State of Washington.
- B = Amount of privilege tax paid in the preceding calendar year to the cities and towns of Grant County.
- C = A constant factor of .10.
- D = Payment to the undersigned Fire Protection Districts for the calendar year.

Example:
$$943,020.05 - 76,810.16 = 866,219.89 \times .10 = 86,621.99$$
(A) (B) (C) (D)

- 4. <u>Distribution of Payment</u>. The annual payment as calculated pursuant to Section 3 shall be allocated to each Fire Protection District based on the distribution supplied to the District and unanimously agreed to by the Fire Protection Districts on or before December 31st of the preceding year. In the event the Fire Protection Districts do not provide the District with the payment distribution by December 31, the District will make payment into a separate account, within the District, to accrue interest earnings until distribution. Upon distribution, both interest earnings and principal will be remitted to the Fire Protection Districts. The District shall have no obligation to contract with or make any payment (except as otherwise required by RCW 4.24.314) to any Fire Protection District except as provided herein.
- 5. <u>Term of Agreement</u>. This Agreement is effective January 1, 1992 and shall continue in effect through December 31, 1992. Thereafter it shall be on a year to year basis unless terminated by the District or any Fire Protection District by giving written notice by October 1st of any year, thereby terminating the Agreement as of the following December 31st of the year in which notice is given.
- 6. <u>Notices</u>. All notices required or permitted hereunder shall be in writing and may be either delivered personally or mailed. All notices to the Fire Protection Districts shall be sent by mail or personally delivered to the chief of each Fire Protection District or such other individual as may be designated

in writing by the unanimous agreement of all Fire Protection Districts. All notices to the District shall be delivered to the District's Manager, whose mailing address is Post Office Box 878, Ephrata, Washington 98823.

- 7. <u>Venue</u>. In the event any suit or other legal proceeding is brought to enforce the terms of this Agreement, venue for said action shall be in the Superior Court of Grant County, Washington.
- 8. <u>Successors and Assigns</u>. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their successors and assigns.
- 9. <u>Assignment</u>. No assignment of any right or obligation of a party to this Agreement shall be made without the written consent of the District.
- 10. <u>Entire Agreement</u>. The foregoing constitutes the entire agreement between the parties and no modification of any of the provisions hereof shall be binding upon either party unless in writing, signed by the party against whom such modification is sought to be enforced.
- 11. <u>Compliance with RCW Chapter 39.34</u>. The District and each of the Fire Protection Districts shall fully comply with the requirements of RCW Chapter 39.34, including but not limited to approving this Agreement by resolution duly adopted by their respective governing bodies. This Agreement shall be filed with the Ephrata City Clerk, the Grant County Auditor and the Secretary of State as required by RCW 39.34.040.
- 12. <u>Non-Waiver</u>. The failure of any party to insist upon or enforce strict performance of the other party of any of the provisions of this Agreement or to exercise any rights under this Agreement, shall not be construed as a waiver or relinquishment to any extent of such party's right to assert or rely upon such provisions or rights in any other instance.
- 13. <u>Authority</u>. Each party represents that he or she has been duly authorized to execute this Agreement on behalf of the parties.
- 14. <u>Counterpart Originals</u>. This Agreement may be executed in counterparts but shall not be effective until each of the Fire Protection Districts has properly executed and returned its signature page to the District. A copy with all original executed signature pages affixed shall constitute the original Agreement. The date of execution shall be the date of the final party's signature.

and seconded by	authorizing the General
to Contract 430-10759 for	Cooperative Service Agreement
contract amount by \$684,	,244.88 for a new contract total of
letion date to December 3	1, 2025, and resetting the
ranted to the General Man	nager/CEO per Resolution No.
ndment No. 3.	
1	to Contract 430-10759 for contract amount by \$684, letion date to December 3 ranted to the General Mar

MEMORANDUM

TO: Rich Wallen, General Manager/CEO

VIA: Jeff Grizzel, Chief Operations Officer for Jeff Grizzel
Ross Hendrick, Senior Manager Environmental Affairs Ross Hendrick

Tom Dresser, Fish, Wildlife and Water Quality Manager Thomas Q Dresser

FROM: Chris Mott, Fish and Wildlife Supervisor Top for C. Mott

Nathan Dietrich, Senior Biologist Top for N. Dietrich

SUBJECT: Contract 430-10759, Amendment (Change Order) No. 3

<u>Purpose</u>: To request Commission approval of Change Order No. 3 to Contract 430-10759 to increase the contract amount by \$684,244.88.

<u>Discussion</u>: Terms and Conditions 1.9 and 1.17 of the NMFS Biological Opinion for the Priest Rapids Project requires the Public Utility District No. 2 of Grant County, Washington (District) to fund an overall programmatic approach to reduce avian-related mortalities to salmon and steelhead populations affected by the Priest Rapids Project (Project) and to maintain avian wire arrays across the powerhouse and tailraces of Priest Rapids and Wanapum dams.

In 2020, the District entered into a five-year Cooperative Service Agreement with the US Department of Agriculture, Animal and Plant Health Inspection Service—Wildlife Service (USDA-APHIS-WS) to conduct avian predator control activities and maintain the tailrace wire arrays within the Project. Annually, under this Cooperative Agreement, a Work Plan/Financial Plan is developed by USDA-APHIS-WS and then reviewed and approved by District Fish, Wildlife, and Water Quality Staff (FWWQ Staff).

FWWQ Staff has reviewed and recommends the approval of the 2024/2025 Work Plan/Financial Plan with USDA-APHIS-WS which contains the activities and costs associated with performing avian predator control activities throughout the Priest Rapids Project, removal of northern pikeminnow in the tailrace of Wanapum Dam, as well as avian wire replacement at Wanapum Dam in 2024 and 2025. The specific tasks contained in the 2024/2025 Work Plan/Financial Plan ensures that the District's remains in compliance with Terms and Conditions 1.9 and 1.17 of the NMFS Biological Opinion, Priest Rapids Salmon and Steelhead Settlement Agreement and FERC License Order for the Priest Rapids Project.

<u>Justification</u>: USDA-APHIS-WS is the only entity (at this time) that can conducted avian predator hazing and lethal removal because they have the necessary agreements and legal authorities to perform this work and have also conducted the necessary environmental review processes to comply with the National Environmental Policy Act (NEPA). Also as stated above, via this contract the District is able to ensure compliance with its environmental stewardship responsibilities.

<u>Financial Considerations</u>: The total cost to the District shall not exceed \$684,244.88 and shall cover work performed between January 1, 2024—December 31, 2025. The new total not-to-exceed amount \$1,557,636.80. Sufficient funds are budgeted in 2024 and 2025 under Cost Center EB4210. The percent increase from 2023 to 2024, for predator control activities is 3.2%. The percent increase from 2024 to 2025 for predator control activities only, is 3.9% with an additional \$32,710.88 for wire repair work at Wanapum Dam.

Change Order History: See attached Change Order table.

Legal Review: See attached email.

Recommendation: Commission approval of Change Order No. 3 to Contract 430-10759 to \$684,244.88.

ANNUAL WORK PLAN/FINANCIAL PLAN for CY 2024 & 2025

Cooperator: Public Utility District No. 2 of Grant County, Washington (District)

District Representative: Nathan Dietrich, (509) 670-9428, Ndietrich@gcpud.org

Cooperative Service Agreement No.: 24-7353-2179-RA

District Agreement No.: 430-10759, Amendment No. 3

WBS Element: AP.RA.RX53.73.0225

Location: Priest Rapids Project Area, Wanapum Dam Project Area, Priest Rapids Fish Hatchery

Dates: January 1, 2024 through December 31, 2024 & January 1, 2025 through December 31, 2025

In accordance with the Cooperative Service Agreement 24-7353-2179-RA (2021 signature year) between the Public Utility District No. 2 of Grant County, WA (District) and the United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) Wildlife Services (WS), this Work Plan/Financial Plan sets forth the objectives, activities, and budget of the wildlife damage management program for the period of January 1, 2024 through December 31, 2024 & January 1, 2025 through December 31, 2025.

Program Concepts

Wildlife in general are attracted to three things: food, water, and cover. Of the three necessities, food is by far the greatest attractant. Once attracted to an area, wildlife can be especially difficult to disperse from the area. That consistent presence in an area may lead to damage issues being caused by wildlife. Promptness and persistence by personnel trained in wildlife damage management is necessary. When WS personnel evaluate management methods, each damage issue is afforded a systematic approach to decision making referred to as the WS Decision Model (WS Directive 2.201). Specialists assess the problem, evaluate management methods, formulate a management strategy, provide assistance, and monitor and evaluate results. When formulating a strategy and providing assistance, WS Specialists utilize an Integrated Wildlife Damage Management (IWDM) approach (WS Directive 2.105). The IWDM encompasses the integration and application of all approved damage management methods, as applicable to reduce wildlife damage. The selection of wildlife damage management methods and their application will consider the species causing damage, the magnitude, geographic extent, duration, frequency, and likelihood of recurring damage.

At the dams, out-migrating salmonids are stacked into a bottleneck, or are disoriented by the current which provides the food attractant for piscivorous birds and predatory fish, creating an artificial concentration. When congregating at the artificial bottleneck, piscivorous birds and predatory fish are able to forage on and have a significant impact on the survivability of the salmonids. By using an IWDM approach, the birds that are attracted to the dams are taught that is not necessarily a safe area to be and leave the vicinity. Repetitive use of the same method decreases the fear, which also decreases their willingness to disperse, which is termed habituation. When birds have become habituated to a

method, they not only do not disperse, but they become an attractant for other gregarious birds, which increases the impact on salmonid survivability. By utilizing approved methods in varying applications, the likelihood of wildlife becoming habituated to the harassment tools decreases.

Program Objective/Goals

The program objective is to provide assistance to the District when they experience conflicts caused by various species of wildlife. This assistance may be in the form of technical assistance (habitat modifications or exclusion) or direct control (repulsion or removal).

The overall objectives of wildlife damage management are to:

- Reduce damage to a tolerable level,
- Use methods that are low risk for people, non-target animals, and the environment,
- Implement habitat modifications, exclusion, and/or direct control diligently and economically,
- Use humane and ethical methods when capturing and removing wildlife.

The specific goals are to conduct a wildlife damage management program:

- To reduce damage/loss to out-migrating juvenile salmonids caused by gulls, cormorants, terns, and other piscivorous birds, and predatory fish at Priest Rapids and Wanapum dams, tailraces, and forebays.
- To reduce/alleviate predation on salmonid smolt caused by gulls and other piscivorous birds at Priest Rapids Hatchery, including the holding ponds, release channel, and the immediate area where the release channel enters the Columbia River.
- To reduce damage to facilities and equipment caused by nuisance wildlife species at District sub-stations in Grant County, Wanapum and Priest Rapids Dam sites, Priest Rapids Hatchery, and other District property and facilities as needed.
- To replace/repair a portion of the avian deterrent wires over the tailrace area at Wanapum Dam in order to reduce predation to juvenile salmonids by piscivorous birds.

Plan of Action

The specific goals of the wildlife control activities will be accomplished in the following manner:

1. WS Personnel and District Project Sites

WS will assign WS Wildlife Specialists on a seasonal basis. The Specialists will include bird hazing crews, predatory fish removal crews, and a Project Leader.

A. Project Leader

WS will assign a Project Leader to ensure that WS-responsibilities outlined in this Work Plan / Financial Plan (WP/FP) are accomplished at the field level. The Project Leader will provide field level oversight over the piscivorous bird hazing activities, and the predatory fishing program at

Wanapum Dam and Priest Rapids Dam. The Project Leader will also conduct nuisance bird/mammal damage management activities as needed. The responsibilities of the Project Leader will overlap during the project year.

Project Leader duties for the piscivorous bird project include, but are not limited to, weekly meetings with project Representative to coordinate program activities, data collection and entry, equipment repair, pyrotechnic and other equip transfer, duties mandated by either the WS District or State offices, shift coverage, shift scheduling, and general oversight from the field of the wildlife damage management program as agreed upon between District and WS. Project Leader duties that may occur outside of the piscivorous bird season include, but are not limited to, coordinating meetings, seasonal position recruitment, presentations, personal training, training seasonal employees, equipment repair, data collection, data entry, administrative support, procurement, project startup and project shut down. The project leader will divide time between Wanapum and Priest Rapids dams as needed for the duration of the project.

B. Seasonal Piscivorous Bird Hazing at Wanapum Dam and Priest Rapids Dam

Table 1. Outlines the bird hazing personnel for Wanapum Dam and Priest Rapids Dam for the 2024 and 2025 Piscivorous Bird Seasons.

and 2025 i iscivorous bira scasoris.					
Wanap					
AM Boat Crew	Monday - Friday	Mid-April thru June	8 hours per shift		
PM Boat Crew	Monday - Friday	Mid-April thru Mid-June	8 hours per shift		
Weekend Boat Crew	Saturday & Sunday	Mid-April thru Mid-June	12 hours per shift		
Priest Rapids Dam Piscivorous Bird Hazing Coverage					
AM Boat Crew	Monday - Friday	Mid-April thru June	8 hours per shift		
PM Boat Crew	Monday - Friday	Mid-April thru Mid-June	8 hours per shift		
Weekend Boat Crew	Saturday & Sunday	Mid-April thru Mid-June	12 hours per shift		

WS Specialists will be assigned to the Wanapum Dam and Priest Rapids Dam to conduct piscivorous bird damage management activities. WS will provide a minimum of three 2-person hazing crews to cover Wanapum Dam. WS will also provide a minimum of three 2-person hazing crews to cover Priest Rapids Dam.

• Mid-April 2024 through June 2024 and Mid-April 2025 through June 2025 (except federally recognized holidays) for a total of nine weeks. The coverage consists of 16 hours a day, five days a week and 12 hours a day during the weekend shifts for seven weeks, and eight hours a day, five days a week for two additional weeks. The actual start and end dates are to be determined by the District Representative and WS Project Leader after the activation of this WP/FP.

WS will use boats to perform most piscivorous damage management activities at Wanapum Dam and Priest Rapids Dam respectively. The use of the boat will be determined by the WS boat operator on site. Factors that influence whether the boat will be used include, but are not limited to, weather conditions, water conditions, presence of certain avian species, and any safety concerns. During periods of weather that boat operations are deemed unsafe, the crews will haze birds from the shore and deck of the dam. Bird damage management activities will begin near sunrise and continue throughout the day until the end of the second eight-hour shift. Start times may vary at the discretion

of the boat captain or the District Representative. However, WS will not split the eight-hour hazing shift once started.

C. Predatory Fish Removal Efforts

Table 2. Outlines the fishing personnel and when they fish from the boat or from the deck of the dams for the 2024 and 2025 Predatory Fish Removal Season.

dams for th	danis for the 2024 and 2025 Fredatory rish Kemovar Season.						
	Mid-April thru Mid-May						
Fisher 1	Boat Fishing	Monday - Friday	8 hours per shift				
Fisher 2	Boat Fishing	Monday - Friday	8 hours per shift				
Fisher 3	Boat Fishing	Monday - Friday	8 hours per shift				
	Mid-May thru Mid-August						
Fisher 1	Boat Fishing	Monday - Friday	8 hours per shift				
Fisher 2	Boat Fishing	Monday - Friday	8 hours per shift				
Fisher 3	Deck Fishing	Monday - Friday	8 hours per shift				
Fisher 4	Deck Fishing	Monday - Friday	8 hours per shift				
Mid-August thru Mid-September							
Fisher 1	Boat Fishing	Boat Fishing	8 hours per shift				
Fisher 2	Boat Fishing	Boat Fishing	8 hours per shift				
Fisher 3	Boat Fishing	Boat Fishing	8 hours per shift				

WS will provide Specialists to conduct a predatory fish removal program. The fishing crew will work one eight-hour shift per day (five days a week except on federally recognized holidays) for a total of 20 weeks. The fishing crew will work their shift during the time of day or night when catch rates are known to be the highest based on past and current data. Fishing will occur primarily at the Wanapum Dam tailrace with flexibility to move to other waters within the project boundaries. A boat may be used to access waters not fishable by shore. The time of day and the location that fishing occurs will be coordinated between the Project Leader and the District Representative.

- Mid-April Mid-September 2024 and 2025 (except federally recognized holidays) for a total of 20 weeks. Coverage consists of eight hours per day for five days a week. The actual start date and end date are to be determined by the District Representative and WS Project Leader after the activation of this WP/FP.
- For 5 PPs during fishing coverage, the fishing crew will consist of 4 fishermen to provide the best coverage. During that time, fishing crews will fish from the deck and from a boat.

D. Priest Rapids Hatchery

WS Specialists assigned to Priest Rapids Dam hazing project, or the WS Project Leader may provide limited coverage in emergency situations at the Priest Rapids Hatchery, provided the work falls within the normal schedule of the WS Specialist crews described in Plan of Action for Priest Rapids Dam, or Nuisance Wildlife.

- E. Repair/Replace Avian Deterrent Wire at Wanapum Dam (2025)
- A minimum of 14 WS Specialists/Biologists will be assigned to the avian deterrent wire install project at Wanapum Dam that is currently scheduled for March 2025.
- As many as 13 wires have been broke or disconnected over the years. The plan is for WS will reinstall avian deterrent wires on the same location they were originally located.
- WS will provide the vehicle and the basic supplies and equipment. Grant PUD understands additional supplies and equipment may need to be purchased under this agreement to replace consumed, damaged or lost supplies/equipment or for specialized situations. Any items not consumed by the end of the agreement will remain in the possession of WS.
- WS will provide two boats for use on the project. One boat will be used to replace wires, while the second boat will be used as a "safety" boat.

F. Nuisance Wildlife

If funding allows, the Project Leader may conduct an intermittent nuisance wildlife damage management program on District property, dams, and other facilities (dependent on need and the availability of specialist). Work will be conducted at the discretion of the Project Leader or determined by the project funding for the duration of the WP/FP.

To reduce the damage caused by nuisance wildlife, WS will use an IWDM approach that includes, but it is not limited to, hazing with pyrotechnics, trapping, and selective removal to reinforce non-lethal hazing, providing information on possible exclusion systems, and identifying long-term habitat modification.

• January 1 – December 31, 2024 and 2025 Specialists may provide nuisance wildlife damage management on an intermittent basis on District properties. Coordination of nuisance work will be between the District Representative and Project Leader.

2. Techniques and Methods

A variety of techniques and methods are available for all three facets of the program. The techniques and methods are not necessarily the same for managing smolt depredation by birds, predatory fish, or nuisance wildlife.

- Piscivorous bird hazing will utilize audible and visual methods. Techniques for hazing may include, but not be limited to the use of boats/vehicles, small Unmanned Aircraft Systems (UAS), physical harassment, firearms harassment, electronic calling devices, propane cannons, effigies, and pyrotechnics. The types of pyrotechnics include but are not limited to 15mms, shell crackers, and 18mm CAPA cartridges.
- Selective removal may be conducted in conjunction with the existing bird hazing efforts
 as part of the IWDM approach. When selective removal is utilized as a method, lethal take
 will be conducted with a shotgun in accordance with the Depredation Permit issued by the

U.S. Fish and Wildlife Service (USFWS).

- The predatory fish removal program will involve rod and reel fishing. Fishing gear utilized is at the discretion of WS to maximize catch rates. Fishermen will utilize the decks of the dams, the shoreline of the District pools, or a boat to accomplish higher catch rates.
- Nuisance wildlife damage management techniques may include but are not limited to the use of technical assistance to improve and expand non-lethal methods, egg oiling, cage traps, body gripping traps, suitcase traps, spotlighting, firearms, Environmental Protection Agency-approved toxicants and hazing and harassment utilizing pyrotechnics.
- WS personnel will determine the best management practices, in coordination with District Representative, to accomplish the cooperative goals of WS and District. WS will obtain all necessary permits as required, and cooperate with the USFWS, Washington Department of Fish and Wildlife (WDFW), county and local city governments, and other entities to ensure compliance with Federal laws and regulations, applicable State, and local laws and regulations as required by WS Directive 2.210.

3. Supplies & Equipment

WS will provide the Wildlife Specialists with vehicles, boats, and the basic supplies and equipment. District understands additional supplies and equipment may need to be purchased under this agreement to replace consumed, damaged or lost supplies/equipment, or specialized situations. Any items remaining at the end of the agreement will remain in the possession of WS.

4. Health, Safety, & Security Protocols

WS Specialists will follow District Safety and Security protocols. A detailed outline of District health, safety, and security protocols and requirements is listed in Appendix C.

5. Work Hours

Work hours associated with this project include, but are not limited to, boat hazing operations, deck hazing operations, rod and reel fishing operations, bird processing, fish processing, cleanup, boat launch and recovery efforts, providing technical assistance, data entry, data analysis, equipment repair, equipment maintenance, vehicle/boat maintenance, mandatory training, on-site training, annual leave, sick leave, travel to and from official duty station, and administrative duties.

6. Permits

WS will acquire all necessary Federal Depredation permits required for the take of migratory birds and provide copies to the District as requested. District will apply for the Scientific Collection Permit for the fishing component and have USDA/Wildlife Services listed as a subpermittee.

7. Amending this Work Plan

All components of this project (piscivorous bird hazing operations, predatory fish removal, and/or nuisance wildlife damage management) including the end dates, start dates, and inseason coverage, may vary during the season without amending this WP/FP as long as the changes stay within funding limits. Variation to the coverage will be coordinated between District Representative and WS Project Leader.

8. WS Oversight

Nick Borchert, the Southeast District Supervisor in Pasco, WA, (509) 461-0310, will supervise this project. It will be monitored by Mike Linnell, State Director, Olympia, WA, 360-753-9884. The financial point of contact for this Work Plan/Financial Plan is Michelle Rodriguez, Budget Analyst, (360) 742-5496.

9. Cooperation with regulatory authorities

WS will cooperate with the WDFW, the USFWS, county and local city governments, and other entities to ensure compliance with their respective laws and regulation.

10. Billing

Public Utility District No. 2 of Grant County will be billed quarterly by WS only for expenses incurred plus Overhead and Pooled Job Costs shown on the bill as Program Support. Personnel compensation is defined as salary for all hours worked, benefits, differentials, hazardous duty allowances, annual leave, sick leave, and awards. The actual costs of the line items within the budget may vary during the year in order to accomplish the objectives and goals of this WP/FP as agreed upon between the Representative and WS. Bills for the period of this WP/FP cumulatively may not exceed the Grand Total listed in the table on the following page.

A. The District will be billed at cost for these services with the exception of the following agreed upon fixed rates. A description of WS Supplies and Services for District projects for January 1, 2024 to December 31, 2024 and January 1, 2025 to December 31, 2025 is attached as Appendix "A".

Boat Operating Expense \$200.00 per boat per day

Camp Trailer Operating Expense \$400.00 per trailer per pay period (PP) (14-day PP)

Vehicle Operating Expense \$350.00 per vehicle per PP (14-day PP)

APHIS Overhead 16.15% of all costs
Pooled Job Cost 11.00% of all costs

B. WS will submit quarterly invoices and a supporting expenditure documentation report referencing the District Agreement No. 430-10759 to the attention of:

Public Utility District No. 2 of Grant County Washington

Attn: Accounts Payable

PO Box 878

Ephrata, WA 98823

Or AccountsPayable@gcpud.org

FINANCIAL PLAN

January 1, 2024 – December 31, 2024

	January 1, 2024 – December 3 2024 Financial Plan	51, 2024						
Lie		s for Caland	ar Vaar 2024					
#	Listed below are the estimated costs for projects for Calendar Year 2024 # Description (includes Grade and Step							
persons	for Seasonal Specialists)	PPs	PP Rate	Project Total				
_	s Bird Depredation Protection Program)	113	11 Rate	Troject rotar				
1	District Supervisor	2.0	\$5,233.00	\$10,466.00				
1	Project Leader	13.0	\$3,029.00	\$39,377.00				
1	AM Crew Boat Captain (3/4)	5.0	\$1,586.00	\$7,930.00				
1	AM Crew Boat Hazer (3/4)	5.0	\$1,586.00	\$7,930.00				
1	PM Crew Boat Captain (3/4)	4.0	\$1,586.00	\$6,344.00				
1	PM Crew Boat Hazer (3/4)	4.0	\$1,586.00	\$6,344.00				
2	Weekend Crew Boat Captain (4/4)	1.5	\$1,629.00	\$4,887.00				
2	Weekend Crew Boat Hazer (3/4)	1.5	\$1,586.00	\$4,758.00				
1	AM Crew Boat Captain (4/4)	5.0	\$1,629.00	\$8,145.00				
1	AM Crew Boat Hazer (3/4)	5.0	\$1,586.00	\$7,930.00				
1	PM Crew Boat Captain (3/4)	4.0	\$1,586.00	\$6,344.00				
1	PM Crew Boat Hazer (3/4)	4.0	\$1,586.00	\$6,344.00				
2	Weekend Crew Boat Captain (4/4)	1.5	\$1,629.00	\$4,887.00				
2	Weekend Crew Boat Hazer (4/4)	1.5	\$1,629.00	\$4,887.00				
Salaries (Predatory	Fish Damage Management)							
1	WS NPM Fish (3/4)	11.0	\$1,586.00	\$17,446.00				
1	WS NPM Fish (3/4)	11.0	\$1,586.00	\$17,446.00				
1	WS NPM Fish (3/4)	11.0	\$1,586.00	\$17,446.00				
1	WS NPM Fish (3/4)	5.0	\$1,586.00	\$7,930.00				
	Federal Employee Health Benefits offer	11.00	\$240.00	\$2,640.00				
Salary								
Differential:								
	Sunday differential (+25% per hour)			\$2,220.00				
	Night differential (+10% per hour)			\$2,462.00				
Total Salaries	(*Actual Costs will be billed)		\$194,163.00					
Vehicle Operating	8 vehicles totaling 44 PPs at \$350/PP for Veh	nicle		*				
Costs	Operating Costs			\$15,400.00				
Boat Operating	2 Boats for 7 days a week at 2 shifts at \$1,400			004 -00 5-				
Costs	3.5 PPs, and 2 Boats for 5 days a week 1 shif PP for 1 PP	t at \$1,000 /		\$21,600.00				
Trailer Expenses:	4 trailers for a total of 25.5 PPs at \$400 / PP			\$10,200.00				
Supplies:	(*Actual cost will be billed)			\$10,000.00				
	SUBTOTA	L:	\$251,363.00					
*APHIS Overhead: (16.15% of all costs)				\$40,595.00				
*Pooled Job Cost: (11.00% of all costs)			\$27,650.00				
	GRAND TOTA	L:	\$319,608.00					

Note: All totals have been rounded to the nearest whole dollar.

^{*}Overhead and Pooled Job Costs are combined on Invoices under the line item "Program Support".

^{**}The distribution of the line items in the budget from this Financial Plan may vary as necessary to accomplish the purpose of this agreement but may not exceed the Grand Total of the above table.

FINANCIAL PLAN

January 1, 2025 – December 31, 2025

	2025 Financial Plan	21, 2020		
Listed	below are the estimated costs for projects f	for Colonda	or Voor 2025	
#	Description (includes Grade and Step	ioi Calenda	ai 1 tai 2023	Project
persons	for Seasonal Specialists)	PPs	PP Rate	Total
-	s Bird Depredation Protection Program)	115	11 Nate	Total
	2	2.0	Φ5 500 00	Φ11 Q1 C QQ
1	District Supervisor	2.0	\$5,508.00	\$11,016.00
1	Project Leader	13.0	\$3,188.00	\$41,444.00
1	AM Crew Boat Captain (3/4)	5.0	\$1,665.00	\$8,325.00
1	AM Crew Boat Hazer (3/4)	5.0	\$1,665.00	\$8,325.00
1	PM Crew Boat Captain (3/4)	4.0	\$1,665.00	\$6,660.00
1	PM Crew Boat Hazer (3/4)	4.0	\$1,665.00	\$6,660.00
2	Weekend Crew Boat Captain (4/4)	1.5	\$1,711.00	\$5,133.00
2	Weekend Crew Boat Hazer (3/4)	1.5	\$1,665.00	\$4,995.00
1	AM Crew Boat Captain (4/4)	5.0	\$1,711.00	\$8,555.00
1	AM Crew Boat Hazer (3/4)	5.0	\$1,665.00	\$8,325.00
1	PM Crew Boat Captain (3/4)	4.0	\$1,665.00	\$6,660.00
1	PM Crew Boat Hazer (3/4)	4.0	\$1,665.00	\$6,660.00
2	Weekend Crew Boat Captain (4/4)	1.5	\$1,711.00	\$5,133.00
2	Weekend Crew Boat Hazer (4/4)	1.5	\$1,711.00	\$5,133.00
Salaries (Predatory	Fish Damage Management)			
1	WS NPM Fish (3/4)	11.0	\$1,665.00	\$18,315.00
1	WS NPM Fish (3/4)	11.0	\$1,665.00	\$18,315.00
1	WS NPM Fish (3/4)	11.0	\$1,665.00	\$18,315.00
1	WS NPM Fish (3/4)	5.0	\$1,665.00	\$8,325.00
	Federal Employee Health Benefits offer	11.00	\$240.00	\$2,640.00
Salary	1 2			
Differential:				
	Sunday differential (+25% per hour)			\$2,331.00
	Night differential (+10% per hour)			\$2,585.00
Total Salaries	(*Actual Costs will be billed)		\$203,850.00	. ,
	(,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Vehicle Operating	8 vehicles totaling 44 PPs at \$350/PP for Ve	hicle		
Costs	Operating Costs			\$15,400.00
	2 Boats for 7 days a week at 2 shifts at \$1,40	00 / PP for		, -,
Boat Operating	3.5 PPs, and 2 Boats for 5 days a week 1 shi			\$21,600.00
Costs	\$1,000 / PP for 1 PP			, ,
Trailer Expenses:	4 trailers for a total of 25.5 PPs at \$400 / PP			\$10,200.00
Supplies:	(*Actual cost will be billed)			\$10,000.00
- TF	SUBTOTAL	L :	\$261,050.00	, .,
*ADITIC O			,	
	(16.15% of all costs)			\$42,160.00
*Pooled Job Cost : (•			\$28,716.00
	GRAND TOTAL	L :	\$331,926.00	

Note: All totals have been rounded to the nearest whole dollar.

^{*}Overhead and Pooled Job Costs are combined on Invoices under the line item "Program Support".

^{**}The distribution of the line items in the budget from this Financial Plan may vary as necessary to accomplish the purpose of this agreement but may not exceed the Grand Total of the above table.

FINANCIAL PLAN

March 2025

2025 Wanapum Wire Project Financial Plan Listed below are the estimated costs for the Wanapum Dam Avian Deterrent Wire Install Project

Grant PUD – Wanapum Dam Wirework

to

USDA APHIS Wildlife Services

for

Installation of Avian Deterrent Wires

from

1/1/2025	to	12/31/202	5
Cost Element		Fu	ull Cost
Personnel Compensation			\$14,507.03
Vehicle / Boat Operating Costs			\$1,600.00
Supplies and Materials			\$3,579.18
Equipment \$1,00			\$1,000.00
Travel Estimates	\$3,040.00		
Lift Rental	\$2,000.00		
Subtotal (Direct Charges)		\$25,726.21	
Pooled Job Costs		11.00%	\$2,829.88
Indirect Costs		16.15%	\$4,154.78
Agreement Total \$32,710			2,710.88

The distribution of the budget from this Financial Plan may vary as necessary to accomplish the purpose of this agreement, but may not exceed: \$32,710.88

WS Agreement No.: 24-7353-2179-RA Account AP.RA.RX53.73.0225 District Agreement No. 430-10759 District Amendment No. 3

Grant County, Washington:	
Ross Hendrick Senior Manager Power Production Environmental Affairs	Date
UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE WILDLIFE SERVICES	
Mike Linnell, State Director, Washington	Date
Wendy Anderson, Director, Western Region	Date

WS Agreement No.: 24-7353-2179-RA
Account AP.RA.RX53.73.0225
District Agreement No. 430-10759
District Amendment No. 3
Appendix A – Schedule of Supplies and Services

Appendix "A"

Schedule of Supplies / Services

WS Description of WS Supplies and Services for District Projects - January 1, 2024 to December 31, 2024

Salaries:

Salary hours associated with this project include, but are not limited to: providing technical assistance, field work, equipment maintenance, vehicle maintenance, boat maintenance, mandatory training, annual leave, sick leave, awards, travel to and from official duty station, data entry, data analysis, project coordination, administrative support, health and retirement benefits, taxes, etc. These salaries provide the Wildlife Services Specialists that help meet the goals and fulfill the duties outlined in the WP/FP.

Vehicles Operating Costs:

The vehicle provides transportation of personnel and equipment assigned to the project. A flat rate is charged per vehicle used, per pay period that cooperatively funds vehicle operating costs. Vehicle operating costs include but are not limited to repair and maintenance, fuel consumption, oil changes, tire replacement, tire changes seasonally, and eventual vehicle replacement and depreciation costs resulting from wear and tear.

Boat Operating Costs:

The boat provides transportation of personnel and equipment assigned to the project to locations that cannot be reached by other methods. The use of the boat can be a hazing tool itself, but also shortens the distance between piscivorous bird and hazer to allow for the improved efficiency and success of the hazing tools at the Specialists' disposal. Boat Operating Costs are charged at a flat rate. Costs associated with boats are similar to vehicle operating costs and include fuel consumption, repair, maintenance, oil changes, trailer repair, trailer tire replacement, and trailer tire repair as needed.

Camp Trailer Operating Costs:

Camp Trailers provide storage for equipment on project and provide space for project specific personnel. A flat rate is charged per trailer used, per pay period that partially funds trailer costs. Camp trailer costs include the cost of the rental space at an RV park, electricity, heating (propane), repair, maintenance, and transportation from the district office to the project, and eventual trailer replacement and depreciation costs.

Supplies:

The supply charge is based on the quantity of supplies anticipated to be used for an operating project during the work period. Costs include, but are not limited to, pyrotechnics, pyrotechnic launchers, traps and trap materials, office supplies, binoculars, ammunition, firearm maintenance cost, uniform allowance, computer accessories for data entry, euthanasia equipment, wildlife capture, restraint and handling devices, spotlights, and similar supplies and equipment.

Training / Travel

A flat rate is budgeted per project for costs associated with training for all specialists for that project. Costs include, but may not limited to, the cost of on-line training, reimbursement of travel costs, per diem, lodging, training facilities rentals, instructor fees and training materials for seasonal and full-time employees related to individual operating projects.

WS Agreement No.: 24-7353-2179-RA
Account AP.RA.RX53.73.0225
District Agreement No. 430-10759
District Amendment No. 3
Appendix A – Schedule of Supplies and Services

Pooled Job Costs:

Pooled Job Costs (11% of subtotal) covers costs that may not be directly associated with one particular project and are distributed across all identifiable projects to which the costs pertain. Costs may include supervision not directly charged, employee retirement, severance, sick leave, self-insurance, OWCP costs, and vehicle, boat, and camp trailer repair and replacement.

Administrative Costs:

Administrative costs (16.15 % of subtotal) cover administrative infrastructure in the U.S. Department of Agriculture WS.

Appendix B – GSA Pay Scale after Executive Order of new Federal Minimum Wage

Appendix "B"

2024 GSA Pay Scale under "new" Federal Minimum Wage Pay Scale

On January 22, 2021, President Biden issued his Executive Order on Protecting the Federal Workforce (EO 14003). It is the general policy of the Biden-Harris Administration that Federal employees stationed in the United States (including its territories and possessions) should receive an hourly pay rate of at least \$15 per hour. Section 5 of EO 14003 directed the Director of the Office of Personnel Management (OPM) to provide a report to the President with recommendations to promote a \$15 per hour minimum pay rate for Federal employees.

The below table the pay scale for Wildlife Services employees in 2023.

SALARY TABLE 2023-RUS INCORPORATING THE 4.1% GENERAL SCHEDULE INCREASE AND A LOCALITY PAYMENT OF 16.50% FOR THE LOCALITY PAY AREA OF REST OF U.S. TOTAL INCREASE: 4.37%

EFFECTIVE JANUARY 2023

Annual Rates by Grade and Step

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
3	\$33,906	\$34,765	\$35,624	\$36,483	\$37,342	\$38,201	\$39,060	\$39,919	\$40,077	\$41,637
4	\$34,584	\$35,548	\$36,512	\$37,476	\$38,440	\$39,404	\$40,431	\$41,554	\$42,677	\$43,801
5	\$37,696	\$38,953	\$40,210	\$41,467	\$42,724	\$43,981	\$45,238	\$46,495	\$47,752	\$49,009
6	\$42,022	\$43,422	\$44,822	\$46,223	\$47,623	\$49,023	\$50,424	\$51,824	\$53,224	\$54,625
7	\$46,696	\$48,252	\$49,808	\$51,365	\$52,921	\$54,478	\$56,031	\$57,591	\$59,147	\$60,703
8	\$51,713	\$53,437	\$55,162	\$56,886	\$58,610	\$60,334	\$62,058	\$63,783	\$65,507	\$67,231
9	\$57,118	\$59,021	\$60,925	\$62,828	\$64,732	\$66,636	\$68,539	\$70,443	\$72,347	\$74,250
10	\$62,898	\$64,955	\$67,092	\$69,189	\$71,286	\$73,383	\$75,480	\$77,577	\$79,674	\$81,771
11	\$69,107	\$71,410	\$73,713	\$76,016	\$78,319	\$80,623	\$82,926	\$85,229	\$87,532	\$89,835
12	\$82,830	\$85,591	\$88,352	\$91,113	\$93,875	\$96,636	\$99,397	\$102,158	\$104,919	\$107,680

Step increases: 1 year between step 1-2, 2-3, 3-4; 2 years between 4-5, 5-6, 6-7; 3 years between 7-8, 8-9, 9-10.

AD pay scale will mirror the GS scale

Applicable locations are shown on the 2023 Locality Pay Area Definitions page: http://www.opm.gov/policy-dataoversight/pay-leave/salaries-wages/2023/ locality-pay-area-definitions/

The salary for **2024** for federal employees is expected to have a cost of living increase of 5.25%. The salary amounts in the 2023 salary table above were increased by that percentage for the 2024 budget.

Appendix "C"

District Health, Safety, and Security Protocols

- 1. Wildlife Services (Contractor) shall comply with the safety requirements of these documents and all District policies pertaining to COVID-19 located at https://www.grantpud.org/for-contractors.
- 2. Prior to receiving access to any District facilities, all WS's employees that require access to District facilities, shall be required to take and pass the District's Security and Safety Awareness training before being issued a security access badge to access District facilities. Under no circumstances will the failure of any WS employee to pass the required training be grounds for any claim for delay or additional compensation.

The Safety and Security Awareness training is available online and is a 20-30 minute training. The training is located at: https://www.grantpud.org/for-contractors. WS and their employees are required to successfully complete Safety and Security Awareness training before coming onsite. The Security and Safety certificates should be emailed directly to SecurityTrainingCerts@gcpud.org.

WS shall ensure that its employees have completed, and submitted the certificate of completion for the training in a timely manner to avoid any delay in execution of the work. All such certificates shall be submitted before any security access badges will be issued.

- 3. WS shall ensure that WS employees are informed of and abide by the District's Contractor Security Plan Information as is fully set out herein a copy of which shall be provided to WS prior to beginning work. Without limiting the foregoing, WS and its employees shall be required to:
 - A. Keep all external gates and doors locked at all times and interior doors as directed.
 - B. Visibly display ID badges on their person at all times.
 - C. Stay out of unauthorized areas or in authorized areas outside of authorized work hours, without express authorization from the District.
 - D. Provide proper notification to the appropriate parties and sign in and out upon entry and exit to secured locations. If unsure of who to notify, WS shall contact the District Representative.
 - E. Immediately notify the District if any of WS's employees no longer need access or have left WS's employment.
 - F. Immediately report any lost or missing access device to the District Representative. A minimum charge will be assessed to WS in the amount of \$50.00 per badge and the fee for lost or non-returned keys may include the cost to re-key the plant facilities. WS is strictly prohibited from making copies of keys.

- G. Not permit 'Tagging on' through any controlled access point (i.e. person(s), authorized or unauthorized, following an authorized person through an entry point without individual use of their issued ID badge or key).
- H. Return all District property, including but not limited to keys and badges, to the District Representative when an individual's access to the facility is no longer needed.
- I. WS's personnel accepting clearances will be required to attend a safe clearance procedure training class and WS's orientation class prior to starting field work. Classes may last up to two hours.

CONTRACTOR SAFETY REQUIREMENTS

CS-1. PURPOSE

The Contractor Safety Requirements shall be required as applicable to the scope of work. Section CS-2 applies to all work, whereas Section CS-3 is specific to specialized types of work. To the extent applicable, the Contractor shall ensure that all workers, subcontractors, and suppliers comply with these requirements. In fulfilling these requirements, the Contractor shall also comply with material and equipment manufacturer instructions, and safety and health requirements stated in these documents where applicable. If there are conflicts between any of the requirements referenced in the Cooperative Agreement or Amendment Documents, the more stringent requirement shall prevail.

CS-2. GENERAL

- A. Initial/Warning Notice: Any District employee may notify the Contractor of any safety or health concern. The notice may be delivered verbally to any Contractor employee or subcontractor and the District employee shall notify the District Representative of the Notice. Written notification may be provided to the Contractor at the discretion of the District Representative. The notice shall have the same effect on the Contractor regardless of format or recipient. The Contractor shall take immediate action to mitigate the safety and health concerns identified in the District's notice.
- B. Stop Work Order: District employees also have the authority to immediately stop a work activity without issuing the Initial/Warning Notice. The District employee will immediately notify the District Representative of the Stop Work Order. The District Representative may direct the Contractor to stop work due to safety and health concerns. The Stop Work Order may cover all work on the Contract or only a portion of the work. After the District issues a Stop Work Order, the Contractor shall meet with District Representatives (as determined by the District Representative) to present a written statement outlining specific changes and/or measures the Contractor will make to work procedures and/or conditions to improve safety and health. A Stop Work Order can be rescinded only with the written approval of the District Representative.
 - 1. The Contractor shall not be entitled to any adjustment of the Amendment price or schedule when the District stops a work activity due to safety and health concerns that occurred under the Contractor's, Subcontractor's, or supplier's control.
 - 2. The District's conduct does not alter or waive the Contractor's safety and health obligations.
 - 3. Contractor shall provide an onsite Safety Professional as directed by the District Representative based upon number and/or severity of identified safety infractions.
 - 4. Non-compliance with safety requirements could lead to termination of the Agreement.

- C. The Contractor shall maintain an accurate record of and shall immediately report to the District Representative all cases of near miss or recordable injury as defined by OSHA, damage to District or public property, or occupational diseases arising from, or incident to, performance of work under this Agreement.
 - 1. The record and report shall include where the incident occurred, the date of the incident, a brief description of what occurred, and a description of the preventative measures to be taken to avoid recurrence, any restitution or settlement made, and the status of these items. A written report shall be delivered to the District Representative within five business days of any such incident or occurrence.
 - 2. In the event of a serious incident, injury or fatality the immediate group shall stop work. The Contractor/subcontractor shall secure the scene from change until released by the authority having jurisdiction. The Contractor shall collect statements of the crew/witnesses as soon as practical. The District reserves the right to perform an incident investigation in parallel with the Contractor. The Contractor, subcontractor, and their workers shall fully cooperate with the District in this investigation.
 - 3. All cases of death, serious incidents, injuries or other incidents, as determined by the District Representative, shall be investigated by the Contractor to identify all causes and to recommend hazard control measures. A written report of the investigation shall be delivered to the District Representative within 30 calendar days of any such incident or occurrence.
 - 4. For situations that meet the reporting requirements of WAC 296-800, the Contractor shall self-report and notify the District Representative. The District Representative shall notify the District's Safety personnel.
- D. The Contractor/subcontractor shall conduct and document job briefings each morning with safety as an integral part of the briefing. The Contractor/Subcontractor shall provide an equivalent job briefing to personnel and/or visitors entering the job site after the original job briefing has been completed. Immediately upon request, the Contractor shall provide copies of the daily job briefing and any other safety meeting notes to the District Representative. The notes, at a minimum, shall include date, time, topics, and attendees and shall be retained by the Contractor for the duration of the Contractor's warranty period.
- E. Job Site Reviews Performed by the District: The Contractor Site Representative or other lead personnel, if requested by the District, shall be required to participate in District job briefs and/or District job site reviews that pertain to the work being performed by the District that may impact the Contractor's work.
- F. Job Site Reviews Performed by Contractor: Each Contractor and Subcontractor shall perform and document weekly safety reviews of their work area(s) by a competent person as defined by WAC 296-62-020. Immediately upon request, the Contractor shall provide a copy of the documented job site review to the District Representative. Contractor and Subcontractor supervisors/foremen shall take immediate action to correct violations, unsafe practices, and unsafe conditions. The Contractor and Subcontractor shall be solely responsible to review and monitor the work area or location of all their employees during the performance of work.
- G. Site Specific Safety Plan (SSSP): The Contractor shall prepare, implement, and enforce a SSSP for all work included in this Contract. The SSSP shall be delivered to and accepted by the District Representative prior to the start of any on-site work.
 - 1. The SSSP shall, at a minimum, identify and provide mitigation measures for any recognized hazards or conditions. Site and adjacent conditions shall be considered. All significant hazards, including unusual or unique hazards or conditions specific to the Contract work shall be identified and mitigated. The Contractor shall provide a clear delegation of authority for the work site(s). The Contractor shall identify, locate, and provide direction to the nearest emergency medical facilities. This shall include telephone numbers for emergency services in the area.

- 2. The Contractor shall make available to all workers at the site(s) the SSSP and ensure that all workers are familiar with the content and requirements of the SSSP. Any subcontractors shall adhere to the Contractor's SSSP.
- 3. Any emergent hazards not identified in the SSSP shall require a Job Hazard Analysis prior to starting work on the associated job.
- H. District Rescue Team and Relation to Contractor Emergencies and Back Shift Operations When District Rescue Team is Not Present: Contractors shall be required to submit an Emergency Plan that covers first response and rescues. This is required to be submitted for approval by the District Representative prior to work starting. Contractors are encouraged to familiarize themselves with District First Responder and Rescue Team capabilities. District Response Teams may not be available during all work hours and typically are not available on off-shifts, weekends, and District holidays. Contractors choosing not to provide their own response personnel must include a process that does not rely on the District in the event District Response Teams are not available.

CS-3. SPECIALIZED WORK

A. Involvement in Job Briefs by Others/Involvement of Others in Contractor's Job Briefs: When work completed by the Contractor will or may affect work being completed by other contractors or by District staff, the Contractor shall ask for a representative from the other contractor or District staff to participate in the Contractor's daily job brief for the purpose of informing the other party of safety hazards that may be encountered as a result of the affected work. Job brief discussion shall include hazards that the other contractor or District staff may encounter as part of the Contractor's work, mitigation measures, clearance points and boundaries, effects that equipment taken out of service or put back into service could have on other parties, Personal Protective Equipment (PPE) requirements and contingency plans. The above is a District requirement.

B. Caution and Danger Barriers:

- 1. Caution Tape or Rope Yellow will be used to demarcate areas with low safety hazards. Contractor employees may enter the barricade area only after identifying the hazard enclosed by the <u>Caution</u> barrier tape/rope.
- 2. Danger Tape or Rope Red will be used to demarcate areas of imminent danger. An employee may not enter the area barricaded with <u>Danger</u> barrier tape/rope without consent of the barricade attendant or tape tag holder.

Contractors that will be introducing hazards as part of their work must barricade the hazardous area to prevent employees from entering the area in accordance with District Policy SA121200-POL. The above is a Code requirement.

C. Emergencies

If an emergency situation is created or observed by the Contractor, the District's Dispatch Center should be contacted immediately. To contact the Dispatch Center from:

- a. A District telephone, dial ext. 2237 or 2238.
- b. An outside telephone line, dial 1-800-216-5226.

The Dispatch Center is manned 24 hours per day.

D. Security

The District's check-in/check-out procedure must be followed by the Contractor's employees and Subcontractor(s) whenever they are at the worksite. This procedure will be explained to the Contractor at the pre-work conference.

Hydroelectric Facility Work Requirements

- E. Priest Rapids Dam Deck Restrictions and Access:
 - All Contractors working on the Priest Rapids powerhouse intake deck and/or the spillway bridge shall comply with Washington State Department of Transportation (WSDOT) publication "Work Zone Traffic Control Guidelines for Maintenance Operations" M 54-44. Personal protective wear shall comply with WSDOT publication "Safety Procedures and Guidelines Manual" M 75-01.
 - 2. The Contractor may use the powerhouse intake and spillway bridge decks for access to the right (west) side of the dam upon coordination with the District and other contractors that may be working in the area. The Contractor will not be allowed to use either deck for staging or setup of equipment and cranes unless otherwise specifically arranged with the District.
 - 3. Powerhouse intake deck, if used for staging and setup subject to Section CS-3.AA.2 above, shall be cleared for emergency gantry crane access within 15 minutes of notification.
 - 4. Transformer deck may be used for setup and access to the work site. Only materials to be used during any one day may be stored on the transformer deck. No electrical outages of overhead lines will be given in that area and Contractor must comply with all electrical safety codes, including grounding all cranes parked on the transformer deck. The Contractor shall submit a request for a Hot Line Hold when work is required near energized high-voltage overhead lines and there is the possibility of accidental contact or violation of the applicable Minimum Approach Distance. The Contractor shall submit a request for a Hot Line Hold a minimum of three days before the start of the work Conductor voltage above the deck is 230,000 volts. Only hydraulic "squirt" boom cranes may be used in that area. Contractor shall clear materials and equipment as necessary to provide bulkhead crane access to the end of the deck within 12 hours of notification.
 - 5. Contractor shall not be entitled to any claims for delays or damages due to any of the deck blockage restrictions specified in these Contract Documents.

The above is a combination of Code and District requirements.

- F. Wanapum Dam Deck Restrictions and Access:
 - All contractors working on the Wanapum powerhouse intake deck and/or the spillway bridge shall comply with Washington State Department of Transportation (WSDOT) publication "Work Zone Traffic Control Guidelines for Maintenance Operations" M 54-44. Personal protective wear shall comply with WSDOT publication "Safety Procedures and Guidelines Manual" M 75-01.
 - 2. The Contractor may use the powerhouse intake and spillway bridge decks for access to the right (west) side of the dam upon coordination with the District and other contractors that may be working in the area. The Contractor will not be allowed to use either deck for staging or setup of equipment and cranes unless otherwise specifically arranged with the District.
 - 3. Powerhouse intake deck, if used for staging and setup subject to Section CS-3.BB.2 above, shall be cleared for emergency gantry crane access within 15 minutes of notification.
- G. Power Plant Personal Protective Equipment: A hard hat, eye protection, and high visibility clothing are required for all personnel in the power plants, with exceptions noted below. Hearing protection is required in the power plant erection bays and in areas designated and marked through signage as hearing protection required areas.

PPE listed above is not required in administrative areas, rest rooms and break areas unless hazards are present due to construction work or other activity. In these cases, the crew foreman or supervisor will determine and post the level of PPE required in the work area. The above is a District requirement.

- H. Power Production Clearance and Lock Out/Tag Out: All employees and contractors are required to follow the "Hydro Switching and Clearance Tag Out System" policy. No work will be performed on or around any hazardous energy source without a clearance or Lock Out/Tag Out, dependent on the location of the work. All affected personnel must receive clearance training. Failure to comply with the Hydro Switching and Clearance Tag Out System will result in removal from the project. The above is a combination of Code and District requirements.
- I. Tying in Equipment to 600 V Plant Electrical System:
 - 1. Apprentices or Trainee Contractors <u>will not be allowed</u> to plug into the District's 600 V wall receptacles.
 - 2. Operations shall be notified when plugging in or unplugging 600 V wall receptacles.
 - 3. All personnel will be required by the District to wear 8 Cal/cm² AR long sleeve shirts, long pants, safety glasses and clean leather gloves while plugging into 600 V receptacles.

(As recommended by NFPA 70E).

Note: The preferred method is to de-energize the circuit before disconnecting and connecting, even though the receptacles and plugs may be rated for load breaking.

4. WAC 296-45 requirements for training of Qualified Electrical Workers

The District will require all the electrical Contract employees who will be plugging in the 600 Volt plugs to be trained accordance with WAC 296-45. The Contractor will be required to maintain the training records and submit to the District employee qualifications as requested, including:

- a. Electrical license (01 License)
- b. Resume

The above is a combination of Code and District requirements.

c. Training records



Change Order Table

Contract Title: Cooperative Service Agreement for Wildlife Damage Management

Contract No.	430-10759	Award Date:	12/8/2020	
Project Manager:	Nate Dietrich	Original Contract Amount:	\$279,928.00	
District Representative (If Different):		Original Contract completion:	12/31/2025	
Contractor:	USDA			

* A new Workplan/Financial Plan must be executed each calenday year under this 5 year Umbrella Contract.

Workplan/Financial Plan runs from Jan. 1 through Dec. 31

CO#	Change Description	Approved by	Executed Date	Revised Completion Date	Cost Change Amount	Revised Contract Amount	Authority Level Tracking
1	2022 Annual WorkPlan Financial Plan	Managing Director	12/13/21	N/A	\$283,665.00	\$563,593.00	\$283,665.00
2	2023 Annual Work Plan/Financial Plan	Comm	11/30/22	N/A	\$309,799.00	\$873,392.00	\$593,464.00
3	2024 and 2025 Annual Work Plan/Financial Plan	Comm		N/A	\$684,244.88	\$1,557,636.88	\$684,244.88
	Total Change Order Cost Change Amount 1,277,708.88						

Completion Date is the date of the 5 year Coop Agreement and so not revising to the completion date of the annual Workplan/Financial Plan.

Completion Date is the date of the 5 year Coop Agreement and so not revising to the completion date of the annual Workplan/Financial Plan.

Completion Date is the date of the 5 year Coop Agreement and so not revising to the completion date of the annual Workplan/Financial Plan.

For Commission Review – 12/12/2023

RESOLUTION NO. XXXX

A RESOLUTION SUPERSEDING RESOLUTION NOS. 9006 AND 9008, RELATING TO AMENDING RATE SCHEDULE NOS. 1, 2, 3, 6, 7, 14, 15, 16, 17 AND 85.

Recitals

- 1. Pursuant to RCW 54.16.040, Grant PUD is authorized to regulate and control the use, distribution, rates, service, charges, and price of electric energy;
- 2. The Commission directed Staff to allocate an overall 3% retail revenue increase among Grant PUD rate schedules beginning April 1, 2024, with consideration to the rate policy set previously in Resolution No. 8768.
- 3. Resolution No. 9006 previously adopted Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, and 85; Resolution No. 9008 previously adopted Rate Schedule No. 17.
- 4. The General Manager and Grant PUD Staff recommend amending Grant PUD Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, 17 and 85 as set forth in Exhibit A.

NOW, THEREFORE, BE IT RESOLVED by the Commission of Public Utility District No. 2 of Grant County, Washington, that effective April 1, 2024, Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, 17 and 85 are hereby effective as set forth in Exhibit A.

BE IT FURTHER RESOLVED that as of April 1, 2024, Resolution No. 9006 as it relates to Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, and 85 is hereby superseded.

BE IT FURTHER RESOLVED that as of April 1, 2024, Resolution No. 9008 as it relates to Rate Schedule No. 17 is hereby superseded.

PASSED AND APPROV	/ED by the Commission of Public Utility District No. 2 of Grant
County, Washington, this day	of, 2024.
	President
ATTEST:	
Secretary	
Commissioner	Commissioner

MEMORANDUM December 12th, 2023

TO: Rich Wallen, General Manager/Chief Executive Officer

VIA: Ty Ehrman, Chief Customer Officer

FROM: Julio Aguirre Carmona, Program Manager of Rates and Pricing

Depree Standley, Financial Analyst

SUBJECT: Approval of revised retail rate schedules for the implementation of a 3% revenue

increase effective April 1, 2024.

<u>Purpose</u>: Approval of revised Rate Schedule ("RS") Nos. 1, 2, 3, 6, 7, 14, 15, 16, 17 and 85 to implement a 3% annual retail revenue increase with the corresponding class allocations, as discussed during the October 17, 2023, and the November 21, 2023, Commission Workshops.

<u>Discussion</u>: On October 17, 2023, and November 21, 2023, Staff and the Commission discussed the potential implementation of a 3% increase to Grant PUD retail revenue effective in 2024. Staff brought forward to the Commission some class cost allocation alternatives that could be used to implement a 3% increase in the total annual retail revenue.¹ These alternatives were developed in consideration of the parameters and principles previously set forth in Resolution No. 8768 and recognizing the Commission's most recent approved increase to retail rates effective on April 1, 2023, as part of Resolution No. 9006.

Based on Staff's analysis and after discussing the various alternatives, the Commission directed Staff to revise the current retail rates using their preferred class cost allocation, which is outlined as follows:

Rate Schedule/Class	Proposed Annual Revenue Increase	Current Est. Ave. Unit Rate per kWh	Proposed Est. Ave. Unit Rate per kWh (4/1/2024)
Residential (Sch. 1)	3.53%	\$0.05710	\$0.05912
General Service (Sch. 2)	3.53%	\$0.04825	\$0.04996
Irrigation (Sch. 3)	3.53%	\$0.04931	\$0.05106
Street Lights (Sch. 6)	3.53%	\$0.22267	\$0.23053
Large General Service (Sch. 7)	3.53%	\$0.03350	\$0.03468
Industrial (Sch. 14)	5.25%	\$0.03118	\$0.03282
Large Industrial (Sch. 15)	1.74%	\$0.03763	\$0.03829
Agricultural Processing (Sch. 16)	5.25%	\$0.03120	\$0.03284
Evolving Industry (Sch. 17)	5.25%	\$0.03171	\$0.03337
Agricultural Boiler (Sch. 85) ²	5.25%	N/A	N/A
Total Retail	3.00%	\$0.04208	\$0.04334

¹ The Commission had also considered a 2.5% annual revenue increase for retail service. However, ultimately the Commission directed the Rates and Pricing team to develop retail rates assuming an overall revenue increase of 3% for 2024.

² Currently there is no energy usage under RS85. Staff will review the appropriateness of maintaining this rate schedule and provide recommendations to the Commission to modify or eliminate RS85 in the next rate review process or earlier if Staff considers it necessary.

To moderate the potential rate impact of the 3% revenue increase on some of the retail classes while still making progress toward the rate trajectories resulting from Resolution No. 8768, the determination of the percentage increase by rate schedule was performed considering the following factors:

- No rate schedule was subject to a percentage revenue increase greater than 1.75x the system average. This results in a maximum increase of 5.25% for any rate schedule, which in this case is applied to RS14, RS16, RS17 and RS85. This upper cap is within the parameter set in Resolution No. 8768 or an increase of no more than 2.5X the system average.
- No rate schedule received a percentage increase lower than 0.58x the system average or 1.74%.
 This percentage is within the parameter established in Resolution No. 8768 or an increase of no
 less than 0.25x the system average. In this case, only RS15 is subject to this percentage revenue
 increase.
- All other retail rate schedules, including all the "core" customers served under RS1, RS2, RS3 and RS7, are subject to a percentage increase of 3.53%, which is marginally higher than the proposed system average increase of 3%.

For the revised Rate Schedule No. 17 – Evolving Industry Service, Staff has recalculated and applied the appropriate revenue increase only to the direct cost element included in Rate Schedule Nos. 17A and 17B, based on the proposed rate increases applied to Rate Schedule Nos. 1, 2 and 7. These revised direct cost elements for Rate Schedule Nos. 17A and 17B effective on April 1, 2024, have been converted to the corresponding basic charges, volumetric energy rates and demand rate as shown in the RS17 tariff attached to Staff's proposed Resolution in this case. The additional rate premiums or adders currently billed to RS17 customers were not adjusted as they are determined through the assessment of the Evolving Industries as outlined in Grant PUD's Customer Service policies.²

Additionally, for the revised Rate Schedule No. 15 – Large Industrial Service, Staff has adjusted the minimum load size criteria to qualify for this schedule from 15 MW/MVA to 10 MW/MVA and the size of the first energy block from the current 10.95 million kWh to 7.3 million kWh. This is proposed in order to align the minimum demand and the first block of energy usage under this rate schedule with the current definition of Preferential Access as outlined in Resolution No. 8768 and to simplify the administration and future application of the Estimated Unmet District Load Cost Recovery Adjustment Clause (EUDL CRAC) Rider No. 18. There are currently no customers with a billable demand between 10MW and 15MW, so no customers will be impacted by reducing the minimum load size applicable to customers under this rate schedule.

Overall, Staff's proposed revenue increases by rate schedule are designed to provide Grant PUD with the opportunity to collect sufficient revenues to address the increasing operational costs associated with the Electric System and the Priest Rapids Project ("PRP") and to maintain a sustainable long term financial position and acceptable financial metrics.

² RS17 is composed of two rate components, a base rate or direct cost, which is based upon the same costing methods used for determining the cost to serve and the social adder of other retail rate schedules, plus risk premium adders, which may vary based on a bi-annual evolving industry assessment. Current risk premium adders for RS17 were approved in 2023 as part of Resolution No. 9008.

After review by the Commission, there was no change to Staff's proposed revenue increases by rate schedule and the corresponding rates. The class cost allocation to Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, 17 and 85 is the same as presented to the Commission on November 21, 2023 (under Alternative 3).

<u>Recommendation</u>: To adopt via resolution the attached Rate Schedule Nos. 1, 2, 3, 6, 7, 14, 15, 16, 17 and 85 as proposed, with an effective date of April 1, 2024.³

Legal Review: See attached e-mail(s)

³ In most retail tariffs, Staff uses the language "after April 1, 2024" to align the effective date of the increase with the time when the metered data is processed and reported through the billing system.

Randi Hovland

From: Sent: To: Cc: Subject:	Ty Ehrman Wednesday, November 29, 2023 7:44 PM Julio Aguirre Carmona; Mitchell Delabarre Leah Mauceri; Depree Standley RE: Commission Packets for Revised Retail Rates and Revised Rate Making Policy					
Julio, The docs look great and approximately comments below that I would like	preciate you and team getting them put together in short order. I do have a few e your answers on. Thanks!					
For RS15, it looks like ene 0.03012). Please adjust.	ave been peer-checked to ensure accuracy – please let me know. ergy charge for tier 2 is a decrease rather than an increase (0.02880 should be riously on RS2 two tiers in energy charges with the same rate?					
packet deadline for 12/12 meetir separate meetings (to allow publ	expedited review - the rates team have worked on a compressed schedule to meet ag following last week's workshop feedback in order to ensure review and approval in ic comment) in time for customer solutions to get billing systems set up in new rates are for helping us out on the timeline and please let me know if you have concerns.					
Ту Ehrman DESK 509.793.1587 CELL 509.361.8201						
From: Julio Aguirre Carmona <jaguirre@gcpud.org> Sent: Wednesday, November 29, 2023 3:35 PM To: Mitchell Delabarre <mdelaba@gcpud.org>; Ty Ehrman <tehrman@gcpud.org> Cc: Leah Mauceri <lmaucer@gcpud.org>; Depree Standley <dstandley@gcpud.org> Subject: Commission Packets for Revised Retail Rates and Revised Rate Making Policy</dstandley@gcpud.org></lmaucer@gcpud.org></tehrman@gcpud.org></mdelaba@gcpud.org></jaguirre@gcpud.org>						
Good afternoon Ty/Mitch,						
Please find attached the packet we plan to submit to the Commission for the approval of revised retail rates, effective						

Please find attached the packet we plan to submit to the Commission for the approval of revised retail rates, effective on 4/1/2024, which follows the Commission's directive provided at the most recent Commission Workshop on 11/21/2023. A link to the redline and clean final versions of the tariffs implementing these changes is provided here as well:

Tariffs - Redline
Tariffs- Clean

Additionally, we are also including a separate Memo and proposed resolution to amend the existing language in Resolution No. 8768 to extend the "expiration date" of the current rate making policy and give us some time to engage with the Commission and come up with a revised policy over the next 12 months that will supersede the existing Resolution 8768.

Please let us know if you have any questions or concerns. In the interest of time, we are proving these to you both concurrently, so we would appreciate it if you could provide us with your legal concurrence (Mitch) and executive approval (Ty), by tomorrow morning if possible, so that we can submit these packets for the Commission's consideration at their 12/12 meeting.

Thank you!

Julio

Julio C. Aguirre

Program Manager, Rates & Pricing

CELL. 505.506.5639

EMAIL jaguirre@gcpud.org





RATE SCHEDULE No. 1 DOMESTIC SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE: To single family dwelling, individual apartment or farmhouse for single-phase service.

EFFECTIVE: With meter readings after *April 1, 2024*.

MONTHLY BILLING RATE: The Customer's monthly billing will consist of a basic charge, an energy charge and a minimum charge as set forth below:

Basic Charge: \$0.59 per day

Energy Charge: \$0.04868 per kWh

Minimum Charge: \$20.00 per Month

FOR QUALIFYING LOW-INCOME CUSTOMERS: Qualified low income senior citizens or qualified low income disabled customers shall receive a discount equal to 20% of the monthly bill, exclusive of taxes. Eligibility and qualification requirements for these low income rate discounts will be as specified in the District's Customer Service Policies.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of the District's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 1 DOMESTIC SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE: To single family dwelling, individual apartment or farmhouse for single-phase service.

EFFECTIVE: With meter readings after *April 1, 202*3<u>4</u>.

MONTHLY BILLING RATE: The Customer's monthly billing will consist of a basic charge, an energy charge and a minimum charge as set forth below:

Basic Charge: \$0.57-<u>59</u> per day

Energy Charge: \$0.04702_04868_per kWh

Minimum Charge: \$20.00 per Month

FOR QUALIFYING LOW-INCOME CUSTOMERS: Qualified low income senior citizens or qualified low income disabled customers shall receive a discount equal to 20% of the monthly bill, exclusive of taxes. Eligibility and qualification requirements for these low income rate discounts will be as specified in the District's Customer Service Policies.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of the District's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 2 GENERAL SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE:

Rate Schedule No. 2: To accounts with loads not exceeding 500 kW (as measured by Billing Demand) for general service, commercial, multi-residential and miscellaneous outbuilding lighting, heating and power (excepting irrigation service) requirements.

Rate Schedule No. 2F: To single-phase loads not exceeding 500 watts as determined from the equipment's UL listing.

EFFECTIVE: With meter readings after *April 1, 2024*.

MONTHLY BILLING RATE: Bills received by the customers will be based on the following:

Rate Schedule No. 2 & 2F

Basic Charge: Single-phase \$0.75 per day

Three-phase \$1.12 per day

Energy Charge: All kWh \$0.04544 per kWh

Minimum Charge: \$4.05 per kW of Billing Demand, applicable to loads of 100 kW and

above, but not less than the Basic Charge.

Usage in kWh for the Energy Charge in Rate Schedule 2F is calculated by using the maximum watts listed by UL on the device X hours per billing period / 1000= kWh.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a) The contract demand, if any.
- b) The highest 15-minute demand during the billing period as determined by demand meter. Metered demand will be adjusted up to 95 percent power factor on accounts having reactive meters.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of Grant PUD's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 2 GENERAL SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE:

Rate Schedule No. 2: To accounts with loads not exceeding 500 kW (as measured by Billing Demand) for general service, commercial, multi-residential and miscellaneous outbuilding lighting, heating and power (excepting irrigation service) requirements.

Rate Schedule No. 2F: To single-phase loads not exceeding 500 watts as determined from the equipment's UL listing.

EFFECTIVE: With meter readings after April 1, 20243.

MONTHLY BILLING RATE: Bills received by the customers will be based on the following:

Rate Schedule No. 2 & 2F

Basic Charge: Single-phase \$0.72.75 per day

Three-phase \$1.08-<u>12</u> per day

Energy Charge: First 10,000All kWh \$0.04389-04544 per kWh

Additional kWh \$0.04389 per kWh

Minimum Charge: \$4.05 per kW of Billing Demand, applicable to loads of 100 kW and

above, but not less than the Basic Charge.

Usage in kWh for the Energy Charge in Rate Schedule 2F is calculated by using the maximum watts listed by UL on the device X hours per billing period / 1000= kWh.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a) The contract demand, if any.
- b) The highest 15-minute demand during the billing period as determined by demand meter. Metered demand will be adjusted up to 95 percent power factor on accounts having reactive meters.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of Grant PUD's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 3 IRRIGATION SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE: Customers with irrigation, orchard temperature control or soil drainage loads not exceeding 2,500 horsepower and other miscellaneous power needs including lighting. For miscellaneous power requirements, customers will furnish additional transformers and other equipment necessary. A grinder, chopper, welder, etc., may be used on a limited operation basis; provided, a double-throw switch or other suitable device is installed that will disconnect one piece of equipment from the line while the other is in operation; provided further, that the load so connected is less than the primary load. Customers receiving service pursuant this rate schedule shall be required to pay charges as set forth below.

EFFECTIVE: With meter readings after *April 1, 2024*.

<u>CAPACITY CHARGE:</u> The Capacity Charge is a recurring charge that is based on the Customer's Billing Horsepower. The Customer's Billing Horsepower is equal to the sum of the horsepower ratings of all of the Customer's equipment that may be operated at the same time under one meter. In no case will charges be based on a Customer's Billing Horsepower of less than two horsepower for single-phase service, nor less than five horsepower for three-phase service. Whenever horsepower requirements, as calculated from the metered demand, exceed nameplate horsepower ratings of the operating load, the District may base its charges upon those requirements.

The Capacity Charge will be determined in accordance with the following:

a) First 75 hp billed at \$2.86 per hpb) Over 75 hp billed at \$2.62 per hp

The Capacity Charge is based on a seven (7) month irrigation season (from April through October) and is billed monthly.

ENERGY CHARGE: The Energy Charge is based on the number of kilowatt hours consumed by the Customer during the billing period in accordance with the following:

All kWh billed at \$0.03099 per kWh

The Energy Charge is billed over the seven (7) month irrigation season and is billed monthly.

BASIC CHARGE: The Basic Charge is based on a seven (7) month irrigation season and is billed monthly.

Single-phase \$31.43 per month
Three-phase \$44.88 per month

MINIMUM CHARGE:





The Monthly Minimum Charge is the monthly Capacity Charge and \$31.43 per month for Single-phase or \$44.88 per month for Three-phase.

TAX ADJUSTMENT: The amount of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Service provided pursuant to this rate schedule is subject to terms and conditions of the District's Customer Service policies, as periodically amended.



RATE SCHEDULE No. 3 IRRIGATION SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE: Customers with irrigation, orchard temperature control or soil drainage loads not exceeding 2,500 horsepower and other miscellaneous power needs including lighting. For miscellaneous power requirements, customers will furnish additional transformers and other equipment necessary. A grinder, chopper, welder, etc., may be used on a limited operation basis; provided, a double-throw switch or other suitable device is installed that will disconnect one piece of equipment from the line while the other is in operation; provided further, that the load so connected is less than the primary load.

Customers receiving service pursuant this rate schedule shall be required to pay charges as set forth below.

EFFECTIVE: With meter readings after *April 1, 20243*.

CAPACITY CHARGE: The Capacity Charge is a recurring charge that is based on the Customer's Billing Horsepower. The Customer's Billing Horsepower is equal to the sum of the horsepower ratings of all of the Customer's equipment that may be operated at the same time under one meter. In no case will charges be based on a Customer's Billing Horsepower of less than two horsepower for single-phase service, nor less than five horsepower for three-phase service. Whenever horsepower requirements, as calculated from the metered demand, exceed nameplate horsepower ratings of the operating load, the District may base its charges upon those requirements.

The Capacity Charge will be determined in accordance with the following:

a) First 75 hp billed at \$2.76 86 per hp
 b) Over 75 hp billed at \$2.53 62 per hp

The Capacity Charge is based on a seven (7) month irrigation season (from April through October) - and is billed monthly.

ENERGY CHARGE: The Energy Charge is based on the number of kilowatt hours consumed by the Customer during the billing period in accordance with the following:

All kWh billed at \$0.02993_03099 per kWh

The Energy Charge is billed over the seven (7) month irrigation season and is billed monthly.

BASIC CHARGE: The Basic Charge is based on a seven (7) month irrigation season and is billed monthly.

Single-phase \$\frac{30.3631.43}{20.3631.43} per month

Three-phase \$\frac{43.3544.88}{43.3544.88} per month

MINIMUM CHARGE:

The Monthly Minimum Charge is the monthly Capacity Charge and \$30.3631.43 per month for Single-phase



or \$43.3544.88 per month for Three-phase.

TAX ADJUSTMENT: The amount of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Service provided pursuant to this rate schedule is subject to terms and conditions of the District's Customer Service policies, as periodically amended.



RATE SCHEDULE No. 6 STREET LIGHTING SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

CONVENTIONAL STREET LIGHTING:

<u>AVAILABLE</u>: To political subdivisions of the State of Washington and agencies of the Federal Government providing lighting; and to qualified non-profit corporations, license under RCW Chapter 24.03, providing streetlights to platted residential subdivisions consisting of not less than five permanent single-family residences. Service is to be extended upon authorized application, provided security acceptable to the District, is made available to secure payment for services rendered.

EFFECTIVE: April 1, 2024.

MONTHLY RATE:

MONTHET RATE.				
Conventional Group 1	\$10.00	Conventional Group 2		\$13.54
*5,800 Lumen High Pressure Sodium (70 Watt) 16,000 Lumen High Pressure Sodium (150 Watt) Up to 105 Watt LED		22,000 Lumen High Pre (200 Watt) *27,000 Lumen High Pr (250 Watt) 106-185 Watt LED		
Conventional Group 3	\$19.12	Conventional Standard	s ¹	
50,000 Lumen High Pressure Sodium (400 Watt) 186-310 Watt LED)	25' – 30' ** 35' – 40' **	\$5.85 \$8.09	
*Rate applicable only to existing lights.		** Mounting height of I	amps.	

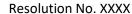
¹Standards are an additional charge over and above the monthly rate for conventional light fixtures.

DECORATIVE STREET LIGHTING:

AVAILABLE: To municipalities only for enhancement of central shopping and contiguous business areas.

MONTHLY RATE:

Decorative Unit 1 \$44.61	Decorative 1A \$23.75
Tapered post, two plain arms with acorn globes.	Two modified plain arms with acorn globes.
Decorative Unit 2 \$45.87	Decorative Unit 2A \$26.59
Fluted post, two filigreed arms with acorn globes.	Two modified filigreed arms with acorn globes.





OPTIONS ¹ :		COST PER UNIT	
REFLECTOR POWER:	& REFRACTORS, pair - Up to 35 Watt two lamps - 36 - 70 Watt two lamps - 71 - 150 Watt two lamps	\$3.16 \$0.83 \$1.54 \$3.16	

¹Reflector/Refractor and Power costs are additional charges over and above monthly Decorative Unit rates.

<u>TAX ADJUSTMENT</u>: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of Grant PUD's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 6 STREET LIGHTING SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

CONVENTIONAL STREET LIGHTING:

<u>AVAILABLE</u>: To political subdivisions of the State of Washington and agencies of the Federal Government providing lighting; and to qualified non-profit corporations, license under RCW Chapter 24.03, providing streetlights to platted residential subdivisions consisting of not less than five permanent single-family residences. Service is to be extended upon authorized application, provided security acceptable to the District, is made available to secure payment for services rendered.

EFFECTIVE: *April 1, 20234*.

MONTHLY RATE:

Conventional Group 1 \$9.6610.00	Conventional Group 2 \$13.0813.54
*5,800 Lumen High Pressure Sodium (70 Watt) 16,000 Lumen High Pressure Sodium (150 Watt) Up to 105 Watt LED	22,000 Lumen High Pressure Sodium (200 Watt) *27,000 Lumen High Pressure Sodium (250 Watt) 106-185 Watt LED
Conventional Group 3 \$ 18.47 <u>19.12</u>	Conventional Standards ¹
50,000 Lumen High Pressure Sodium (400 Watt) 186-310 Watt LED	25' – 30' ** \$5.655.85 35' – 40' ** \$7.818.09
*Rate applicable only to existing lights.	** Mounting height of lamps.

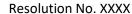
¹Standards are an additional charge over and above the monthly rate for conventional light fixtures.

DECORATIVE STREET LIGHTING:

AVAILABLE: To municipalities only for enhancement of central shopping and contiguous business areas.

MONTHLY RATE:

Decorative Unit 1	Decorative 1A
\$43.0944.61	\$ 22.94 23.75
Tapered post, two plain arms with acorn globes.	Two modified plain arms with acorn globes.
Decorative Unit 2	Decorative Unit 2A
\$44.3045.87	\$ 25.68 26.59





Fluted post, two filigreed arms with acorn globes.	Two modified filigreed arms with acorn globes.
OPTIONS ¹ :	COST PER UNIT
REFLECTOR & REFRACTORS, pair POWER: - Up to 35 Watt two lamps - 36 - 70 Watt two lamps - 71 - 150 Watt two lamps	\$ 3.05 3.16 \$ 0.80 0.83 \$ 1.49 1.54 \$ 3.05 3.16

¹Reflector/Refractor and Power costs are additional charges over and above monthly Decorative Unit rates.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of Grant PUD's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 7 LARGE GENERAL SERVICE

<u>AVAILABLE:</u> To accounts with loads not less than 200 kW or more than 5,000 kW Billing Demand for general service lighting, heating and power requirements. Service will NOT be provided under this rate schedule to process heating or boiler service loads greater than 3,000 kW unless such loads were served on this rate schedule prior to January 1, 2001. Such loads will be served on Rate Schedule 85 or its successor.

EFFECTIVE: With meter readings after April 1, 2024.

MONTHLY BILLING RATE: Bills received by the customers will be based on the following:

Basic Charge: \$158.78 per month

Energy Charge: \$0.02248 per kWh for the first 50,000 kWh

\$0.01988 per kWh for all additional kWh

Demand Charge: \$5.31 per kW of Billing Demand

Minimum Charge: \$158.78 per month

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- (a) The contract demand, if any.
- (b) The highest 15-minute demand during the billing period as determined by demand meter. Metered demand will be adjusted up to 95 percent power factor on accounts having reactive meters.

<u>TAX ADJUSTMENT:</u> The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of the District's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 7 LARGE GENERAL SERVICE

<u>AVAILABLE:</u> To accounts with loads not less than 200 kW or more than 5,000 kW Billing Demand for general service lighting, heating and power requirements. Service will NOT be provided under this rate schedule to process heating or boiler service loads greater than 3,000 kW unless such loads were served on this rate schedule prior to January 1, 2001. Such loads will be served on Rate Schedule 85 or its successor.

EFFECTIVE: With meter readings after *April 1, 202*<u>4</u>**3**.

MONTHLY BILLING RATE: Bills received by the customers will be based on the following:

Basic Charge: \$\frac{153.36}{158.78} per month

Energy Charge: \$\frac{0.02171}{0.02248}\$ per kWh for the first 50,000 kWh

\$0.019200.01988 per kWh for all additional kWh

Demand Charge: \$5.135.31 per kW of Billing Demand

Minimum Charge: \$\frac{153.36}{158.78} per month

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- (a) The contract demand, if any.
- (b) The highest 15-minute demand during the billing period as determined by demand meter. Metered demand will be adjusted up to 95 percent power factor on accounts having reactive meters.

<u>TAX ADJUSTMENT:</u> The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070, of the Laws of the State of Washington, will be added to the above charges.

SERVICE: Subject to terms and conditions of the District's Customer Service Policies, as periodically amended.



RATE SCHEDULE No. 14 INDUSTRIAL SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> To industrial customers whose Billing Demand is greater than 5 MW/MVA and less than 10 MW/MVA, provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after April 1, 2024.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$685.32 per month

Energy Charge: \$0.02213 per kWh for the first 7,300,000 kWh

\$0.03569 per kWh for all additional kWh

Demand Charge: \$5.62 per kW of Billing Demand

Minimum: The Minimum shall be computed as Demand Charge

times 75% of the Customer's Maximum Billing Demand

during the most recent 12-month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 14 INDUSTRIAL SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> To industrial customers whose Billing Demand is greater than 5 MW/MVA and less than <u>45-10</u> MW/MVA, provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after *April 1, 202*34.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$651.14685.32 per month

Energy Charge: \$0.021030.02213 per kWh for the first 7,300,000 kWh

\$0.033910.03569 per kWh for all additional kWh

Demand Charge: \$5.345.62 per kW of Billing Demand

Minimum: The Minimum shall be computed as Demand Charge

times 75% of the Customer's Maximum Billing Demand

during the most recent 12-month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

<u>TAX ADJUSTMENT:</u> The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 15 LARGE INDUSTRIAL SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> To industrial customers whose Billing Demand is greater than or equal to 10 MW/MVA, provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after April 1, 2024.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$1,035.20 per month

\$0.02642 per kWh for the first 7,300,000 kWh

Energy Charge: \$0.02880 per kWh for 7,300,001 to 21,900,000 kWh

\$0.03136 per kWh greater than 21,900,000

Demand Charge: \$5.88 per kW of Billing Demand

Minimum: The Minimum shall be computed as Demand Charge times 75% of

the Customer's Maximum Billing Demand during the most recent 12

month period.

<u>ADDITIONAL CHARGES:</u> Customers on this schedule are subject to charges related to the Estimated Unmet District Load Cost Recovery Adjustment Clause (EUDL CRAC) as determined in accordance with Rate Schedule No. 18 – EUDL CRAC Rider.

<u>BILLING DEMAND:</u> The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 15 LARGE INDUSTRIAL SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE</u>: To industrial customers whose Billing Demand is greater than or equal to <u>15-10 MW/MVA</u>, provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after April 1, 20234.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$1,017.501,035.20 per month

\$0.02597<u>0</u>.02642 per kWh for the first 10,9507,300,000 kWh Energy Charge:

\$0.029600.02880 per kWh for 7,300,00110,950,001 to 21,900,000

kWh

\$0.030970.03136 per kWh greater than 21,900,000

Demand Charge: \$5.785.88 per kW of Billing Demand

Minimum: The Minimum shall be computed as Demand Charge times 75% of

the Customer's Maximum Billing Demand during the most recent 12

month period.

<u>ADDITIONAL CHARGES:</u> Customers on this schedule are subject to charges related to the Estimated Unmet District Load Cost Recovery Adjustment Clause (EUDL CRAC) as determined in accordance with Rate Schedule No. 18 – EUDL CRAC Rider.

<u>BILLING DEMAND:</u> The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 16 AGRICULTURAL FOOD PROCESSING SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> Customers whose Billing Demand is greater than 5 MW/MVA and less than 15 MW/MVA at plants where the primary purpose is processing, canning, freezing or the frozen storage of agricultural food crops (including livestock, poultry and fish), provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after April 1, 2024.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$685.32 per month

\$0.02153 per kWh for the first 7,300,000 kWh

Energy Charge: \$0.03569 per kWh for all additional kWh

Demand Charge: \$5.64 per kW of Billing Demand

The Minimum shall be computed as Demand Charge

Minimum: times 75% of the Customer's Maximum Billing Demand

during the most recent 12-month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 16 AGRICULTURAL FOOD PROCESSING SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> Customers whose Billing Demand is greater than 5 MW/MVA and less than 15 MW/MVA at plants where the primary purpose is processing, canning, freezing or the frozen storage of agricultural food crops (including livestock, poultry and fish), provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after *April 1, 20234*.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$651.14685.32 per month

\$0.020460.02153 per kWh for the first 7,300,000 kWh

Energy Charge: \$0.033910.03569 per kWh for all additional kWh

Demand Charge: \$5.365.64 per kW of Billing Demand

The Minimum shall be computed as Demand Charge

Minimum: times 75% of the Customer's Maximum Billing Demand

during the most recent 12—month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 17 EVOLVING INDUSTRY SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE: To accounts whose load activity and / or industry is classified as an Evolving Industry. If any part of a load is classified as Evolving Industry, all loads measured by that meter are subject to this rate.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

17-A: For retail customers that would otherwise be served as Residential, Rate Schedule 1, and other retail customers with service less than 200 kW Billing Demand.

EFFECTIVE: With meter readings after *April 1, 2024*.

Basic Charge: \$1.04 per day

Energy Charge: \$0.08867 per kWh

Minimum Charge: \$1.04 per day

17-B: For retail customers with service of 200kW or greater Billing Demand.

EFFECTIVE: With meter readings after *April 1, 2024*.

Basic Charge: \$1,000.00 per month

Energy Charge: \$0.00554 per kWh

Demand Charge: \$28.18 per kW of Billing Period

Minimum Charge: The Minimum shall be computed as Demand Charge times 75%

of the Customer's Maximum Billing Demand during the most

recent 12-month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 17 EVOLVING INDUSTRY SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

AVAILABLE: To accounts whose load activity and / or industry is classified as an Evolving Industry. If any part of a load is classified as Evolving Industry, all loads measured by that meter are subject to this rate.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

17-A: For retail customers that would otherwise be served as Residential, Rate Schedule 1, and other retail customers with service less than 200 kKW Billing Demand.

EFFECTIVE: With meter readings after *February April 1, 20234*.

Basic Charge: \$1.04 per day

Energy Charge: \$0.085350.08867 per kWh

Minimum Charge: \$1.04 per day

17-B: For retail customers with service of 200kkW or greater Billing Demand.

EFFECTIVE: With meter readings after **February** April 1, 20234.

Basic Charge: \$1,000.00 per month

Energy Charge: \$0.003890.00554 per kWh

Demand Charge: \$28.18 per kW of Billing Period

Minimum Charge: The Minimum shall be computed as Demand Charge times 75%

of the Customer's Maximum Billing Demand during the most

recent 12-month period.

<u>BILLING DEMAND</u>: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 85 AGRICULTURAL FOOD PROCESSING BOILER SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> To electric boilers which are separately metered and are primarily used for the purpose of processing, canning, or freezing agricultural food crops (including livestock, poultry and fish), provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after April 1, 2024.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$1,334.97 per month

Energy Charge: \$0.02856 per kWh for the first 7,300,000 kWh

\$0.03257per kWh for all additional kWh

Demand Charge: \$6.24 per kW of Billing Demand

Minimum: The Minimum shall be computed as Demand Charge

times 75% of the Customer's Maximum Billing Demand

during the most recent 12-month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.



RATE SCHEDULE No. 85 AGRICULTURAL FOOD PROCESSING BOILER SERVICE

Rates shown on the Rate Schedules are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

<u>AVAILABLE:</u> To electric boilers which are separately metered and are primarily used for the purpose of processing, canning, or freezing agricultural food crops (including livestock, poultry and fish), provided however, service to any Customer load or portion thereof which is or becomes a New Large Load as defined by the District's Customer Service Policies shall be served at the rates specified in Rate Schedule No. 94.

EFFECTIVE: With meter readings after April 1, 20234.

MONTHLY BILLING RATES: Customer's monthly billing will consist of the following charges:

Basic Charge: \$1,268.381,334.97 per month

\$\frac{0.027140.02856}{0.027140.02856}\$ per kWh for the first 7,300,000 kWh

\$0.03095 0.03257 per kWh for all additional kWh

Demand Charge: \$5.936.24 per kW of Billing Demand

Minimum: The Minimum shall be computed as Demand Charge

times 75% of the Customer's Maximum Billing Demand

during the most recent 12_month period.

BILLING DEMAND: The Billing Demand under this schedule shall be the larger of the following demand factors:

- a. The contract demand, if any, or;
- b. The highest 15-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor.

TAX ADJUSTMENT: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.