Safety Report

September 2022



Injuries Reported

Date	Injury	Description		
		Picked Up a Piece of Wood and Got a Splinter		
8/11	Finger	While retrieving and picking up wood pieces an employee was not wearing gloves and got a large sliver in their middle finger which delayed work to attend to the extraction of the sliver. What was learned from this is their Supervisor instructed him to put them on and emphasized the importance and the value of wearing proper PPE.		
	Forearm	Spider Bite		
8/13		An employee was opening a garbage dumpster lid and noticed there was a small spider on their left forearm and		
		brushed it off at the same time. He felt a sting/burn feeling after brushing it off and realized must have been bitten.		
		Blunt Abdominal Trauma/Struck by boat rail		
8/17	Abdomen	While performing ERT water rescue maneuvers (Tactical turns). While transitioning from the tactical turn to		
		centering up the boat an employee's grip was lost causing them to fall and strike the boat rail with their abdomen.		
	Eye	Eye Allergic reaction		
		An employee got out of their truck at the PRRA boat launch. It was windy and something was blown into their eye,		
8/22		which the eye and eyelid became very red and swollen. Went to the walk-in clinic and was told it was most likely an		
		allergic reaction. The employee was wearing glasses when this happened. Received a prescription eyedrop to reduce the swelling.		





Injuries Reported

Date	Injury	Description
8/24	Knee	Sore knee An employee's knee became sore after working on and off the new mezzanine platform. Going up and down the stairs most of the day made it sore.
8/24	Ankle	Rolled Ankle While walking on the sidewalk an employee stepped off the sidewalk into gravel and rolled their ankle. A little swollen and sore but feels ok. Situational awareness could have help prevent this.
8/29	Back	Tweaked Back When walking back to the truck from a customer's property an employee was attempting to step on to the shoulder of the road. The area was covered with brush making it look like it was the same grade they were stepping from and stepped into a hole, tweaking their mid to lower back due to the unexpected grade change.





Monthly and Year to Date

2022	Month	YTD
Total Incidents Reported	7	31
Recordable Case(s)	2	11
Restricted Duty Case(s)	1	4
Lost Workday Case(s)	0	3





2022 incidents Year to Date Summary











Close Calls

Date	Location	Description
		Vehicle on Single Lane Haul Road
8/23	PRD	A Wanapum Safety Monitor and an IMCO roadway monitor observed a vehicle driving south on the Martinez roadway. This section of the Martinez Roadway is a single lane road and managed by IMCO roadway monitors. This roadway is a primary haul route for the PRREIP. The vehicle did not stop and check in with the north roadway monitor and proceeded down the roadway to the south. A northbound dump truck was in route on this section of roadway, the two vehicles reportedly needed to pull to the roadway edge to pass each other.





Vehicle Incidents

Date	Vehicle	Driver's Account:
		Backed into Sign
8/6	419	An employee was backing out of a parking spot at Huntzinger Boat Launch and misread the backup camera warning markings and backed into a sign. The employee had no spotter at the time. No one was injured, and a slight dent was made in the back bumper of the truck.
		Clipped another Vehicles Mirror
8/13	418	An employee was driving in a congested area at Rattlesnake Cove due to illegally parked vehicles and people in the area and brushed against a parked vehicle's foldable mirror. No damage to either mirror.
		Rock Chip
8/18	Unknown	While driving on 243 a rock chipped the front window from a truck filled with apple bins.
	1 .233	T259 Damaged While Backing Up
8/26		While backing up trailer T259 the driver could see the curb and building but failed to see a post that was placed beyond the curb.





Contractor Injuries and Incidents

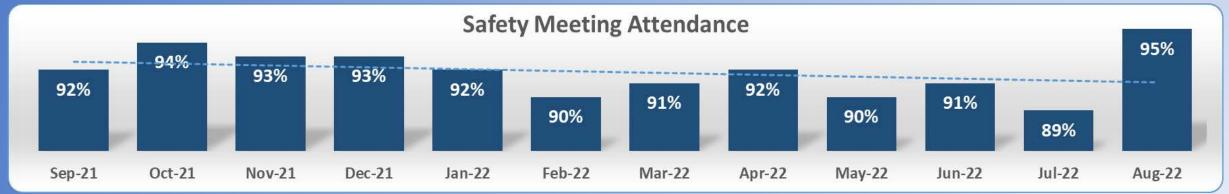
Date	Location	Description		
		Contractor Personal Vehicle Backed into Parked PUD vehicle		
8/3	Crescent Bar	A PUD vehicle was parked in a Crescent Bar parking lot and a contractor in personal vehicle backed into the PUD vehicle. PUD employee was in the parked vehicle at the time and noticed the car backing up and noticed no sign of stopping so PUD employee honked but the contractor did not stop in time and hit the PUD vehicle.		
		Conductors Exposed During Excavation		
8/4	PR Hatchery	While a contractor was excavating with a small excavator to expose a leaking valve at the old PR Hatchery site, a bundle of wires was exposed. One wire was broken, and several others had their insulation torn. Work was stopped and PR maintenance electricians were notified. The wires were tested and shown to be dead. They are suspected to be abandoned wires, but electrical engineering is researching their history and last-known status. Work on the valve will remain stopped until the bundle's status is known.		





Leading & Lagging Indicators









Leading & Lagging Indicators





Safety Action Item Critical Success Factors

Incident Reporting

- Number of Close Calls = 2
- Number of Close Calls Reported on Time = 2

Injuries

- Total Number of Injuries = 7
- Total Number of Injuries Reported on Time = 7

Mobile

- Total Number of Mobile Incidents = 4
- Total Number of Mobile Incidents Reported on Time = 3



Number of Open Action Items over 60 days old					
As of July 2022	As of August 2022				
Year 2017 = 3	Year 2017 = 1				
Year 2018 = 13	Year 2018 = 3				
Year 2019 = 9	Year 2019 = 2				
Year 2020 = 4	Year 2020 = 2				
Year 2021 = 8	Year 2021 = 6				
Year 2022 = 3	Year 2022 = 3				
Month Total = 40	Month Total = 17				

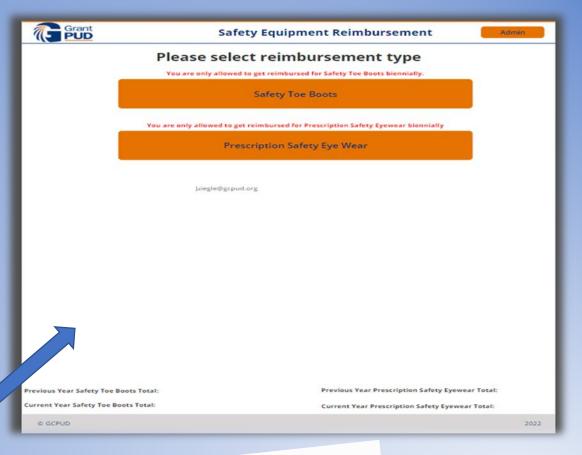




New and Improved Reimbursement Process!

Go to the Safety Home Page

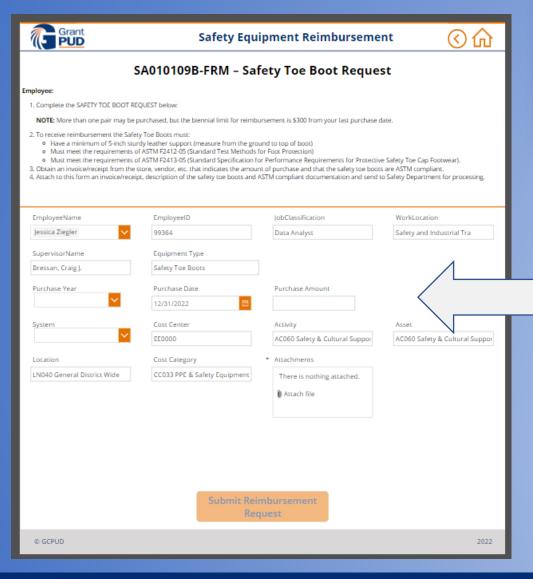








Safety Equipment Reimbursement (cont....)







- All employee information is pre-filled into the new electronic form when you open it up. You must enter: <u>Purchase Year</u>, <u>Purchase Amount, and System</u> – The old form will no longer be needed.
- Please <u>attach your receipt</u> and proof of ASTM rating (this is usually located on the tongue of the boot).
- <u>Submit!</u> It will go to your Supervisor for approval and then come back to the Safety Department for review. We will then send it on to Accounts Payable for payment.
- Please DO NOT use your P-Card to purchase boots or submit an SOE for reimbursement.
- Please contact Jessica Ziegler with any questions.



JHA/Job Brief Process Review



For those Supervisors that have not yet completed the Survey you can do so now using your cell phone and this QR Code.

At the request of the Safety
Department the Continuous
Improvement Department is looking at
the JHA/Job Brief process.

To get baseline information, a communication was sent to ALL Supervisors requesting them to complete a Survey regarding how they utilize JHA's and Job Briefs. More to come after the requested data is compiled.





Thank You!



Powering our way of life.





Safety

Safety Update - Q3 2022



Powering our way of life.

2023 Goals & Programs

- Contractor Management
- Stay at Work Program
- Job Hazard Analysis
- Update of Safety Policies and Procedures
 - Electrical Safety Procedure
 - Confined Space Procedure
 - Hearing Conservation Program



Contractor Management

Project Description:

Update and implement a structured program which will provide guidance, expectations and process for applying GPUD safety standards and requirements to contractors working on our projects. The program will also include a continuous improvement process that achieves our high standards for operational excellence.



Contractor Management progress update

Status	Accomplishments to date	
Complete	Reached coconscious on contractor pre-qualification	
Complete	Agreement on District Representative (DR) and CSP outlines	
Complete	Set a modified meeting schedule to allow for production of a draft policy and procedure	
Complete	Held core team and management team meeting	
Status	Planned activities	
October	Draft DR and CSP procedure	
October	Schedule core team and SteerCo meetings	
November	Hold training planning management session	

Stay at Work Program

The Safety Department is working in partnership with HR to update and maintain the required documents for LNI's - employees Stay at Work program, after reporting an injury which results in restricted work activities. We have completed the following items:

- Requested up to date options for light duty work from all Supervisors in all Departments.
- Updating job descriptions.
- Using results from 2016 L&I Vocational Rehab documents and comparing to current light duty documents for any necessary updates.
- Documents will be reviewed with supervisors
- A draft of a Stay at Work Policy will be shared with stakeholders for input and refinement.
- The resulting policy will b sent to labor management for input and refinement
- Documents will be uploaded to HR platform once finalized.





Job Hazard Analysis

Safety is working with our Continuous Improvement Team to evaluate and enhance our current Job Hazard Analysis (JHA) Program and our Pre-Job Brief Program across the District.

Current tasks:

 The CI Team is surveying the District to better understand how each department is utilizing JHAs and Pre-Job Briefs

Future tasks:

- Create a stakeholders group to refine and improve the existing JHA and Pre-Job Brief programs
- Improve the use, review and storage of JHAs

Safety Policy Review Efforts

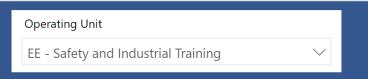
Published Documents	Documents in Revision Process
Outdoor Heat Stress Program v.5 (policytech.com)	Working On, Over, Or Near Water v.3 (policytech.com)
	Accident Prevention Program v.4 (policytech.com)
Grant PUD Safety Steering Team History v.1	
(policytech.com)	Confined Space Program v.2 (policytech.com)
Grant PUD Safety Steering Team Charter 09-01-2022 v.1	
(policytech.com)	Lockout Tagout Program v.2 (policytech.com)
	Policy on Safety Policies, Programs, Plans and Procedures v.2 (policytech.com)
	Workplace Ladder Safety v.3 (policytech.com)
	Evacuating A Grant County PUD Facility v.4 (policytech.com)
	Scaffold v.2 (policytech.com)
	Personal Protective Equipment (PPE) v.2 (policytech.com)
	Safety Toe Boot Request Form v.4 (policytech.com)
	Prescription Safety Eyewear Request v.2 (policytech.com)
3	11

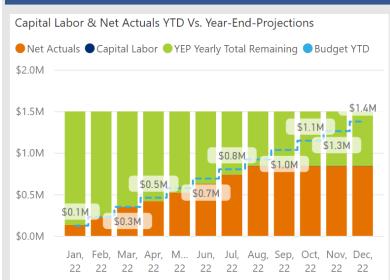
Additional Safety Policy Review Efforts

Safety Programs Under Significant Update

- Confined Space Procedure (implementing CI effort)
- Electrical Safety Procedure
- Hearing Conservation Program
- Crane Safety Program







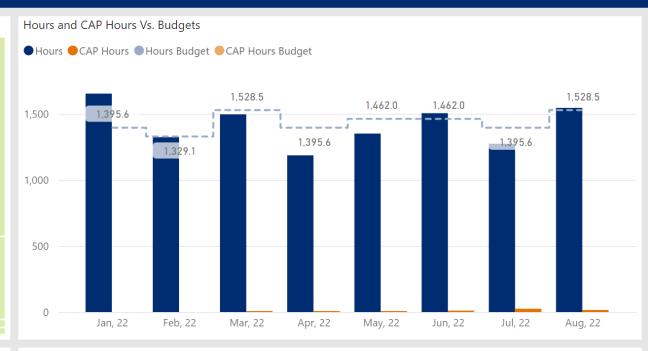


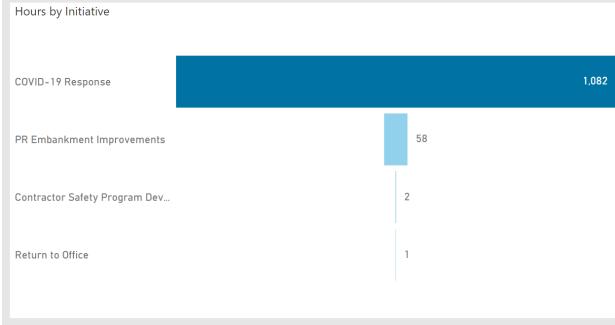
Net Actuals Vs. Budget					
\$840.0K -8.6%					

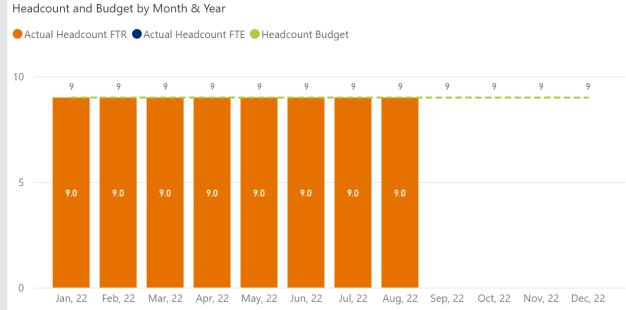
O&M Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
☐ Labor	\$625,966	\$581,056	-\$44,910	-7.2%	92.8%
Salaries & Wages	\$586,997	\$561,020	-\$25,976	-4.4%	95.6%
Other Labor	\$28,969	\$17,180	-\$11,789	-40.7%	59.3%
Overtime	\$10,000	\$2,856	-\$7,144	-71.4%	28.6%
Purchased Services	\$178,393	\$130,200	-\$48,193	-27.0%	73.0%
Operating Materials & Equipment	\$88,867	\$96,802	\$7,935	8.9%	108.9%
⊕ G&A	\$26,000	\$33,127	\$7,127	27.4%	127.4%
⊕ IT		\$1,435			
Total	\$919,225	\$842,620	-\$76,605	-8.3%	91.7%











Powering our way of life.



OUR PLAN FOR DELIVERING VALUE TO OUR CUSTOMERS



Powering our way of life.

Topics Covered



Budget Initiatives & Process



Strategic Initiatives



Summary of Results



Appendices

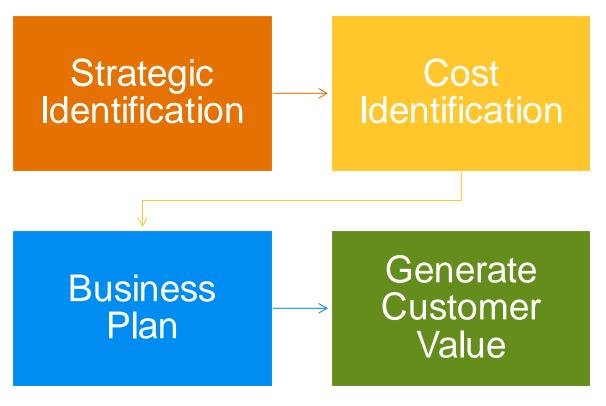


Keys for the Budget & Planning Process

General Aims:

1. Provide value for current and future Grant PUD customers

2. Maintain the utility's financial health





01

Major Budget Initiatives & Budget Process



Alignment with customers' top priorities:

- Reliability and minimizing outages 90% satisfaction across all customers
- Good customer service 87% satisfaction across all customers
- Affordability #1 priority for residential customers, 73% satisfaction across all customers
- Customer communications Communicating on energy use and outages, 70% satisfaction across all customers

Source: 2021 Customer Satisfaction Survey



Major 2023 Budget Initiatives

- 1. New Budget Schema
 - New focus on using data-optimization managerial reporting for Business Intelligence
 - Budgets derived from "normalized" historical actual spending
- 2. Introduction of the "Budget Area Committees"
 - Committees mirror functional areas
 - Committees are responsible for developing business unit operating budgets and the tactical plan to deliver the year's strategic plan
- 3. Similar to last year, detailed budget data available for review



2023 Budget Process:

- 1. Round 1 Strategic Focus
 - Establish Strategic Initiatives "Big 3 in 23"
 - Identify major cost drivers
 - Major external drivers: Inflation, Supply Chain, International energy demand
 - Inclusion of major forecast items
 - o Updated Loads and Revenues, latest Wholesale assumptions, and latest Capital spending assumptions
 - CXOs set overall operating unit budget targets for 2023
- 2. Round 2 Tactical Focus and Budget Delivery
 - Budget Area Committees (BAC) refine Labor and non-Labor operating budgets to deliver on strategic initiatives
 - BACs develop, evaluate, and select the most valuable/highest priority business cases
 - CXOs and BACs set functional area operating budgets
- 3. Round 3 Commission and Public Review
 - Commission review and public outreach
 - Budget adoption



2023 Budget Timeline:

Task	PARTICIPANTS	START	END	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
PLANNING		1/2/22	6/17/22	
2022 Intra-period Business Case Process	BU Mgrs, CXOs, FP&A	1/2/22	2/20/22	
2023 Budget Reform Effort	CXOs, FP&A	3/10/22	5/25/22	
Enterprise-wide communication on 2023 Process	BU SMEs, BU Mgrs, CXOs, FP&A	5/27/22	5/27/22	
Distribution of Info, Budget Timing, Training expectations,	BU SMEs, BU Mgrs, CXOs, FP&A	6/17/22	6/17/22	
Round 1 - Strategic and Target Setting		6/10/22	7/29/22	
GO#1 - Initial Analytics prep	FP&A	6/10/22	7/1/22	
GO#1 - Develop Operating Budget Targets	FP&A> CXOs	7/5/22	7/15/22	
GO#1 - Fin Fx Run with Targets & Contingency	FP&A> CXOs	7/5/22	7/15/22	
GO#2 - Finalize Targets, Contingency and Strategic Spend	CXOs	7/15/22	7/22/22	
Finalize Round 1	FP&A	7/25/22	7/29/22	
Round 2 - Budget Delivery Plan		8/1/22	9/9/22	
GO#1 - Budget Area Week 1	BA Committees, BU Mgrs, FP&A	8/1/22	8/5/22	
GO#1 - Budget Area Week 2	BA Committees, BU Mgrs, FP&A	8/8/22	8/12/22	
GO#1 - Budget Area Week 3	BA Committees, BU Mgrs, FP&A	8/15/22	8/19/22	
GO#1 - Finalize Operating Budgets by Budget Area	BA Committees, BU Mgrs, FP&A	8/22/22	8/26/22	
GO#2 - Refine Fin Fx Inputs - Week 1 (Capital Update)	FP&A> CXOs	8/1/22	8/5/22	
GO#2 - Refine Fin Fx Inputs - Week 2	FP&A> CXOs	8/8/22	8/12/22	
GO#2 - Refine Fin Fx Inputs - Week 3	FP&A> CXOs	8/15/22	8/19/22	
GO#2 - Finalize Fin Fx Inputs	FP&A> CXOs	8/22/22	8/26/22	
Finalize Round 2	CXOs, BA Committees, FP&A	8/29/22	9/9/22	
Round 3 - Public Outreach		9/12/22	12/30/22	
Prepare and Review Materials for Commission/Public Review	FP&A, CXOs, Commission	9/12/22	10/11/22	
Public Meetings	Commission, CXOs, FP&A	10/11/22	10/13/22	
Budget Adopted	Commission	10/13/22	11/22/22	
Budget Upload to ODS	Acctg, FP&A	11/22/22	12/30/22	
Finalize Round 2 Round 3 - Public Outreach Prepare and Review Materials for Commission/Public Review Public Meetings Budget Adopted	FP&A, CXOs, Commission Commission, CXOs, FP&A Commission	8/29/22 9/12/22 9/12/22 10/11/22 10/13/22	9/9/22 12/30/22 10/11/22 10/13/22 11/22/22	

02

Strategic Initiatives Overview



Strategic Initiatives Overview: "Big 3 in 23"

Strategic Planning Initiatives

For 2023, business unit goals were integrated across the whole PUD. This coordination effort led to the identification of the "Big 3 in 23".

- Standardization Through Improvement of Processes and Procedures
- Drive Customer Value by Seizing Opportunities
- Workforce of the Future, Employer of Choice

Each of the initiatives has 7-16 sub-initiatives for a total of 38 separate workflows. Each sub-initiative was identified by senior management as a priority for 2023. Each sub-initiative has an identified owner and timing of delivery during 2023. Work on these initiatives is spread across all functional areas of the PUD, including the Operations group (COO), Finance & Business Services (CFO), and the Chief Customer Officer group (CCO).

The Operations group consists of **Power Delivery**, **Power Production**, **Safety & Industrial Training**, and **Business Advancement**. They are directly responsible for 7 of 38 priorities for the "Big 3 in 23".

Power Delivery

Standardization

• Strengthening Asset Management to standardize our processes for preventative maintenance and capital improvement

Drive Customer Value

- Proactive regulatory compliance and risk mitigation for electric and fiber assets to reduce PUD exposure to financial and reliability impacts
- Improved power quality on the PUD distribution grid to increase customer confidence and reliability

Workforce of the Future

• Investing in our engineering and workforce development through training, adequate FTR allotment, and a positive culture that embraces opportunity and engagement



Power Production

Standardization

- Framework for all PP standards; List of all standards needed; Plan to complete remaining standards
- Operator SOPs Complete all missing/out-of-date SOPs by EOY 2023

Drive Customer Value

- Develop asset strategy framework, write first two strategies and develop list of assets needing a strategy by July 31 st
- Develop asset management 10-year plan for O&M and capital work by October 31st
- Develop and deploy new process for resource-loaded work scheduling by 5/31/24 (start 2/1/23)

Workforce of the Future

- Skills Matrix for all departments needed skills vs. actual skills
- Transparent PP succession planning process by 8/1/2023 (Employee Experience Big 3 and PP 5-year strategic plan)



Safety & Industrial Training

Standardization

- Standardization of District's safety procedure: In format, documentation, and functionality
- Development of a data driven Industrial Hygiene Program covering lead, asbestos, hearing protection, respirator program, and HAZCOM
- Significant safety program rewrites and/or implementation in 2023

Drive Customer Value

- Strong field presence of Safety Coordinators
- Modify the Contractor Safety Program: include collection of safety data during the bidding process and increase training, roles, and responsibilities for DRs and PM



Business Advancement

Standardization

- Develop and or optimize existing program frameworks PM, OCM, EPPM, CAP, CI, QA and PC
- Create maturity roadmaps to set-up programs for implementation success

Drive Customer Value

- Implement projects decrease project delivery risk to produce safe and quality outcomes
- Enhance project prioritization and project selections

Workforce of the Future

Continue to support our employees (and customers) through change



Strategic Initiatives: Finance & Business Services Group

The Finance & Business Services group (the CFO organization) consists of **Internal Services**, **Enterprise Technology**, and **Financial Services**. The CFO group is primarily service-oriented with costs driven by the service provided to internal customers. They are directly responsible for 14 of 38 priorities for the "Big 3 in 23".

- To achieve elevated services necessary to support the execution of the 2023 priorities, the CFO group identified the following work-efforts:
 - An increase in 6 FTRs to decrease response time and improve services, offset by reducing consulting fees in Emergency Management, Treasury, and Enterprise Technology.
 - Strengthening the District's overall internal controls and governance.
 - Maintaining the District's compliance record.
 - Supporting a preventative maintenance approach to maintaining District assets by adequately planning and resourcing work.

Strategic Initiatives: Finance & Business Services Group

Because of the support nature of Finance and Business Services, work efforts must be coordinated across the whole enterprise and march together with both operational and customer growth. To support these efforts, cost discovery became a significant effort for the CFO group's 2023 strategic plan. These include:



Risk

Anticipated Premium Increase (\$209k)



Compliance

Consultant for NERC Audit (\$150k) – Not considered in target methodology (audit every 3 years)



Accounting

Accountant (FTR) – Compliance, Internal Controls (\$80k)



EΤ

Service Desk Specialist (FTR) (\$86k)

Network Analyst for Ops (FTR) (\$94k)

Security Engineer (FTR)(\$123k)

New Software (\$809k)



Internal Services

Fleet Coordinator (FTR) (\$67k)



Strategic Initiatives: Chief Customer Officer Group

The Chief Customer Officer group (CCO) consists of **Customer Services** and **Employee Services**. The CCO group is primarily focused on external customers. They are directly responsible for 17 of 38 priorities for the "Big 3 in 23", with the sole responsibility for the **Workforce of the Future** priority (7 of the 17).

- In support of the 2023 priorities, the CCO group identified the following:
 - \$3.5M associated with New Resource acquisition (CCO Special Projects business unit)
 - \$300k for the Educational Reimbursement program
 - \$162k Water Accounting System, costs (supports PRP participants)
 - \$140k in vendor support for PMO/OCM instructional design (training)
 - \$100k in wellness and recruiting costs
 - \$100k in Emergent Leadership program

- \$30k for Demand Response Assessment
- \$30k Additional Training associated with Affirmative Action
- \$35k Rewards and Recognition project implementation
- \$200k for HR compensation consultant, HR department audit and policy reviews
- NEW \$200k for development & implementation of Wellness program
- NEW \$66k for Records Officer position



03

Summary of Results



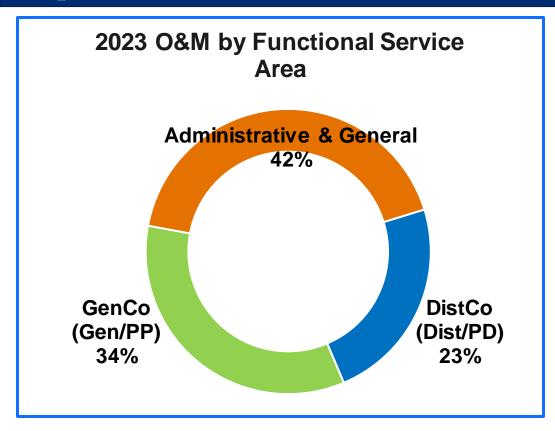
Total Expenses for 2023 (before offsets)

All Figures in Millions	2020 Actuals	2021 Actuals	2022 Budget	2022 YEP	2023 Budget
Operations & Maintenance - Total:	\$134.9	\$165.5	\$156.9	\$162.5	\$191.2
Electric System O&M:	\$55.7	\$69.4	\$66.9	\$72.2	\$95.9
Priest Rapids Project O&M:	\$79.2	\$96.1	\$89.9	\$90.4	\$95.4
Capital - Total:	\$119.5	\$157.2	\$145.4	\$151.8	\$155.0
Electric System Capital:	\$70.7	\$90.0	\$90.1	\$90.8	\$80.8
Priest Rapids Project Capital:	\$48.8	\$67.2	\$55.3	\$61.0	\$74.1
Debt Service	\$73.6	\$74.5	\$75.7	\$75.6	\$72.1
Taxes	\$17.7	\$20.1	\$19.5	\$20.9	\$21.4
Total Expenses	\$345.7	\$417.2	\$397.5	\$410.8	\$439.7

Total Expenses for 2023 are expected to increase by \$42.1M (+10.6%) compared to the 2022 budget. Compared to current 2022 expectations, the 2023 budget is an increase of \$28.8M (+7.0%).

- **Debt Service** and **Taxes** remain relatively flat compared to both the 2022 budget (-\$1.7M) and current 2022 expectations (-\$3.0M).
- **O&M Expense** increases by \$34.3M (+21.9%) vs the 2022 budget and \$28.7M (+17.6%) vs current 2022 expectations.
- Capital Spend is expected to increase by \$9.5M (+6.6%) vs the 2022 budget and \$3.1M (+2.1%) vs current 2022 expectations.
- Major Cost Drivers Compared the 2022 budget, the most significant driver for 2023 is inflation. Inflation accounts for 68% (\$26.3M) of the overall increase. The 2023 budget assumes an overall cost structure increase of 8.7% (+5.7% over our standard 3% planning assumption). Compared to the 2022 budget, 2023 business planning around the "Big 3 in 23" accounts for an additional \$12.4M of the increase (\$15.4M in O&M and -\$3.1M in Capital).
- Compared to the 2022 budget, Medical/Employee Benefits have increased by \$4.0M.

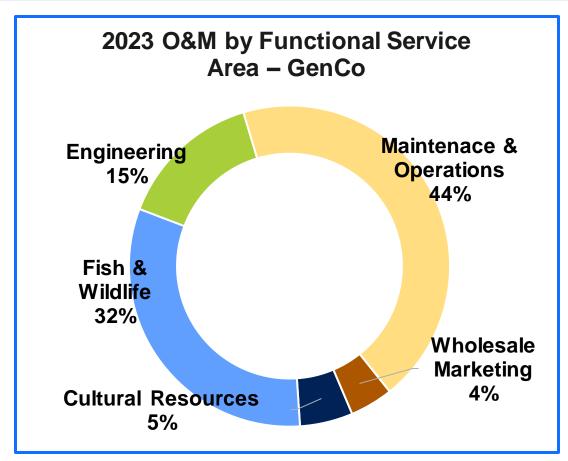
Operations and Maintenance Expense



Cost Type	2023	PRP	ELEC
Labor	\$122.3	\$58.4	\$63.9
Purchased Services	\$38.4	\$22.0	\$16.4
General & Administration	\$11.5	\$8.0	\$3.5
Operating Materials and Equipment	\$8.7	\$3.2	\$5.5
Information Technology	\$8.4	\$3.2	\$5.2
Risk	\$3.5	\$1.7	\$1.7
Transportation	\$1.6	\$0.3	\$1.3
Utilities	\$0.8	\$0.4	\$0.4
Capitlized A&G	(\$4.0)	(\$2.0)	(\$2.0)
Total	\$191.2	\$95.4	\$95.9

- Operations and maintenance (O&M) expense includes both labor and operating expenses, net of labor to capital.
- Total 2023 O&M of \$191.2M can be reviewed programmatically across the three service areas of A&G, GenCo (nearly synonymous with Power Production), and DistCo (nearly synonymous with Power Delivery).

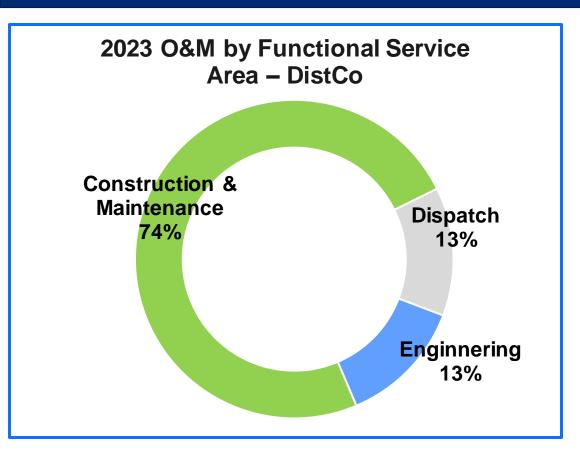
2023 Generation & Power Production O&M



Cost Type	2023	PRP	ELEC
Labor	\$42.4	\$39.7	\$2.7
Purchased Services	\$15.3	\$15.1	\$0.2
General & Administration	\$6.4	\$6.0	\$0.4
Operating Materials and Equipment	\$2.7	\$2.7	\$0.0
Information Technology	\$0.1	\$0.1	\$0.0
Risk	\$0.0	\$0.0	\$0.0
Transportation	\$0.0	\$0.0	\$0.0
Utilities	\$0.1	\$0.1	\$0.0
Capitalized A&G	(\$1.4)	(\$1.3)	(\$0.1)
Total	\$65.6	\$62.4	\$3.2



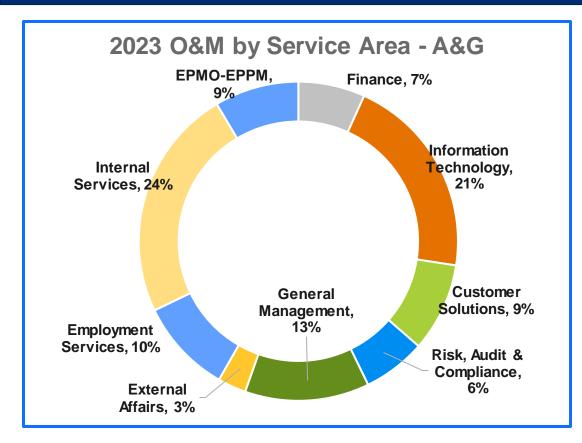
2023 Distribution & Power Delivery O&M



Cost Type	2023	PRP	ELEC
Labor	\$35.0	\$1.2	\$33.7
Purchased Services	\$5.6	\$0.0	\$5.6
General & Administration	\$0.5	\$0.0	\$0.5
Operating Materials and Equipment	\$4.7	\$0.0	\$4.7
Information Technology	\$0.1	\$0.0	\$0.1
Risk	\$0.0	\$0.0	\$0.0
Transportation	\$0.0	\$0.0	\$0.0
Utilities	\$0.0	\$0.0	\$0.0
Capitalized A&G	(\$1.3)	(\$0.1)	(\$1.2)
Total	\$44.7	\$1.2	\$43.5



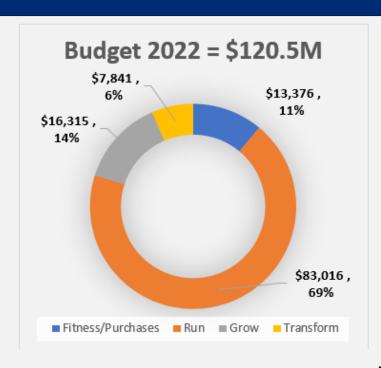
2023 Administrative & General O&M

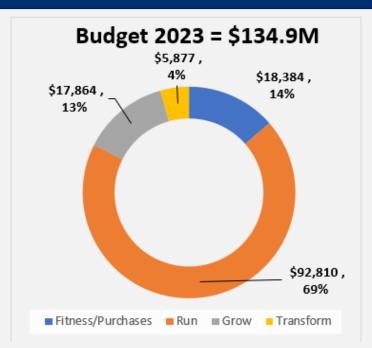


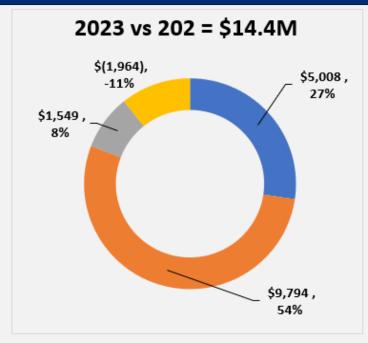
Cost Type	2023	PRP	ELEC
Labor	\$45.0	\$17.5	\$27.5
Purchased Services	\$17.5	\$6.8	\$10.6
General & Administration	\$4.6	\$2.0	\$2.6
Operating Materials and Equipment	\$1.2	\$0.5	\$0.7
Information Technology	\$8.2	\$3.1	\$5.1
Risk	\$3.5	\$1.7	\$1.7
Transportation	\$1.6	\$0.3	\$1.3
Utilities	\$0.7	\$0.3	\$0.4
Capitalized A&G	(\$1.4)	(\$0.6)	(\$0.8)
Total	\$81.0	\$31.8	\$49.2



2023 Consolidated Capital Plan







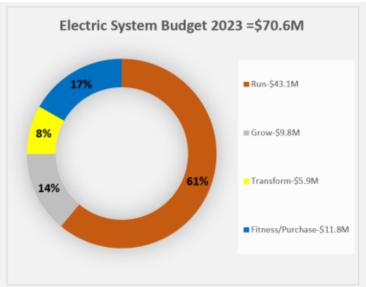
\$135 Million in 2023

Note: Costs exclude Internal Labor

- RUN + Fitness/Purchases (Operate & Maintain): Power Production = \$54.5M (49%), Power Delivery = \$30.6M (28%), IS/Facilities = \$6.5M (5%), Enterprise Technology = \$1.8M (2%), Fiber/Other = \$17.7M (16%)
- GROW (Enhance & Expand): Power Production = \$7.8M (43%), Power Delivery = \$5.3M (30%), IS/Facilities = \$0.2M (1%), Enterprise Technology = \$0.2M (1%), Fiber/Other = \$4.5 (25%)
- TRANSFORM (Innovate & Drive): Power Production = \$0.0M (0%), Power Delivery = \$4.4M (75%), IS/Facilities = \$0 (0%), Enterprise Technology = \$1.5M (25%), Fiber/Other = \$0 (0%)

2023 Electric System Capital Plan





Electric System Capital Plan Characteristics					
Concentration of Projects %	Notable Forecasted Projects				
n 2023, 10 projects respresent 76% of expected spend of \$70.6M (this was 70% in 2022)	Portfolio Summary 6 DB2 Projects represent 20% of 2023 expected spend \$14.1M 2 IQ projects represent 5% of 2023 expected spend \$3.8M 2 LPS projects represent 17% of 2023 expected spend \$5.6M Project Summary 6 DB2 projects have a aggregate project forecast of \$20.9M for 2023 5 IQ projects have a aggregate project forecast of \$24.1M for 2023 13 LPS projects have a aggregate project forecast of \$66.6M for 2023				

Fiber System

Included in the Electric system capital plan

Fiber Expansion Project

o 2023-2024 = +\$30.0M

Broadband Customer Connects

o 2022-2026 = +\$20.0M

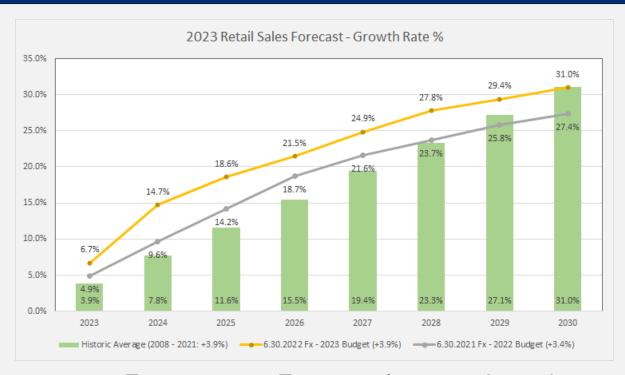
Electric System Expansion

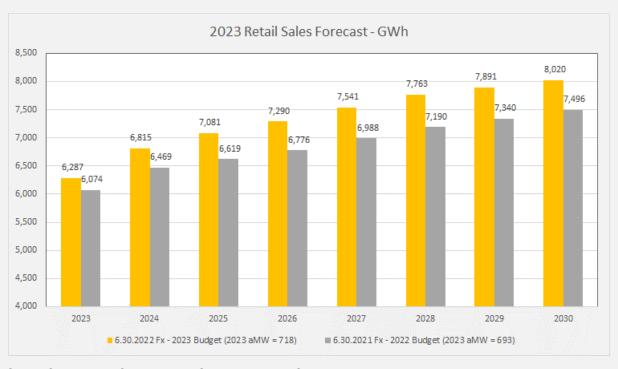
- Retail growth is significant in Grant County
- To meet this growth, there are:
- 2 large system expansions Design Build 2 (DB2) and the Quincy Transmission Expansion Project (QTEP), and
 - 2 customer engagement functions, Large Power Solutions (LPS) and Transmission Interconnections (IQ)



Note: Costs exclude Internal Labor

2023 Electric System Capital Plan – Load Growth

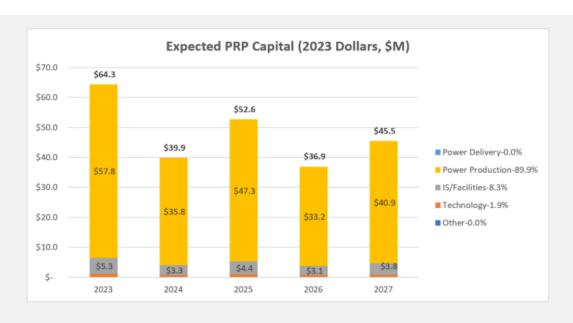


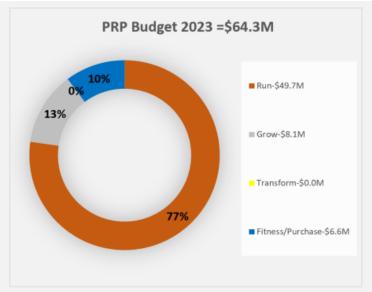


- Forecast over Forecast, for 2023 through 2030, load growth rates increase by 0.5%
 - The 2023 growth outpaces the previous forecast by 2.7%
 - By 2030 growth rates have diverged by 3.6%
 - 2023 Fx = 6.7% annual growth vs 2022 Fx = 4.9% annual growth
- Current expected load growth nearly intercepts the historical rate of 3.9% in 2030
 - The increasing growth rate is associated with new large customers



2023 Priest Rapids System Capital Plan





Priest Rapids Project System Capital Plan Characteristics Concentration of Projects % Notable 2023 Projects PR Embankment improvments represents 33% of 2023 expected spend 2023 expected spend \$21.4M of the \$64.3M PR Turbine upgrades represents 30% of 2023 expected spend 2023 expected spend \$19.6M of the \$64.3M PR Generator rewind represents 17% of 2023 expected spend 2023 expected spend \$10.9M of the \$64.3M

Capital allocation between systems

- For most of the recent history, the PRP system has dominated the allocation of capital work.
- This will be reversed for the foreseeable future.

Performance since Q1 2020

- The combination of high project concentration and pandemic's supply-chain impacts have been a drag on project delivery.
- Both the PR Turbine & Generator and the PR Embankment work was delayed in 2020



Expense Offsets for 202 Budget

6.	Total Expenses after Offsets\$319.9M
5.	Total Offsets (\$119.8M)
4.	Conservation Loans
3.	Net Power (expenses minus revenue) (\$95.2M) (Net of market power purchases and sells)
2.	Sales to Power Purchasers at Cost (\$13.8M) (Long-term external share)
1.	Contributions in Aid of Construction (\$10.7M) (Money paid by customers to build infrastructure)

CIACs

 Customer contributions range from small residentials connections (~\$1.2M annually) up to large +20MVA industrial customer substation builds. Compared to the 2022 budget, this is a increase of \$2.4M.

Sales to Power Purchasers

 Compared to the 2022 budget, this is a reduction of \$8.6M. The change is volumetric and driven by increased retail power demand offsetting wholesale market opportunities.

Net Power

 Compared to the 2022 budget, 2023 shows an increase of \$13.6M. This is driven by favorable wholesale market pricing. Compared to the market forecast used for the 2022 budget, wholesale market prices have increased by \$16.92/MWh.

Change in *Total Offsets* and impact on *Total Expenses*

- For 2023, offsets have increased by \$18.0M, mostly driven by the Net Power item and favorable wholesale market impacts.
- Overall, compared to the 2020 budget, *Total Expenses after Offsets* have increased by \$34.6M (12%).
 - o Compared to pervious expectations for 2023 (based on Q2 of this year), this is an increase of \$10.9M (3.5%).



Preliminary Budget Summary – Total Expenditures

Exhibit A - \$'s in thousands	Current	Forecast					>
BUDGETED ITEMS	2022	2023	2024	2025	2026	2027	2028
TOTAL O&M	162,540	188,170	194,098	201,797	208,743	216,296	223,382
TAXES	20,874	21,382	22,832	23,852	24,810	25,849	26,868
ELECTRIC CAPITAL	90,835	80,842	100,327	88,979	110,221	103,271	64,527
PRP CAPITAL	61,012	74,139	56,081	72,408	56,192	68,333	72,431
DEBT SERVICE (net of rebates)	75,569	72,084	73,658	76,327	80,649	95,126	99,246
TOTAL EXPENDITURES	410,830	436,617	446,996	463,364	480,615	508,876	486,453
Expenditure offsets for deduction							
Contributions in Aid of Construction	(9,901)	(10,713)	(12,257)	(12,650)	(11,297)	(11,490)	(6,853)
Sales to Power Purchasers at Cost	(13,568)	(13,774)	(14,183)	(14,472)	(15,032)	(15,416)	(15,425)
Net Power (+ Expense, - Revenue)	(78,222)	(95,178)	(84,182)	(62,511)	(42,203)	(34,776)	(25,089)
Conservation Loans	(125)	(125)	(125)	(125)	(125)	(125)	(125)
TOTAL EXPENDITURE OFFSETS	(101,816)	(119,790)	(110,746)	(89,757)	(68,656)	(61,806)	(47,491)
TOTAL BUDGETED EXPENDITURES	309,014	316,827	336,250	373,606	411,959	447,070	438,962

TOTAL O&M

- 2023 is projected to be a \$24.8M increase over current 2022 expectations.
 - o \$11.7M is driven by inflation.
 - \$13.1M is related to the 2023 business plan.

ELEC & PRP Capital

• Inflation will impact both the ELEC and PRP systems' 2023 capital plans.

	Ī	Inflation Business Plan		Business Plan		<u>Total</u>
ELEC Sys	\$	8,097	\$	(17,680)	\$	(9,584)
PRP Sys	\$	3,456	\$	10,065	\$	13,520
Total	\$	11,552	\$	(7,616)	\$	3,937

Expenditure Offsets

 As noted above, the primary driver of offset benefits is Net Power (+\$17M compared to current 2022 projections). Compared to Q2 2022 expectations, both CIACs and Sales to Power Purchasers remain flat.



Preliminary Budget Summary – Net Position

Exhibit B - \$'s in thousands	Current	Forecast					>
CONSOLIDATED OPERATIONAL PERFORMANCE	2022	2023	2024	2025	2026	2027	2028
Sales to Power Purchasers at Cost	13,568	13,774	14,183	14,472	15,032	15,416	15,425
Retail Energy Sales	252,904	270,018	292,408	307,719	321,943	337,436	352,523
Net Power (Net Wholesale+Other Power Revenue	78,222	95,178	84,182	62,511	42,203	34,776	25,089
Fiber Optic Network Sales	12,100	12,300	12,500	12,700	12,900	13,200	13,400
Other Revenues	2,354	2,354	2,354	2,354	2,354	2,354	2,354
Operating Expenses	(162,540)	(188,170)	(194,098)	(201,797)	(208,743)	(216,296)	(223,382)
Taxes	(20,874)	(21,382)	(22,832)	(23,852)	(24,810)	(25,849)	(26,868)
Net Operating Income(Loss) Before Depreciation	175,733	184,072	188,697	174,107	160,878	161,036	158,541
Depreciation and amortization	(75,522)	(77,841)	(80,694)	(83,637)	(87,743)	(89,785)	(93,195)
Net Operating Income (Loss)	100,211	106,231	108,003	90,470	73,136	71,251	65,346
Other Revenues (Expenses)							
Interest, debt and other income	(45,474)	(25,477)	(24,803)	(24,902)	(26,800)	(32,674)	(33,582)
CIAC	9,901	10,713	12,257	12,650	11,297	11,490	6,853
Change in Net Position	64,637	91,467	95,456	78,217	57,633	50,066	38,617

Forecast Period

- Sales to Power Purchasers: Moving from 2024 through 2028, sales are expected to stay flat.
- **Net Power**: By 2028, the constraints on market activity due to load growth, constrain sales impacts by 74% compared to 2023.

Retail Energy Sales

- There are two components for the increased sales forecast.
- Volumes have increased: Forecast vs forecast, for 2023, sales volume has increased by 24.4 aMW. By 2030, this difference is 59.8 aMW. This increase in sales demand is largely driven by industrial customers.
- 2% Rate Increase: A 2% rate increase is assumed from 2023 through 2028.
- forecast (the 2022 budget), for 2023, both price and volumes combine for a \$21.3M retail revenue increase.



Preliminary Budget Summary – Key Metrics

\$'s in thousands	Current	Forecast -					>
FINANCIAL METRICS	2022	2023	2024	2025	2026	2027	2028
NET INCOME	64,637	91,467	95,456	78,217	57,633	50,066	38,617
LIQUIDITY (measured at year end)							
Elect System Liquidity (Rev + R&C)	109,668	111,014	112,392	113,860	116,019	118,221	120,467
Excess Liquidity	8,775	24,307	18,738	22,148	19,786	23,128	24,979
Days Cash On Hand	281	280	262	259	250	250	249
<u>LEVERAGE</u>							
Consolidated DSC	2.21	2.51	2.68	2.47	2.22	2.10	1.81
Consolidated Debt/Plant Ratio	47%	45%	44%	44%	45%	46%	47%
PROFITABILITY							
Consolidated Return on Net Assets	2.7%	3.7%	3.8%	3.0%	2.1%	1.8%	1.4%
Retail Operating Ratio	108%	109%	104%	103%	102%	104%	104%

Profitability Metrics

- Return on Net Assets Targets not met in any years 2023 through 2028
 - Compared to the 2022 budget, 2023 is favorable +0.7% and the forecast period 2024-2028 is favorable +0.8% on an average annual basis.
- Retail Operating Ratio Targets not met in any years 2023 through 2028
 - Compared to the 2022 budget, 2023 is unfavorable, increasing by 1.2%; for the forecast period 2024-2028 the metric shows significant improvement, decreasing by 8.1% on an average annual basis.

Liquidity Metrics

- Electric System
 Liquidity Targets
 met all years 2023
 through 2028
- Days Cash on Hand

 Targets met for
 years 2023 through

 2027. Current

 forecast does not
 meet the target in

 2028.

Leverage Metrics

- Debt Service
 Coverage Targets
 met all years 2023
 through 2028.
- Debt-to-Plant Ratio Targets met all years 2023 through 2028.



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Appendix A - Scenarios

Events that could have a significant impact on budget



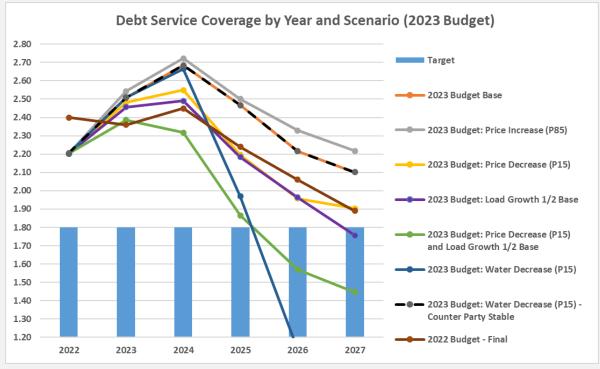
Operational Scenario Descriptions

6 Scenarios – provide metrics impact for movement in volatile parts of Grant PUD operations

- Scenarios that provide insight on Grant PUD's exposure to wholesale prices, that is selling and buying from the market when Grant's resources don't match load needs.
 - High wholesale prices (P85, prices only higher 15% of time)
 - Low wholesales prices (P15, prices only lower 15% of time)
- Scenarios that show how Grant PUD's financial metrics respond when load growth (electricity sales to retail customers) slows down from expected growth.
 - Low load growth at ½ growth rate of base forecast
 - Low load growth (½ Base) combined with low wholesale prices (P15)
- Scenarios that provide the impact of changing water conditions on the Columbia River
 - Low water (P15, water flow at dams only lower 15% of the time) Isolated
 - Low water and Counter Party Stable



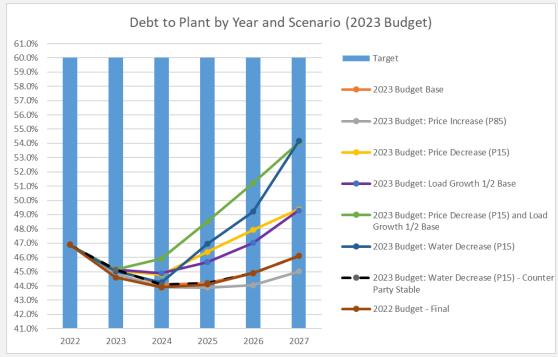
Operational Scenarios – Comparison to Base Budget



Debt Service Coverage (DSC)	2022	2023	2024	2025	2026	2027	2028
Target	1.80	1.80	1.80	1.80	1.80	1.80	1.80
2023 Budget Base	2.21	2.51	2.68	2.47	2.22	2.10	1.81
2023 Budget: Price Increase (P85)	2.20	2.54	2.72	2.50	2.33	2.22	1.94
2023 Budget: Price Decrease (P15)	2.20	2.48	2.55	2.20	1.96	1.90	1.77
2023 Budget: Load Growth 1/2 Base	2.20	2.46	2.49	2.18	1.96	1.76	1.49
2023 Budget: Price Decrease (P15) and Load Growth 1/2 Base	2.20	2.39	2.32	1.87	1.57	1.45	1.29
2023 Budget: Water Decrease (P15)	2.20	2.51	2.67	1.97	1.13	1.16	1.01
2023 Budget: Water Decrease (P15) - Counter Party Stable	2.21	2.51	2.68	2.47	2.22	2.10	1.81
2022 Budget - Final	2.40	2.36	2.45	2.24	2.06	1.89	1.64



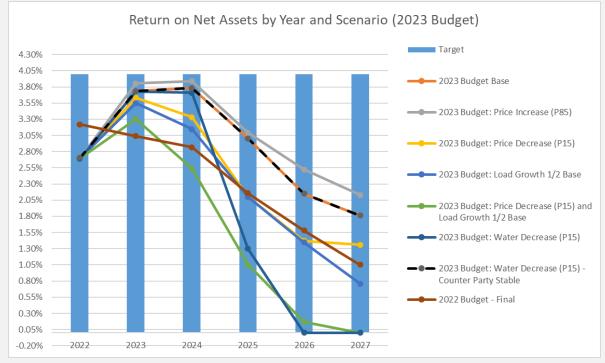
Operational Scenarios – Comparison to Base Budget



Debt to Net Plant	2022	2023	2024	2025	2026	2027	2028
Target	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
2023 Budget Base	46.9%	45.1%	44.1%	44.2%	44.9%	46.1%	46.7%
2023 Budget: Price Increase (P85)	46.9%	44.9%	43.9%	43.9%	44.0%	45.0%	45.3%
2023 Budget: Price Decrease (P15)	46.9%	45.1%	44.8%	46.4%	47.9%	49.4%	49.8%
2023 Budget: Load Growth 1/2 Base	46.9%	45.1%	44.9%	45.7%	47.0%	49.3%	50.8%
2023 Budget: Price Decrease (P15) and Load Growth 1/2 Base	46.9%	45.1%	45.9%	48.5%	51.2%	54.1%	56.0%
2023 Budget: Water Decrease (P15)	46.9%	45.0%	44.2%	46.9%	49.2%	54.2%	52.9%
2023 Budget: Water Decrease (P15) - Counter Party Stable	46.9%	45.1%	44.1%	44.2%	44.9%	46.1%	46.7%
2022 Budget - Final	46.9%	44.6%	43.9%	44.1%	44.9%	46.1%	47.0%



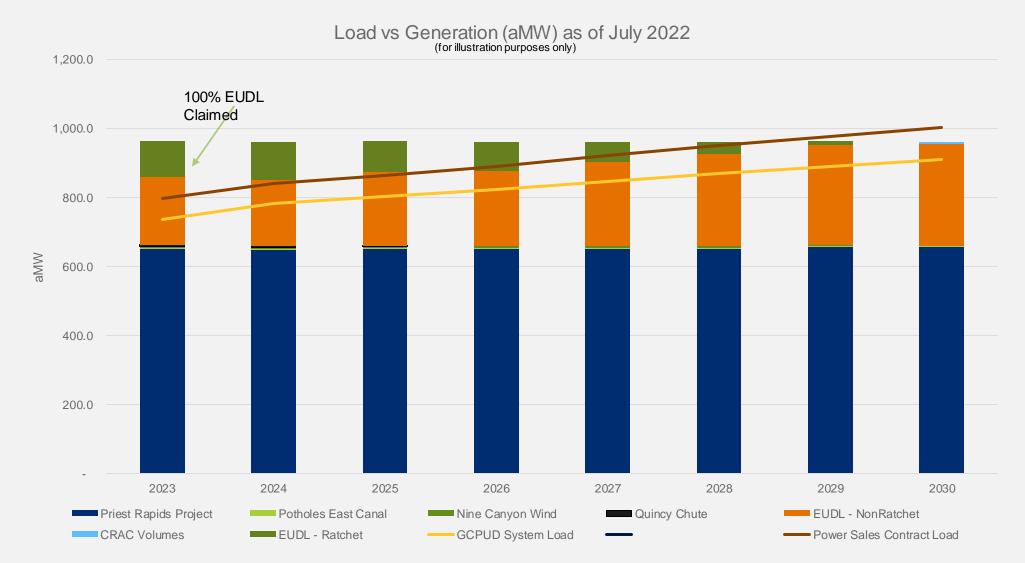
Operational Scenarios – Comparison to Base Budget



Return on Net Assets (RONA)	2022	2023	2024	2025	2026	2027	2028
Target	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
2023 Budget Base	2.70%	3.74%	3.78%	3.01%	2.15%	1.81%	1.38%
2023 Budget: Price Increase (P85)	2.70%	3.85%	3.89%	3.09%	2.52%	2.13%	1.78%
2023 Budget: Price Decrease (P15)	2.69%	3.64%	3.33%	2.10%	1.42%	1.36%	1.43%
2023 Budget: Load Growth 1/2 Base	2.70%	3.55%	3.15%	2.10%	1.40%	0.76%	0.32%
2023 Budget: Price Decrease (P15) and Load Growth 1/2 Base	2.69%	3.31%	2.54%	1.05%	0.17%	0.00%	0.00%
2023 Budget: Water Decrease (P15)	2.69%	3.73%	3.71%	1.30%	0.00%	0.00%	0.00%
2023 Budget: Water Decrease (P15) - Counter Party Stable	2.70%	3.74%	3.78%	3.01%	2.15%	1.81%	1.38%
2022 Budget - Final	3.22%	3.04%	2.87%	2.16%	1.58%	1.05%	0.75%



Operational Scenarios – Priest Rapids Remaining Availability Load Growth



Grant's total rights (physical and financial) to the project are exhausted in 2023

Grant County retail customers' loads won't surpass expected project capabilities until after 2030



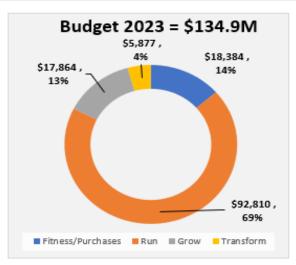
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Appendix B – Capital Plan Details

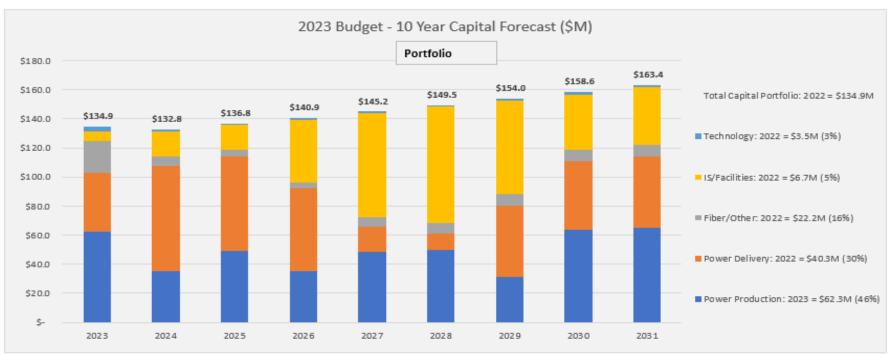


2023 Capital Plan – All Portfolio Dollars



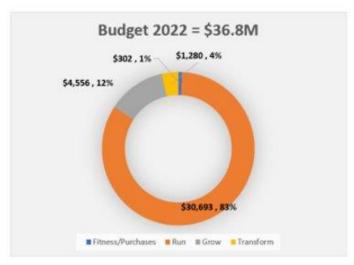


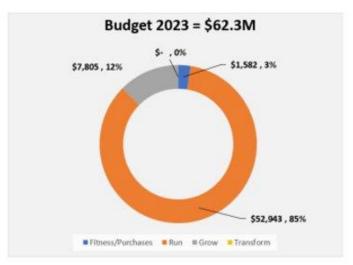


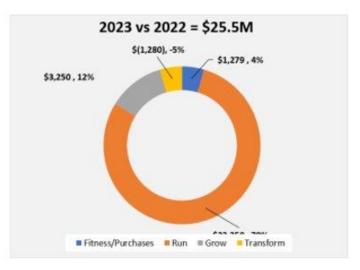


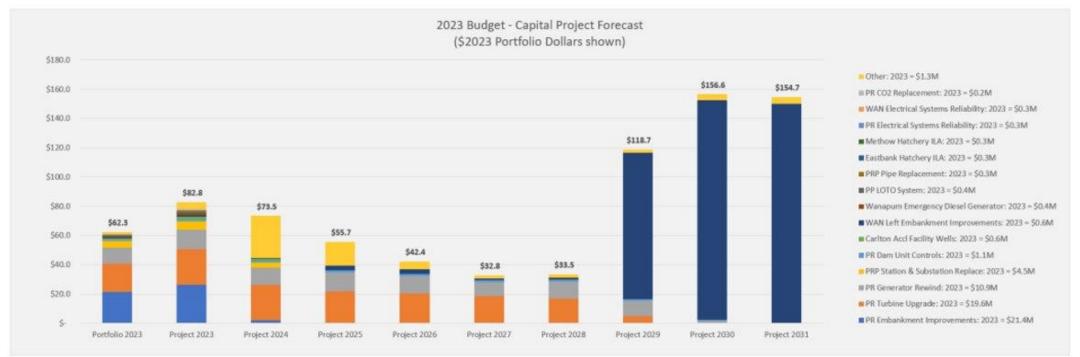


2023 Capital Plan - Power Production



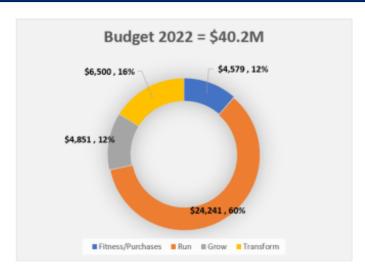


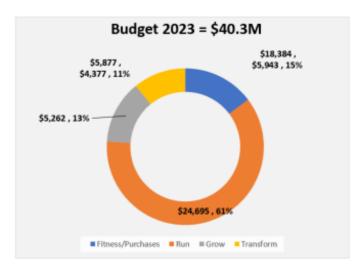




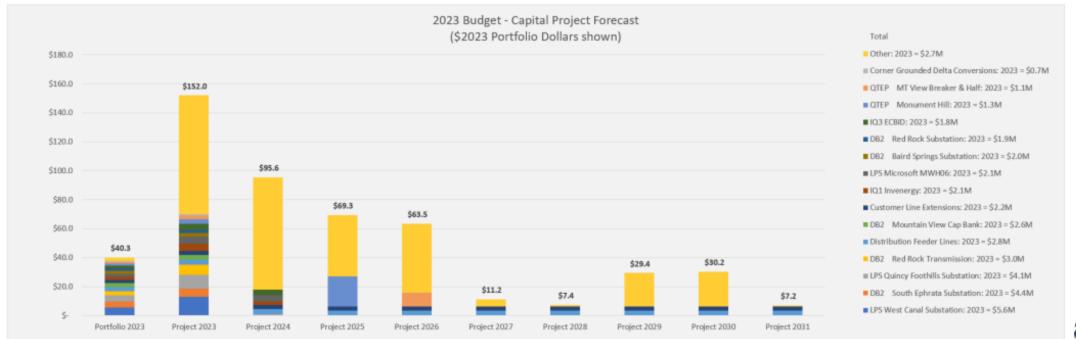


2023 Capital Plan – Power Delivery



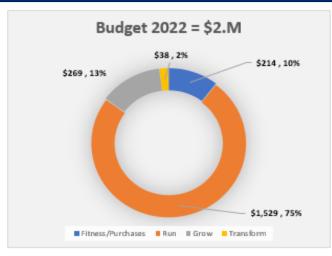


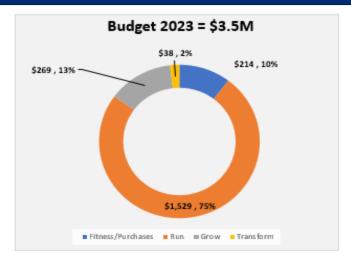




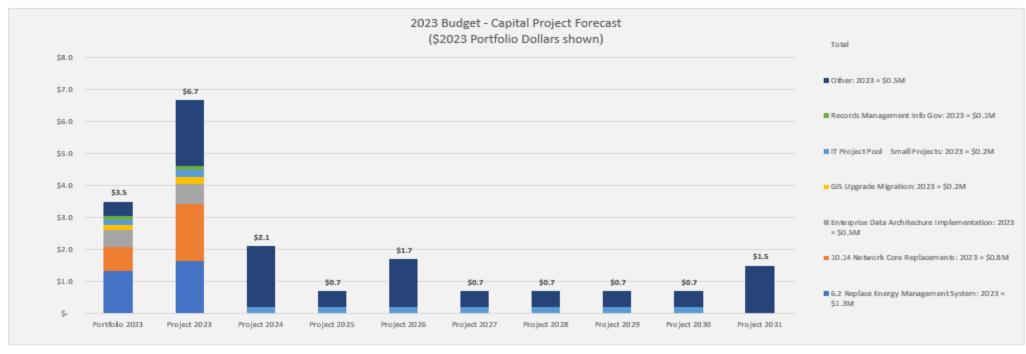


2023 Capital Plan - Technology



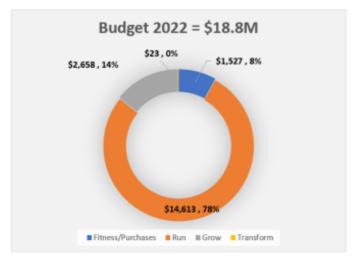


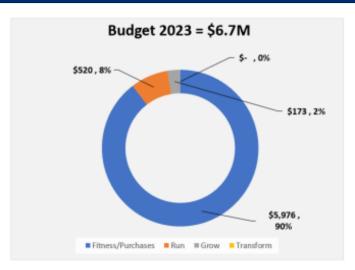




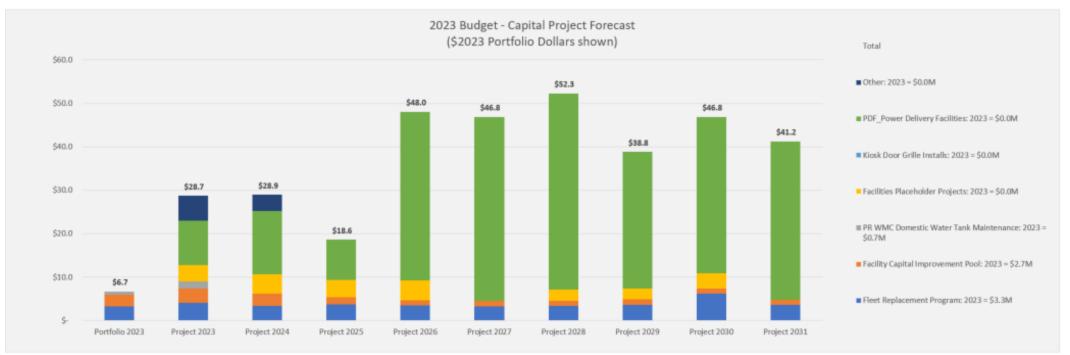


2023 Capital Plan – Internal-Services/Facilities





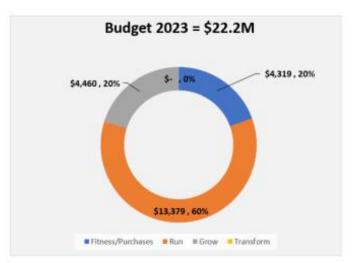


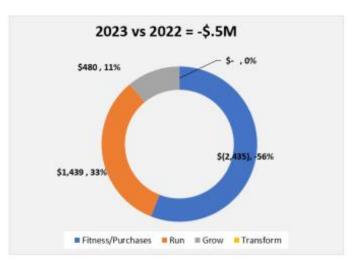


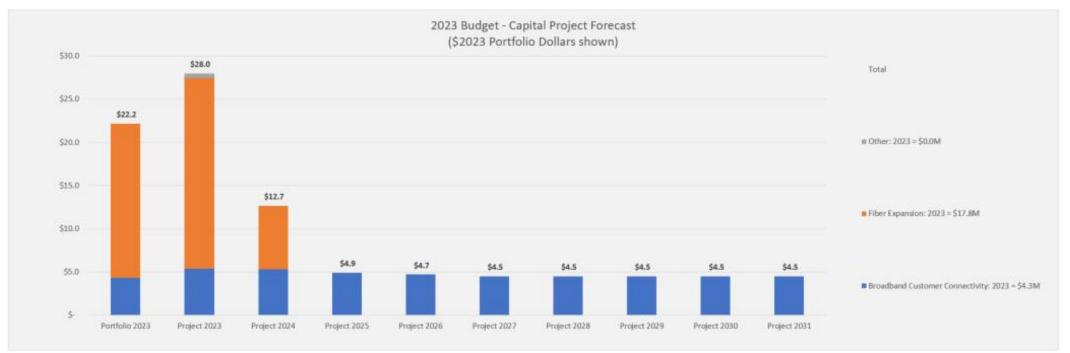


2023 Capital Plan - Fiber / Other













Powering our way of life.



Agenda



BUDGET REVIEW



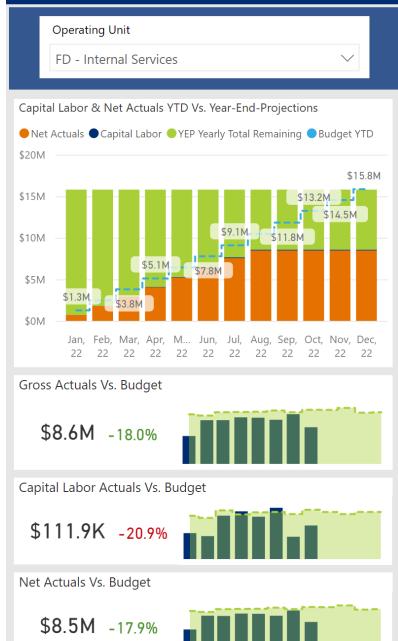
DEPARTMENT SUMMARIES



KEY INITIATIVES/PROGRAMS

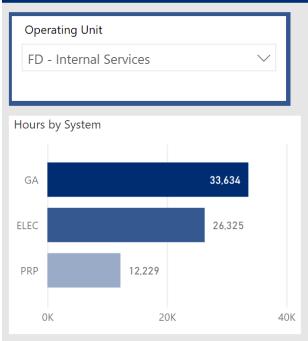
BUDGET REVIEW

© Grant | O&M Budget Versus Actuals

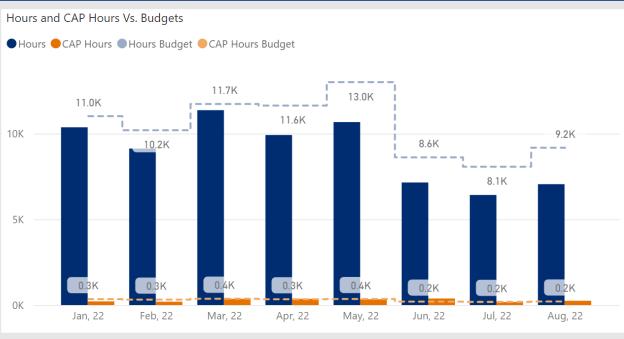


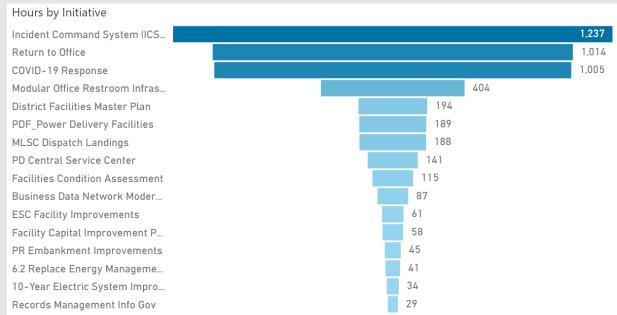
O&M Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	Budgeted ▼	Actuals	Budget Var	Budget Var %	Consumed %
□ Labor	\$4,706,976	\$3,857,823	-\$849,153	-18.0%	82.0%
Salaries & Wages	\$4,311,182	\$3,503,316	-\$807,866	-18.7%	81.3%
Overtime	\$343,264	\$321,313	-\$21,951	-6.4%	93.6%
Other Labor	\$52,530	\$33,193	-\$19,337	-36.8%	63.2%
⊞ Purchased Services	\$3,195,839	\$2,362,124	-\$833,715	-26.1%	73.9%
⊞ Transportation	\$933,669	\$1,118,403	\$184,734	19.8%	119.8%
⊕ G&A	\$758,664	\$454,184	-\$304,481	-40.1%	59.9%
⊕ Operating Materials & Equipment	\$750,951	\$634,629	-\$116,323	-15.5%	84.5%
	\$111,733	\$122,420	\$10,687	9.6%	109.6%
⊕ IT		\$28,186			
⊕ Risk		\$1,173			
Total	\$10,457,833	\$8,578,943	-\$1,878,890	-18.0%	82.0%



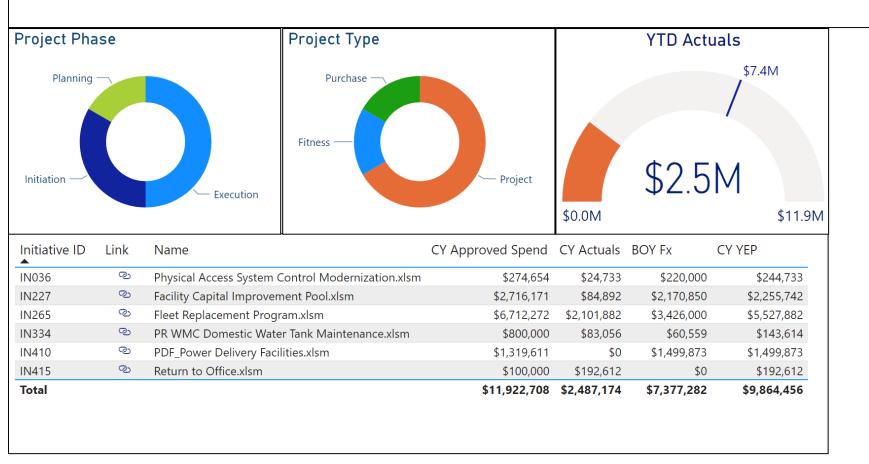








Initiative ID	Name	C	Y Scope	C۱	/ Schedule		CY Price	CY Var	iance	T	P Scope T	P Schedule	TP Pr	ice		TP Variance
IN036	Physical Access System Control Modernization.xlsm	\bigcirc	\$0		(\$29,921)	\bigcirc	\$0		(\$29,921)	\bigcirc	\$0 🔘	\$0 ()	\$0		(\$29,921)
IN227	Facility Capital Improvement Pool.xlsm	\Diamond	(\$276,257)	\Diamond	(\$138,129)		(\$46,043)		(\$460,429)	\bigcirc	\$0 🔘	\$0 🔷	(\$	460,429)	\Diamond	(\$460,429)
IN265	Fleet Replacement Program.xlsm	\bigcirc	\$0	\Diamond	(\$1,184,390)	\bigcirc	\$0 🔷	(\$	1,184,390)	\bigcirc	\$0 🔘	\$0 🔷) (\$	514,740)	\Diamond	(\$514,740)
IN334	PR WMC Domestic Water Tank Maintenance.xlsm	\Diamond	(\$393,831)		(\$65,639)	\Diamond	(\$196,916) 🔷		(\$656,386)	\Diamond	\$487,375	\$97,475 🔷	> 9	389,900	\Diamond	\$974,751
IN410	PDF_Power Delivery Facilities.xlsm	\bigcirc	\$0	\bigcirc	\$0 (\bigcirc	\$0 🔷		\$180,262	\bigcirc	\$0 🔘	\$0 ()	\$0	\rightarrow	\$265,857,842
IN415	Return to Office.xlsm	\bigcirc	\$0	\bigcirc	\$0 (\bigcirc	\$0 🛕		\$92,612	\bigcirc	\$0 🔘	\$0 ()	\$0		\$92,612
Total			(\$670,089)		(\$1,418,079)		(\$242,959)	(\$2	,058,252)		\$487,375	\$97,475	(\$5	85,269)		\$265,920,114



DEPARTMENT SUMMARIES

Facilities Projects

Current:

- MLSC Backup Dispatch Entry (BWA)
- MLSC Dispatch Cubical & Furniture (BWA)
- ESC Storm Drainage Improvements (RH2)
- Beazley & Saddle Mountain Tower Re-Roof (BWA)
- PR & WMC Domestic Water System Maint. (RH2)
- Grand Coulee Local Office Exterior Maint. (BWA)
- Wanapum Longhouse Exterior Siding (BWA)
- Archeological Building Exterior Maint. (BWA)
- Return to Office Planning/Coordination (FAC & BWA)
- BOR Office & Furnishing Reconfiguration (FAC & BWA)
- Substation / Fiber / Telecom Maint. Plan (McKinstry)
- New Power Delivery Facilities (FAC/EPMO & TBD)
 - ✓ TBD Owner Representative, Contractor & Consultant Team Selection in-progress
- GPUD Water Rights Inventory (RH2)
- Enclosed Office Remodel (EHQ & WMC) (BWA)
- Wanapum & Priest Rapids Water Tower Improvements (RH2)
- South Ephrata Substation Support (BWA)

Completed:

- Priest Rapids Warehouse Structural Improvements (BWA)
- Power Delivery Facilities Master Plan (McKay+Sposito)
- •EHQ Crosswalk Improvements (RH2)
- Archeological Building Re-Roof (BWA)
- •Return to Office Planning & Improvements (IT/FAC)
 - •Robin hotel software data development continuing
 - •Coordinating air quality monitoring & improvements with Safety

Facilities Support Resources

Facilities Utilizes (3) Primary Consulting Groups to Augment our Internal Resources:

- In addition to the Project specific services, they also provide ongoing services to support our operations.
- RH2 Civil Engineering (services civil engineering, water rights, surveying, geotechnical)
 - General Services (ongoing):
 - ✓ Water Rights Consultation & Coordination
 - ✓ Code Review
 - ✓ Permit Coordination
 - ✓ Cost Estimating
 - ✓ Surveying & Site Planning
 - ✓ Geotechnical Testing
- <u>BWA Architecture & Building Engineering (services interior design & space planning, architecture, structural engineering, mechanical engineering, electrical engineering, communication & alarm system engineering)</u>
 - General Services (ongoing):
 - ✓ Code Review
 - ✓ Permit Coordination
 - ✓ Cost Estimating
- McKinstry Maintenance Planning & Engineering (services operations & maintenance planning, commissioning, asset management database & development)
 - General Services (ongoing):
 - ✓ Call Center & CMMS (computer-aided maintenance management system)
 - ✓ Building Systems Monitoring (supports our ability to update condition, predict service life, and anticipate maintenance required to support our effort to run systems closer to end of service life)
 - ✓ Facilities Condition Assessment (new equipment/materials are added, existing systems are replaced, and existing systems age with continued use)
 - ✓ Commissioning (tunes system for maximum performance and provide insight into operational efficiency)
 - ✓ Code Review & Energy Planning
 - ✓ Cost Estimating



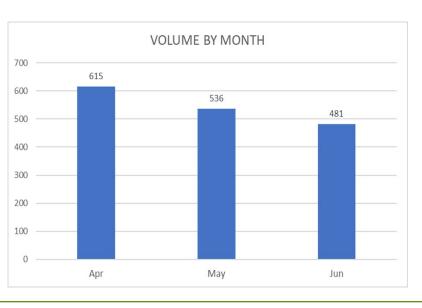
Maintenance Planning Completed Items:

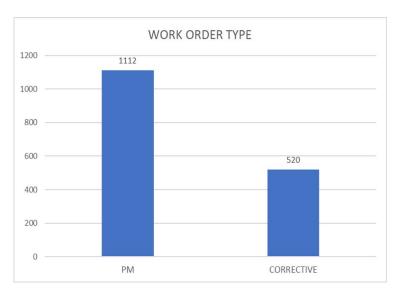
- Five Year Plan updated and made additional changes to equipment based on anticipated future building plan.
- Final building assets, Preventive Maintenance work plans, and tasking have been entered into Maximo.
- Retro-Commissioning complete at HOB, WHC, WMC, and CCSC
 - ✓ Reviewing maintenance plan updates based on performance
- Remote Monitoring program standards developed.
 - ✓ Team is reviewing key performance data and link to asset management system.
- InfoCentre roadmap & timeline outlined for next steps in improving client interface, document & work order alignment, crew mobility, and asset data access.

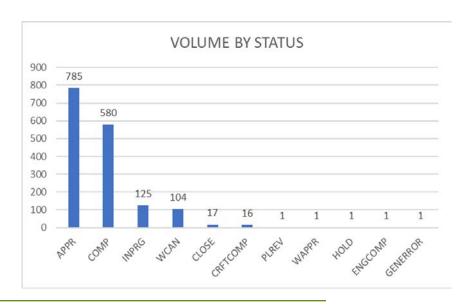
Maintenance Planning On-going Items:

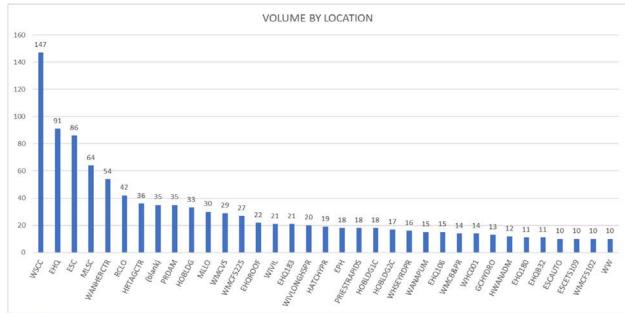
- Adding Fiber Hut and Substation data into Facility Condition Assessment (FCA).
- Maintenance Plans and schedules 98% complete for Fiber Huts and Substations
- Finalizing retro-commissioning at EHQ and developing preliminary facility improvement measures (FIM) to address extended systems life-cycle objectives.
- Refining standard operating procedures for connection of Call Center, data management, work order procedures, and connection to remote monitoring capability.

Combined Corrective & Preventative Maintenance Work Order Data









- We processed 1,632 work orders in Q2 2022
 - ✓ We processed 1,384 work orders in Q1 2022
 - ✓ There are currently 1,109 work orders remaining in Facilities' queue
- Return to Office showed an increase in work orders, however it's starting to level off.
- A key objective in developing a Facilities program has been focusing on the Preventative Maintenance (PM) efforts compared to Corrective Maintenance (CM)
 - √ Target is 25% CM + 75% PM

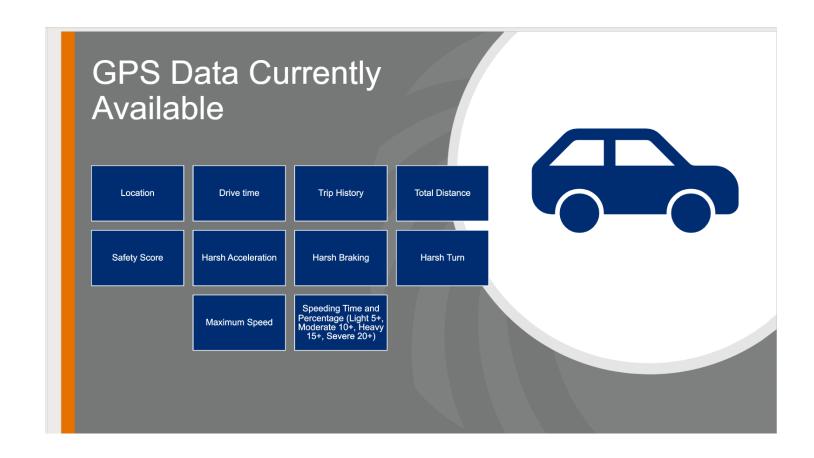
Transportation Department Updates

Vehicle Safety Program



GPS reporting w/camera pilot

GPS System



Our current vendor provided 2 sets of GPS cameras free to the Utility to pilot.

Exploring new features such as:

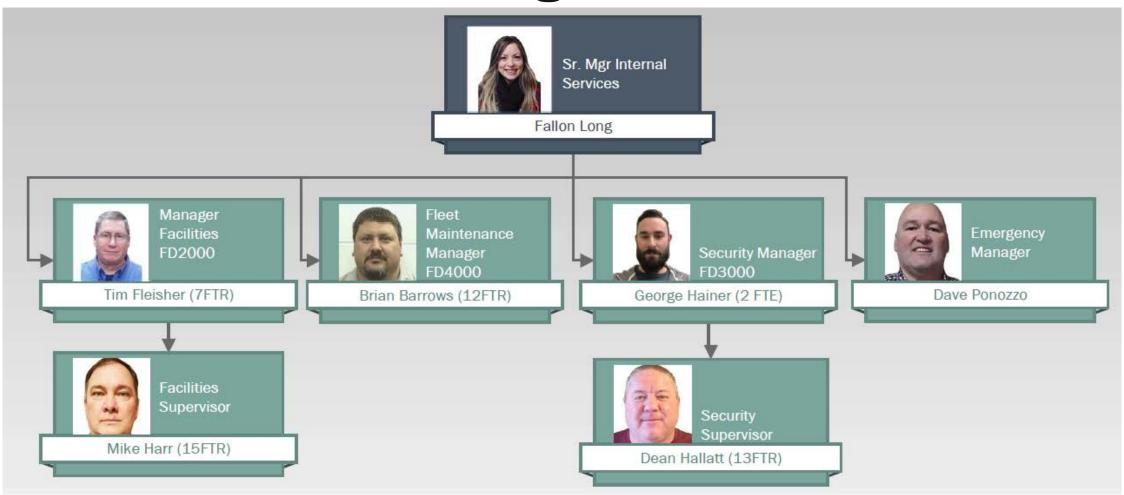
- Following distance
- Rolling stops
- Defensive driving
- Accident recording
- Ran red light
- Near collision
- Drowsy driving
- Seatbelt usage
- Tail gating
- Distracted driving
- Lane departure





New Crane Delivered Tedano 90-ton Track Crane

Internal Services Management



Security & Emergency Management

Security Department

 Backfilled our Security Supervisor position with Dean Hallatt.



- Transferred from Risk
 Department
- Background and Skills:
 - Law enforcement
 - Training
 - Risk Management
- Wrapping up the recreation season- Q4 report-out will highlight all details. 9/15 we began scaling back security efforts at recreation sites.

Emergency Management

- Continuity of Operations Plan (COOP)
- Emergency Action Plans (EAP) for both Priest
 Rapids and Wanapum Dams
- Collaborative Efforts
- Future Considerations
 - Development of a Water Systems Emergency Response Plan
 - Wildfire Mitigation Plan

June, July & August Safety Data Report

Fallon Long

By Cost Center	Safety Mtg. No Attended	Safety Mtg. No Potential	Safety Mtg % Attended	# JSRs	# Close Calls	# Vehicle Incidents	Non Recordables
Department - FD0000 - Internal Services	5	6	83%				
Department Total	5	6	83%				

Facilties/Security/Transp.

By Cost Center	Safety Mtg. No Attended	Safety Mtg. No Potential	Safety Mtg % Attended	# JSRs	# Close Calls	# Vehicle Incidents	Non Recordables
Department - FD2000 - IS Facilities	39	43	93%				1
Department - FD3000 - IS Security	6	6	100%				1
Department - FD4000 - IS Transportation	23	24	96%			1	
Department Total						1	2

Recordables YTD

Injury Details	Date of Injury	
Sprained Ankle - Jumped out of culvert (Facilities)		1/28/2022
Back Strain- Repeated awkward positions		5/12/2022



Powering our way of life.



Employee Experience QBR

Positioning for the Future

Q3 2022

Agenda

- 1. Organizational Linkage
- 2. In-Flight Programs/Projects
- 3. Ongoing Performance Metrics
- 4. 2023 Priorities



Organizational Linkage Aligning the work of the team with the needs of the organization

Organizational Objective 2

OBJECTIVE 2

DESIGN AND SUSTAIN AN ENGAGING & FULFILLING GRANT PUD CULTURE

Workplace culture is the infrastructure that guides how we function. Business outcomes, such as safety, compliance, financial results, and operational excellence, all hinge on a healthy workplace culture that supports people. We continuously design our culture so every role has purpose and every employee has value. We make meaningful investments in our workforce. We encourage transparent and authentic communication, and engage our teammates with respect and empathy.

STRATEGIES

- Reinforce commitment to the Code of Excellence
- Recruit, develop and retain a best-inclass workforce
- Sponsor a vibrant employee association
- Establish a deliberate, continuous learning strategy aligned to business outcomes
- Implement the ADDIE instructional systems design framework for training
- Articulate and reinforce our desired leadership culture
- Deliver industry-leading educational reimbursement programs

KEY METRICS

- Organizational Health Index
- Employee Engagement Assessment
- Educational Reimbursement Target
- Training Effectiveness Assessment
- Establish a holistic approach to employee wellness



Why we exist-Mission

LOD Mission

We exist to support organizational health by creating clarity around how we lead, train and treat people at Grant PUD.

lissior

We exist to design & deliver people-centric services that equip employees on their journey to becoming <u>healthy</u>, wealthy and wise.



1 In-flight programs/projects

HR Maturity Model





EMPX outcomes & service enhancements

- Ongoing Employee/Supervisor HRBP Outreach: routine, proactive outreach throughout the organization (rotating onsite office hours at all locations (i.e. PRD, MLLO, Svc. Ctrs., WAN, HOB)
- People-Manager/Employee Relations/Labor Relations consulting (investigations, compensation, recruitment, etc.)
- Enhanced talent acquisition support/services
- Long-range workforce plans
- Real-time answers/availability of staff
- Workforce planning, pipelines and succession plans
 - Improved promote-from-within options
- Process, policy, and technology designed with empathy in mind (Improved UX with self-service tools)
 -Improved UX/UI within the UKG platform

- Actionable people-analytics to inform value of interventions and services provided
- Redundancy of expertise and cross training within the HR discipline (eliminate service disruption to org)
- Affirmative Action planning & embedding of DEI lens
 - Workforce demographics that reflect the communities served
- Targeted, strategic recruitment services that reduce time-tofill rates
 - Cost-avoidance/savings associated with improved recruitment strategies (time to fill rates) and internal hires
- Expanded, holistic, wellness services
- Employee Benefits Education & utilization
- Expanded onboarding experience (to include site tours)

HR & Org Dev. Department Focus

- 1. 2 HR Business partners and an HR generalist hired: Focused on proactive, consistent outreach to business units in the field
- 2. Independent HR department audit under way by Trupp Consulting (to inform long-term HR strategy).
- 3. Policy/Procedure review
- 4. Compensation study and programmatic review



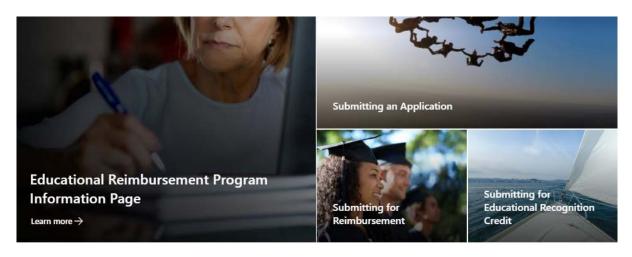
Education Reimbursement, audit updates

Revisions

- 1. Automated processes (SharePoint)
- 2. Established process for identifying hard to fill roles
- 3. Easier application/administration
- 4. Shifting from 3 to 2 tiers



Policy Statement: "As an organization that values innovation and continuous learning, Grant PUD encourages employees to continue their education and further their professional development. The educational reimbursement policy is designed to eliminate barriers to continued professional development, and financially support employees pursuing courses of study..."





Employee Appreciation Day '22

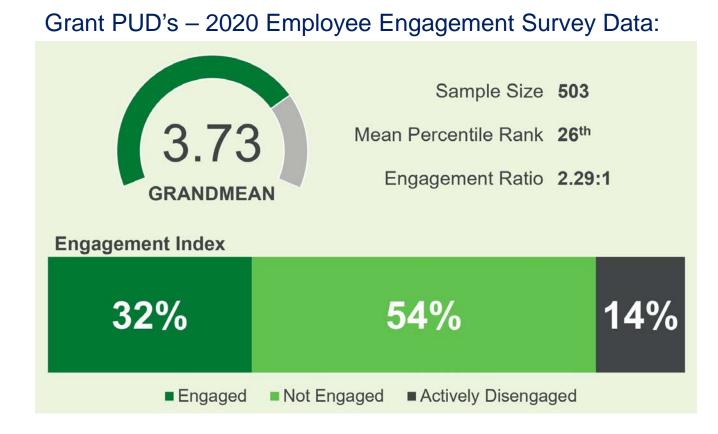
Updates

- Celebration date: 9/15/2022
- In-person
- Presentations
- Fun

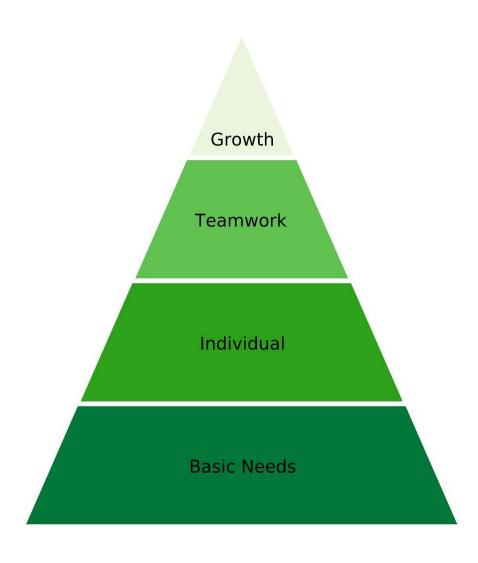
Grant PUD's – 2022 Employee Engagement Survey

Updates

- Next Survey Window:
 October 2022
- Employee-Wide Survey
 Report-Outs:
 November/December 2022



Engagement Hierarchy



Growth - How can I grow?

Employees need to be challenged to learn something new and find better ways to do their jobs. They need to feel a sense of movement and progress as they mature in their roles.

Teamwork - Do I belong here?

Employees need to feel like they belong and are a good fit with their team. They need to know they are part of something bigger than themselves. As a manager, encourage opportunities for teamwork and a sense of belonging.

Individual - What do I give?

Employees want to know about their individual contributions and their worth to the organization. Manager support is especially important during this stage because managers typically define and reinforce value.

Basic Needs - What do I get?

Employees need to have a clear understanding of what excellence in their role looks like so they can be successful. Groups with high scores on the first element are more productive, cost-effective, creative and adaptive.

Engagement Hierarchy - Continued

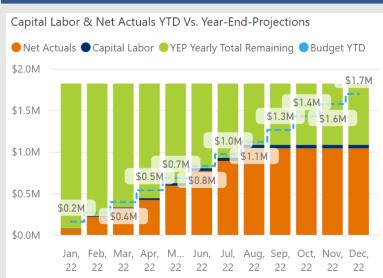


- Q12. This last year, I have had opportunities at work to learn and grow.
- Q11. In the last six months, someone at work has talked to me about my progress.
- Q10. I have a best friend at work.
- Q09. My associates or fellow employees are committed to doing quality work.
- Q08. The mission or purpose of my company makes me feel my job is important.
- Q07. At work, my opinions seem to count.
- Q06. There is someone at work who encourages my development.
- Q05. My supervisor, or someone at work, seems to care about me as a person.
- Q04. In the last seven days, I have received recognition or praise for doing good work.
- Q03. At work, I have the opportunity to do what I do best every day.
- Q02. I have the materials and equipment I need to do my work right.
- Q01. I know what is expected of me at work.

Ongoing Performance Metrics As of 06/13/22

(O&M Budget Versus Actuals





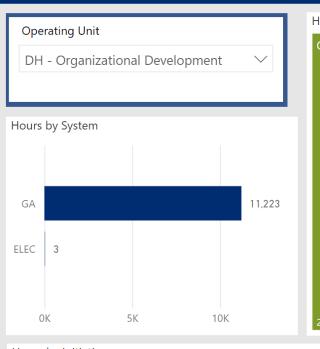


Net Actuals Vs. Budget

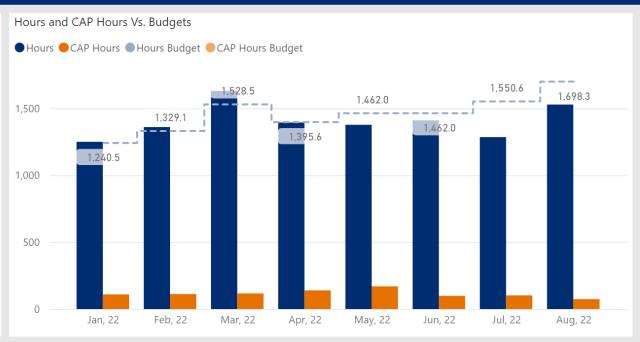
\$1.0M -6.8%

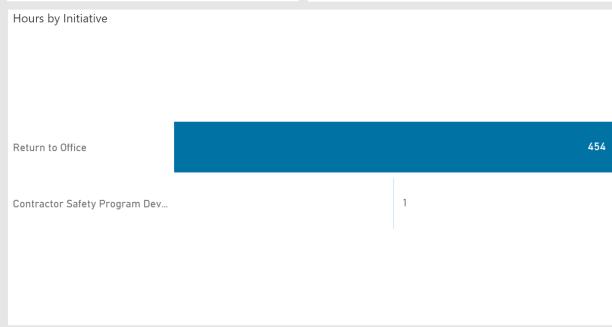
O&M Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	■ Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
□ Labor	\$652,292	\$682,554	\$30,263	4.6%	104.6%
Salaries & Wages	\$647,996	\$673,730	\$25,734	4.0%	104.0%
Other Labor	\$4,296	\$7,795	\$3,499	81.4%	181.4%
Overtime		\$1,029			
Purchased Services	\$402,854	\$324,922	-\$77,932	-19.3%	80.7%
Operating Materials & Equipment	\$52,000	\$20,935	-\$31,065	-59.7%	40.3%
⊞ G&A	\$10,500	\$37,685	\$27,185	258.9%	358.9%
⊕ IT		\$17,901			
Total	\$1,117,646	\$1,083,997	-\$33,649	-3.0%	97.0%







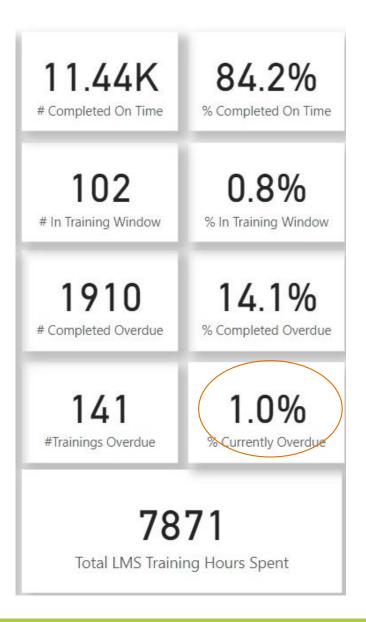




Training Completion & Experience



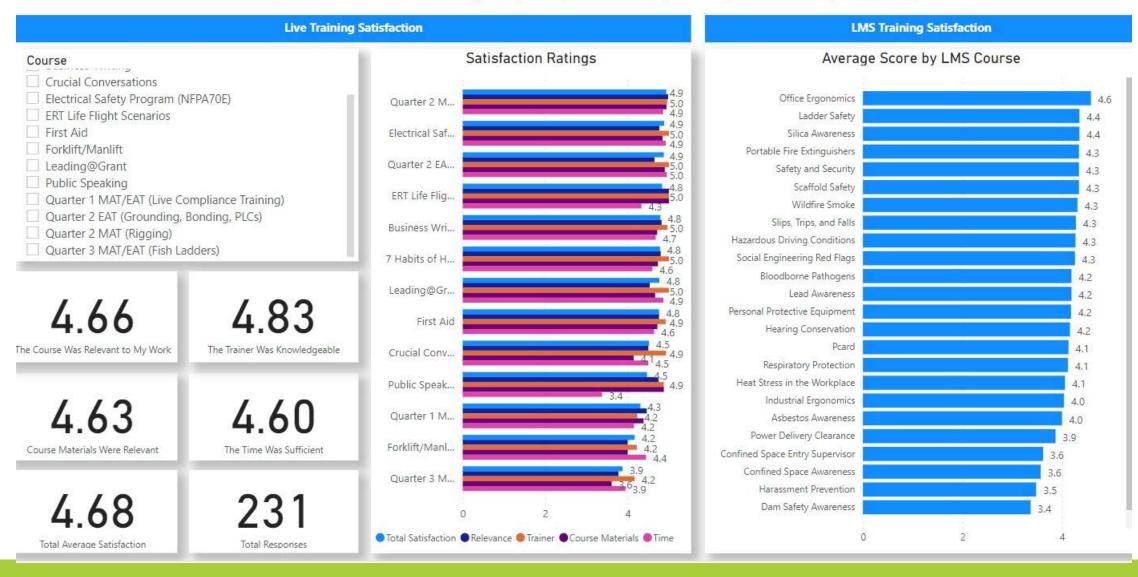




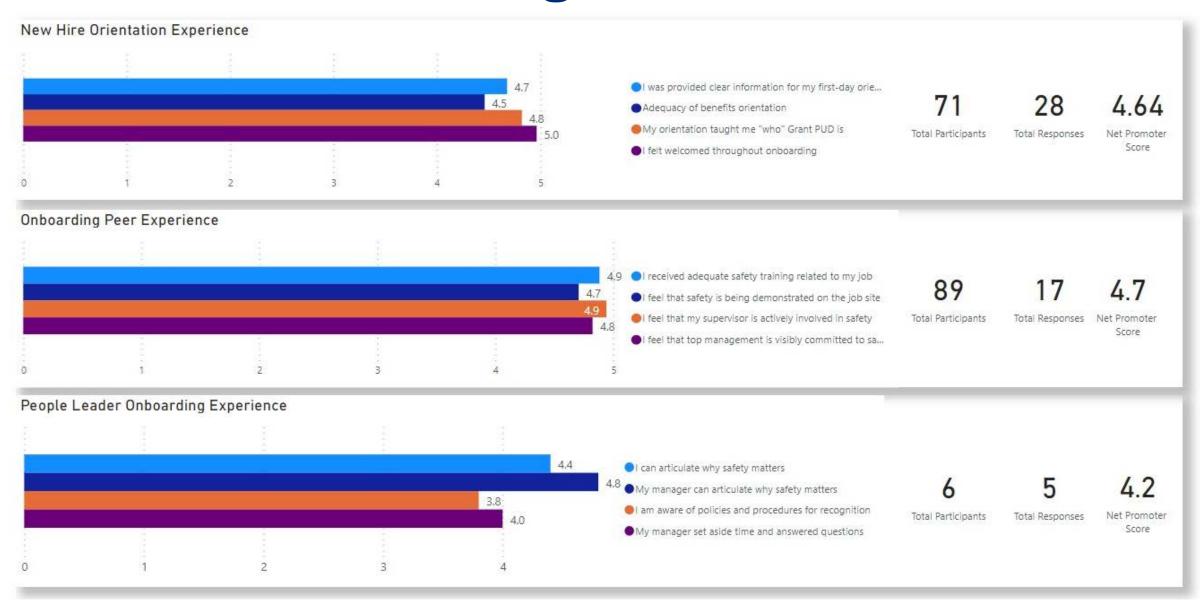
Training Satisfaction

L&D TRAINING DASHBOARD

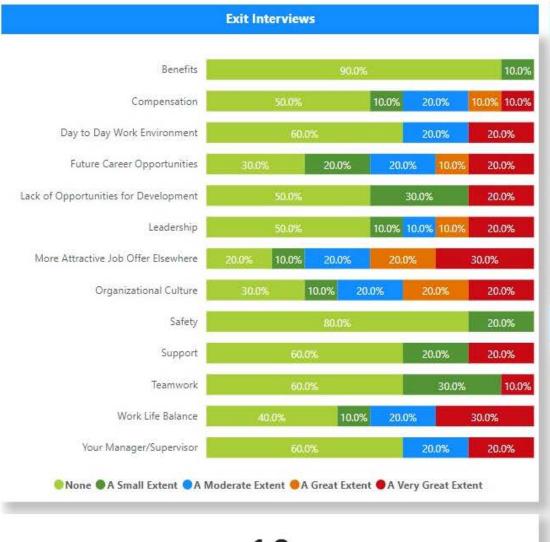
To multi-select, hold the "Ctrl" key while selecting. To toggle a selection off, just click it again or click the eraser. This Training Dashboard is NOT real time. It updates every Monday at 8am. Data will show as Blank if it is null. Questions? Contact Katie Boswell on Teams. Want to download data to Excel? Select any filters you want, hover over the compliance table, select the "..." icon, and click on "export data."



New Hire Onboarding



Organizational Health



Total Exit Interviews



Engagement Score by Department and Percentile 50-74th A Department <25th 25-49th Percentile Percentile Percentile. Accounting 3.82 4.13 Accounts Payable CS Customer Service 3.54 3.43 CTO Enterprise Systems CTO Service Desk 4.3(CTO Software Engineering 2.97 CTO Telecom Network Servi 2.92 FP&A 3.77 Human Resources 4.13 IS Facilities 3.66 IS Procurement 4.2:V



THE PERSON AND PROPERTY.	Dates /Three	mark 0 /2 41
IUITIONET	Rates (Thro	uan 0/51)

Department	Turnover	
Operational Excellence	200.00%	
ET Cyber Security	133.33%	
Merchant Wholesale Teleco	100.00%	
PP Power Production Eng	57.14%	
CTO Service Desk	50,00%	
Government Regulatory Aff	50.00%	
IS Office Services	50.00%	
EPMO Mrg Enterprise Techn	40.00%	
PP MC Maint IC Techs	40.00%	
Large Power Solutions	36.36%	
PP License Implementation	31.58%	
DD COME	20,570/	
Total	6.30%	

Separations (through 9/8/2022)

28 Voluntary Separations

Involuntary Separations

Retirements

Deceased

04 2023 Priorities Employee Experience

Big 3 in'23: Workforce of the future

- Implement a revised workplace wellness program (more coming at next QBR)
- Succession management pilot program in power production
- Establish at least one workforce program in partnership with Big Bend Community
 College
- Implement a revised employee recognition program

Why Workplace Wellness?

- Psychiatric Care, among top 5 conditions within the UIP.
 - \$871k between 2019-2020 (no change from prior year, precovid)

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STRATEGIES

- Reinforce commitment to the Code of Excellence
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KEY METRICS

- Organizational Health Index
- Employee Engagement Assessment
- Educational Reimbursement Target
- Training Effectiveness Assessment
- Establish a holistic approach to employee wellness

Workplace Wellness-What is it?

Safety	Physical Health	Mental Fitness	Financial Fitness	Community Building	Purpose Meaning
Accident prevention	Diet, weight, blood health	Stress relief, mindfulness	Financial counseling and education	ERG and community programs	Corporate purpose and mission
Safety training and compliance	Exercise, yoga, fitness, competitions	Management behavior, goals	Savings plans, loans, budget programs	In house interest groups and teams	Leaders set a healthy example for life and work style
Culture of safety and health in all roles and locations	Mindfulness, Sleep, rest, vacation	Family, community	Debt reduction programs, tuition and mortgage assistance	Family relationships and support programs	Investments in career growth and employee development
Monitoring and study of accidents and injuries	Maternity, disease, special care	Addiction, coaching, psychological support	Retirement, legal, and other consulting support	Sponsorships with schools, hospitals, non-profits	Investments in environment and sustainability
Facility, workplace, and deskless worker programs	Preventive care screenings and tests	Episode support and life-event resources	Pay review, pay transparency, competitive pay	Volunteerism program, days off, sabbatical	Focus on organic, supplies and supply chain health

Questions?



Commission Presentation Sept 20, 2022

Chuck Allen, Senior Manager External Affairs & Communications

Ryan Holterhoff, Government Affairs Annette Lovitt, Public Affairs



Powering our way of life.

Leveraging our relationships Hydro and public power unity makes us stronger

Industry Memberships (Unified Voice)

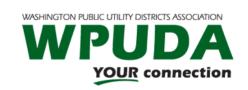






























Lower Snake River Dams messaging

Apples to Wine: WA Ag backs dams on lower Snake River

Published on July 25, 2022



OFFICIAL PRESS RELEASE

Dams Benefit Family Farms, Local Food Production



✓ Following

Vancouver, Washington—July 25, 2022—Family farms depend on the benefits provided by the lower Snake River dams (LSRD). Removing the dams would hurt agriculture and drive energy costs up at a time when family farms and their communities already face steep price increases.

Inslee, Murray say Snake River dam removal possible, but not yet

Aug. 25, 2022 at 2:01 pm | Updated Aug. 25, 2022 at 6:54 pm



The Lower Granite Dam on the Snake River as seen from the air in 2019. (Steve Ringman / The Seattle Times)

By Nicholas Turner

Seattle Times climate reporter

Breaching the four Lower Snake River dams is not an option yet, Washington Gov. Jay Inslee and U.S. Sen. Patty Murray, D-Wash., said Thursday in a statement outlining the findings of a joint report on dam removal and salmon recovery.

Mid-C collaboration







A united voice for:

- Recreational Immunity
 Legislation
- Importance of Lower Snake River Dams
- Legislative Outreach





Spokane, Washington Est. May 19, 1883

This column reflects the opinion of the writer.

<u>Learn about the differences between a news story and an opinio</u> column.

OPINION > GUEST OPINION

To protect the grid and meet climate goals, we need the Lower Snake River dams

Sun., Aug. 21, 2022



Opinion | Kirk Hudson, Rich Wallen and Gary Ivory, PUD general managers: To protect the grid and meet climate goals, we need the Lower Snake River dams

By Kirk Hudson, Rich Wallen and Gary Ivory Jul 5, 2022

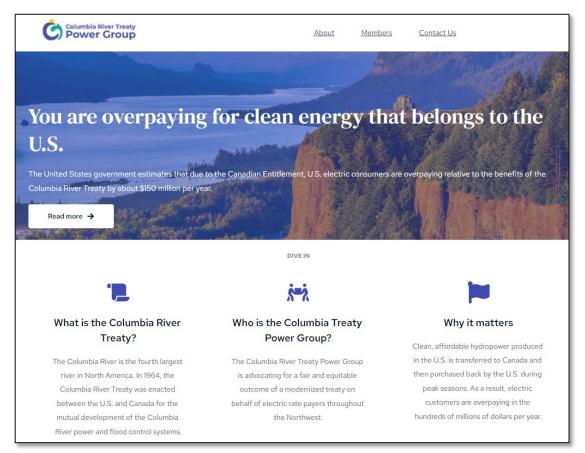
FWEE hydro education



- Hydro STEM Academy 2022: 26 students participated in week-long camp.
- Electricity Production Teacher Training & Kits (NWHA funding partner): 131 teachers in the NW have been trained to use of kits.



Columbia River Treaty Power Group



Providing a unified voice to ensure fair value
 Treaty modifications for NW power customers.



July 6, 2022

The Honorable Peter DeFazio United States House of Representatives 2134 Rayburn House Office Building Washington, DC 20515

Dear Chairman DeFazio:

On behalf of the over 80 member organizations of the Columbia River Treaty Power Group, we write to express our great appreciation for your efforts, and those of your staff, to include provisions in the Water Resources Development Act of 2022 (H.R. 7776/S. 4136) to address flood risk management issues that appear to have impeded progress on negotiation of modifications to that Treaty. The collective effort made by you, your staff, and a few other staff in the Northwest delegation, have resulted in a much-needed congressional directive to the Corps of Engineers to put forward a plan to manage flood risk along the Columbia in a manner that takes into account cross-border issues and flood risk management needs. While we are well aware that the provisions are in the House bill and not yet adopted in final House-Senate language, we are hopeful that the House language will prevail.

The members of the CRT Power Group have worked strenuously with the delegation, as you know, and the relevant federal agencies to obtain Treaty modifications which are fair to interests on both sides of the border of the United States with Canada---modifications which we have shown are overdue, would reduce the US obligations for ratepayer overpayments in the form of the "Canadian Entitlement" and were fully envisioned by the stakeholder Regional Recommendation of 2013. The requirements that are in section 315 of H.R. 7776 and section 141 of S. 4136 will go a long way to spur the current bilateral negotiations toward a favorable conclusion which treats fairly the interests of both countries with appropriate shared burdens with respect the value of coordinated operation and flood risk management.

We commend you for your leadership of the Committee to successfully incorporate strong and favorable language into the House WRDA bill, and for your staff working in a bipartisan, bicameral manner with Senate leaders. We urge final passage of WRDA legislation which incorporates the House language, with, if possible, deadlines for the study and flood risk management plan, as well as the strong encouragement to the Corps to use all available authorities to work with the US Negotiating team to successfully conclude negotiations for a modernized Columbia River Treaty which provides an appropriate net benefit to US ratepayers in any resulting arrangement with Canada.

Sincerely,

San Simon

Scott Simms
CRT PG Chair
Executive Director
Public Power Council

Kevin Nordt CRT PG Vice-Chair Chief Resource Officer Grant County PUD

L. M. Morst

Chris Robinson CRT PG Vice-Chair General Manager Tacoma Power

NHA Clean Currents 2022



Sharing our knowledge, learning from others.

GM Rich Wallen is a Meet &
 Greet presenter at NHA
 Clean Currents Oct. 18-20 in
 Sacramento.



More Powerful Together Public Power Resources

NWPPA Training and Support

- NWPPA Innovations in Communications
 Conference We're multiple award
 winners!
- Training opportunities for variety of specialties:
 - Customer Service
 - Power Delivery
 - Power Production
 - Finance
 - Human Resources



APPA - Celebrating Public Power

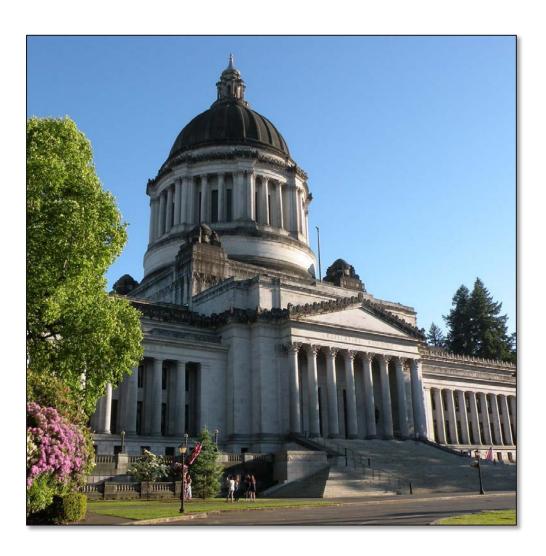
- Public Power Week activities planned for Oct 2 to 8.
 - Employee service projects for the community are being finalized
 - Week-long social media campaign



WPUDA – Advocating for PUDs in WA

- Supporting policy efforts on key issues at a statewide level that are important to PUDs in Washington
- Grant PUD employees recognized with WPUDA's Good Samaritan Award for their lifesaving efforts in 2021







Powering our way of life.

RATE SCHEDULE 17 2022 UPDATE

Commission Presentation

Large Power Solutions

Baxter Gillette and Louis Szablya

September 27, 2022



Powering our way of life

Update on Rate Schedule 17 (RS17)

- RS17 purpose and process refresher
- Evolving Industry (EI) candidate update
- Concentration risk, threshold, and load activity and / or industry¹
- Business risk Porter's Five Forces
- Regulatory risk
- RS17 rate analysis, review, and findings
- Next steps

Rate Schedule 17 (RS17) Refresher

RS17 Evolving Industry Assessment Team

Name	Role
Dave Churchman	Executive Sponsor*
Louis Szablya	Lead, Large Power Solutions/Rates
Julio Aguirre Carmona	Rates and Pricing
Baxter Gillette	Update Manager*
Paul Dietz	Risk Management*
Cary West	Customer Service
John Mertlich	Finance / Accounting
Jesus Lopez	Engineering

^{*} Not required per the Customer Service Policy

Evolving Industry (EI) Update

- Identify new industries or energy load activities
- Assess industries or energy load activities for:
 - Concentration Risk,
 - Business Risk, including nascency, and
 - Regulatory Risk
- Classify industries or energy load activities that meet the Concentration Risk as EI if they also exhibit Business or Regulatory Risk
- Determine the incremental costs associated with providing electric power to El
- Update RS17 as needed

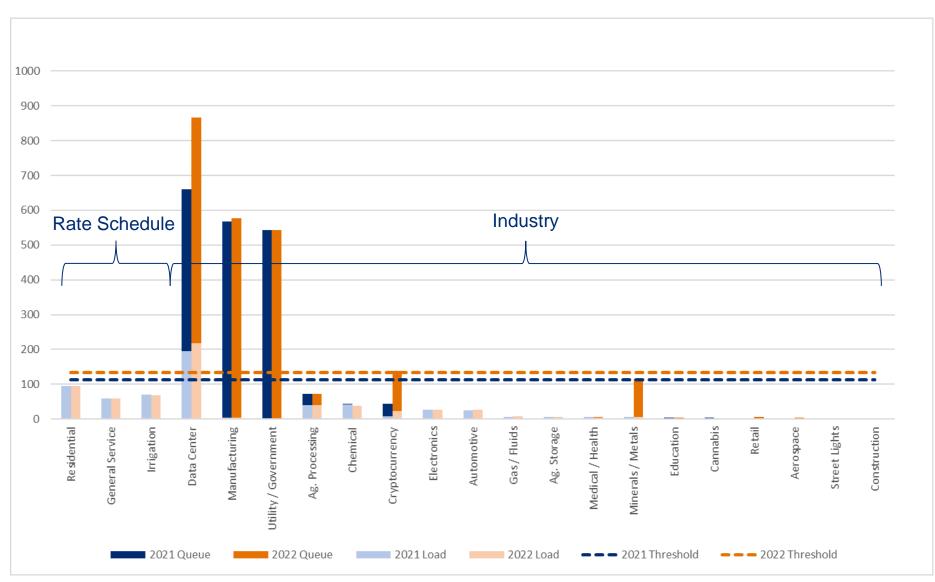
Evolving Industry (EI)Candidate Assessment

Potential New Industries

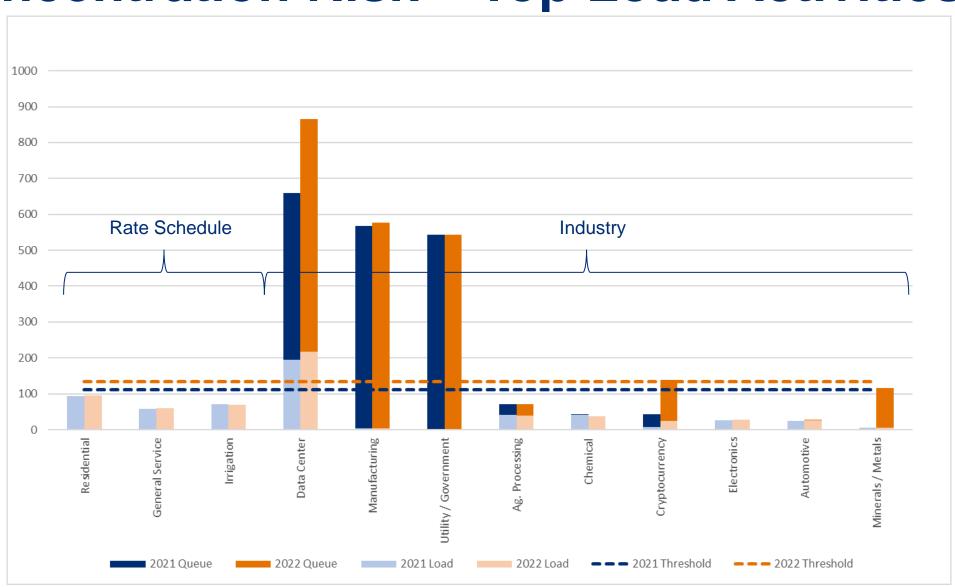
- None identified for various reasons
- Candidates
 - Not explicitly a request in for a specific industry
 - Hydrogen Production (potentially now under Utility/Government)
 - Currently too small, but potential for large growth
 - Electrified Fleet Transportation (currently Automotive)
 - Not nascent
 - Solar Panel Manufacturing (currently Manufacturing, queue only)
 - Have not yet made determination whether to split from existing industries
 - Novel Battery Materials (currently Manufacturing, queue only)

Concentration Risk, Threshold, and load activity and / or industry¹ Is the El Material?

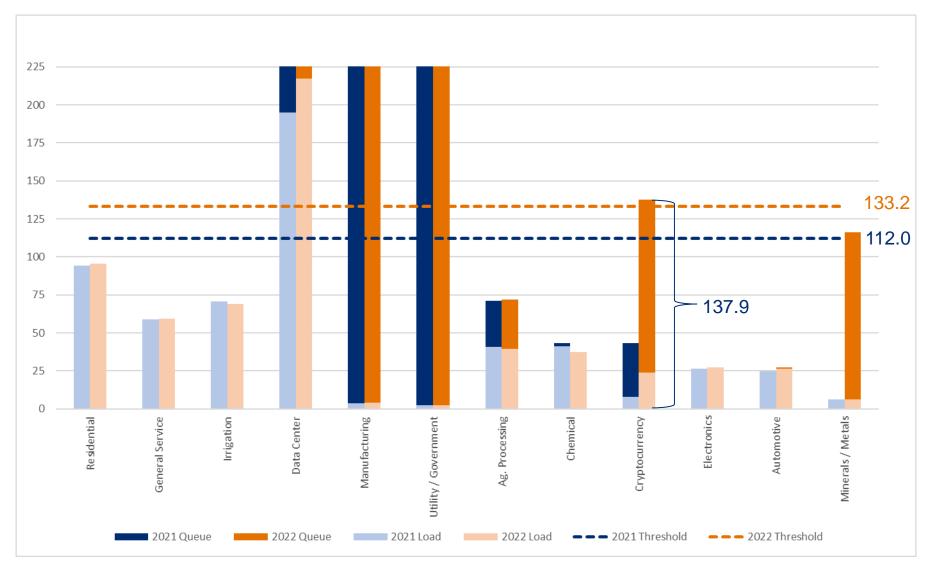
Concentration Risk – All Load Activities



Concentration Risk – Top Load Activities



Concentration Risk – A Closer Look



Data Centers and Utility/Government

- Data Centers continue to be a growth industry
 - Past the nascent stage
 - Slower growth during pandemic, but less affected than other industries¹
 - 10-year revenue Compound Annual Growth Rate projections range from 4-11% per year through 2030²
- Utility/Government are the Ports
 - Ports are seeking businesses and loads, but the loads will not be Utility or Governmental in nature
 - No basis for analysis
 - Hydrogen production has been mentioned, but no specific requests or load characteristics have been identified

Manufacturing Overview

- Manufacturing definition is broad
- Grant has already assigned many manufacturing subsectors into their own industries
- Drivers of growth:
 - Novel battery anodes (153 MVA)
 - Solar Panel manufacturing (410 MVA)

National Institute of Standards and Technology, US Dept. of Commerce. Manuf. Subsectors

- 1. Computer and electronic products
- 2. Chemical products
- 3. Food and beverage and tobacco products
- 4. Petroleum and coal products
- 5. Motor vehicles, bodies, trailers and parts
- 6. Fabricated metal products
- 7. Machinery
- 8. Other transportation equipment
- 9. Miscellaneous manufacturing
- 10. Primary metals
- 11. Plastics and rubber products
- 12. Elect. equip., appliances, and components
- 13. Paper products
- 14. Non-metallic mineral products
- 15. Printing and related support activities
- 16. Furniture and related support activities
- 17. Textile mills and textile production mills
- 18. Apparel and leather and allied products
- 19. Wood Products

Grant Industrial Classifications

- 1. Aerospace
- 2. Ag. Processing
- 3. Ag. Storage
- 4. Automotive
- 5. Cannabis
- Chemical
- 7. Construction
- 8. Cryptocurrency
- 9. Data Center
- 10. Education
- 11. Electronics
- 12. Gas / Fluids
- 13. Manufacturing
- 14. Medical / Health
- 15. Minerals / Metals
- 16. Retail
- 17. Utility / Government

Business RiskPorters Five Forces

Porter's Five Forces

THREAT OF SUBSTITUTE PRODUCTS

- Number of substitute products available
- Buyer propensity to substitute
- Relative price performance of substitute
- Perceived level of product differentiation
- Switching costs

BARGAINING POWER OF BUYERS

- Number and size of customers
- Size of each customer order
- Difference between competitors
- Price sensitivity
- Buyer's ability to substitute
- Buyer's information availability
- Switching costs



BARGAINING POWER OF SUPPLIERS

- Number and size of suppliers
- Uniqueness of each supplier's product
- Company's or industry's ability to substitute

THREAT OF NEW ENTRANTS

- Barriers to entry
- Economies of scale
- Brand loyalty
- Capital requirements
- Cumulative experience
- Government policies
- Access to distribution channels
- Switching costs

Porter's Five Forces - Manufacturing

Most U.S. manufacturing subsectors are in decline,

but the industry has retained real overall growth from R&D and Design.

THREAT OF SUBSTITUTE PRODUCTS

- Substitutes readily available in:
 - Scale-based and Standardized
 - Learning Curve
 - Flexible and Customizable
- R&D and Design U.S. still first in class globally and growing
- Range of quality and price performance
- Switching costs vary

BARGAINING POWER OF BUYERS

- Global markets and open trade
- Customers are price sensitive to commoditized manufacturing
- Niche and innovative products protect firms to some extent
- Information availability strong for most subsectors

RIVALRY AMONG EXISTING COMPETITORS

- Brand loyalty strong in many products
- U.S. Profit margins falling
- Component manufacturing competition intense
- More competitors globally
- Reshoring

BARGAINING POWER OF SUPPLIERS

- U.S. labor force and wages falling in aggregate
- US productivity falling but high relative to others
- Automation and robotics
- Substitutability varies with subsector

THREAT OF NEW ENTRANTS

- Generally capital intensive
- Economies of scale in most sectors
- Switching costs highest in nonportable, high capital plants
- Supply chain risks
- Geopolitical attitudes and low costs impact siting of new manufacturing
- Strategic and security concerns

Porter's Five Forces - Cryptocurrencies

Although cryptocurrencies continue to mature,

they continue to be a volatile, evolving industry.

THREAT OF SUBSTITUTE PRODUCTS

- Competing currencies, algorithms, and ASIC resistance
- Precious metals and fiat currencies
- Stablecoins
- Central Bank Digital Currencies (CBDCs)
- Banks and companies
- Proof of Stake (ETH 2.0) versus Proof of Work

BARGAINING POWER OF BUYERS

- Exchange listings: BTC on CME and ICE
- 6 ETFs, Equity and Futures only
- Price and volume manipulation
- El Salvador BTC legal tender
- 69% annualized volatility
- Over 83 million blockchain wallets
- Top 0.35% of wallets (~150k) have 84% of BTC

RIVALRY AMONG EXISTING COMPETITORS

- Miners in pure competition
- Mining pools concentrated
- No brand loyalty to miners
- Brand loyalty to currencies
- Barriers to exit are low
- Stablecoins and Exchanges

BARGAINING POWER OF SUPPLIERS

- Machine turnover (efficiency and difficulty) slowing over last several years
- 20+ firms globally, \$8.7 B/yr in sales
- Chip shortages
- Mining rig dynamic pricing
- Miners selling rigs to cover losses
- ETH 2.0 GPU liquidations or altcoin mining



Regulatory Risk
Are regulations Mature?

Cryptocurrency Regulatory Risk

- Market conditions attract legislative and regulatory attention
 - Bitcoin and ETH price collapse from highs
 - TerraUSD / Luna algorithmic stablecoin collapse
 - Voyager, Three Arrows Capital and Mark Cuban
 - Tether (USDT) / Bitfinex prominence and history
- Global Legislation and Regulation
 - Exchange, mining, and transaction bans in China
 - Financial Action Task Force FATF
 - EU Markets in Crypto Assets (MiCA) bill
- US Legislation and Regulation
 - "Executive Order on Ensuring Responsible Development of Digital Assets"
 - Lummis-Gillibrand crypto bill- Responsible Financial Innovation Act
 - Non-Fungible Token (NFT) insider trading, fraud, and money laundering scheme brought by DOJ, not SEC
- State and Local Regulations
 - County ban
 - State fuel source restrictions

RS17 Update Team Findings

- Cryptocurrency mining currently meets the Evolving Industry (EI) criteria for concentration and business or regulatory risk and should be placed into the EI class
- No other industries or energy load activities were identified for EI criteria analysis
- Propose modifying El criteria
 - Once an industry or load activity becomes material and is placed in the El class, it remains as El until the business and regulatory risk falls below nascent levels
- Enforce El attestations per CSP section 9.8
 - Customer will need to attest that they are not an Evolving Industry
 - Customers with load profiles that are similar to other El loads shall be placed into the El until the customer can provide assurances to Grant PUD that it is not
 - Customers who misrepresent their industry or load activity shall be pursued subject to section 2.15, Revenue Protection and Power Diversion and the El sections 9.6 through 9.10 of the Customer Service Policy

Rate Schedule 17 (RS17) Assessment Analysis, review, and preliminary findingd

Risk Assessment

- Departure the ability of a customer to either move to another utility, or to cease operations without consequence (terminate the business)
- Load characteristic the potential cost of odd load profiles
- Liquidation the potential cost of unwinding hedges associated with serving EI customers when one departs Grant PUD's system
- Transmission acceleration the need to construct transmission facilities earlier than would have been needed but for the EI loads
- Distribution risk the potential cost of incremental damage or accelerated consumption of distribution assets and distribution costs due to the EI load characteristics
- Supply risk the potential costs associated with a broad range of current and future costs that can include wholesale power commodity costs, new resource costs, impact of ratcheting load on the Power Sales Agreement cost obligation, I937 obligations, CETA, carbon, changes in future Columbia River water allocations or uses, etc.

Risk Elements – how they are handled

Departure

- 50 state study that considered the current rates, the volatility of those rates, and the correlation to Washington State rates
- Determined the monthly probability of departure
- Load characteristic
 - Compared the cost to serve the load characteristic of the candidate group to the underlying rate group they belong to
- Liquidation
 - Calculated the potential incremental cost of liquidating a position in the future for the remaining period of the hedge¹
- Transmission acceleration
 - Determine how much sooner transmission facilities will need to be constructed due to the EI candidate loads (including requests)
- Distribution risk
 - Incremental costs above typical operations to serve core customers that may not be recovered directly from the EI customer (call-outs, facility damage, etc)
- Supply risk
 - Performed an assessment of supply characteristics that are not based on the commodity wholesale price of electricity. There are potential costs associated with the ratchet, I937, CETA, new resource commitments, independent power producer contracts, future regulation/legislation, technology disruptions, etc.

Risk Elements – Preliminary Findings

Departure

• There is a substantial probability of EI customers departing Grant PUD during a 12-month period

Load characteristic

- While the load characteristics are good, they are not vastly different than other customers on the same rate schedule
- Most cryptomining customers today are on Rate Schedule 7, for RS17b and Rate Schedules 1 & 2, for RS 17a, which established the energy cost component

Liquidation

The cost of liquidation is calculated based on current forward market conditions

Transmission acceleration

• Because Grant PUD is currently constructing significant transmission facilities that will increase its load serving ability, the EI customers at this time do not impact the timing of transmission construction and since the underlying transmission costs are captured in the energy component, there is no incremental amount associate with transmission acceleration. This will be monitored for changes at least annually

Distribution risk

• Incremental costs above typical operations to serve core customers that may not be recovered directly from the EI customer (call-outs, facility damage, etc). This is an experienced based component and will be changed should Grant PUD start experiencing additional costs

Supply risk

- Performed an assessment of supply characteristics that are not based on the commodity wholesale price of electricity. There are potential costs associated with
 the ratchet, I937, CETA, new resource commitments, independent power producer contracts, future regulation/legislation, technology disruptions, etc.
- Supply risk costs will be re-assessed as the cost mechanisms are defined through legislation, development of regulatory rules, internal assessments, contract negotiations, etc. Staff will provide out of sequence recommendations should any supply cost be assessed that needs to be reflected in RS17

Next Steps

- Solicit commission feedback
- Complete incremental risk assessment
- Calculate costs of incremental risks
- Revisit allocation between demand and energy
- Submit revised rate schedule
- Present resolution draft

Thank You!

Appendix 1: 2022 Concentration Risk

<u>Industries</u>	s / Energy Load Activities, July 2021 - June 2022 Loads					
		July 2021 - June 2022 MWa	Queue Request	Total	Percent Concentration	Avg. No. of Service Agreements
Rate 1 Rate 2 Rate 3 Rate 6	Residential	95.7	0.0	95.7	3.6%	39,035
	General Service	59.4	0.0	59.4	2.2%	7,200
	Irrigation	69.2	0.0	69.2	2.6%	4,871
	Street Lights	0.5	0.0	0.5	0.0%	109
Rate 85	Ag Food Process Boiler	0.0	0.0	0.0	0.0%	1
	Aerospace	1.4	2.0	3.4	0.1%	4
	Ag. Processing	39.6	32.5	72.1	2.7%	59
	Ag. Storage	6.4	0.0	6.4	0.2%	12
94	Automotive	26.4	1.0	27.4	1.0%	3
Rate Schedules 7, 14, 15, 16, 17, 94	Cannabis	0.9	0.0	0.9	0.0%	6
	Chemical	37.4	0.0	37.4	1.4%	6
	Construction	0.2	0.0	0.2	0.0%	4
	Cryptocurrency	23.9	114.0	137.9	5.2%	20
	Data Center	217.5	648.0	865.5	32.5%	13
	Education	1.8	2.4	4.2	0.2%	14
	Electronics	27.4	0.0	27.4	1.0%	1
	Gas / Fluids	7.4	0.0	7.4	0.3%	3
	Manufacturing	3.9	573.0	576.9	21.7%	6
	Medical / Health	4.9	2.0	6.9	0.3%	6
	Minerals / Metals	6.3	110.0	116.3	4.4%	7
	Retail	2.3	3.0	5.3	0.2%	12
	Utility / Government	2.4	541.0	543.4	20.4%	19
	Total	634.9	2028.9	2663.8	100%	51,411
		Concentrati	on Risk Threshold:	133.2		

Appendix 2: 2021 Concentration Risk

Industries	stries / Energy Load Activities, September 2020 - August 2021 Loads					
		September 2020 - August 2021 MWa	Queue Request	Total	Percent Concentration	Avg. No. of Service Agreements
Rate 1 Rate 2 Rate 3 Rate 6 Rate 85	Residential	94.1	0.0	94.1	4.2%	39,828
	General Service	58.8	0.0	58.8	2.6%	7,151
	Irrigation	70.9	0.0	70.9	3.2%	4,826
	Street Lights	0.6	0.0	0.6	0.0%	104
	Ag Food Process Boiler	0.0	0.0	0.0	0.0%	-
Rate Schedules 7, 14, 15, 16, 17, 94	Aerospace	1.1	0.0	1.1	0.0%	2
	Ag. Processing	40.7	30.6	71.3	3.2%	39
	Ag. Storage	6.5	0.0	6.5	0.3%	10
	Automotive	24.7	0.0	24.7	1.1%	3
	Cannabis	0.7	2.5	3.2	0.1%	5
	Chemical	41.1	2.0	43.1	1.9%	7
	Construction	0.2	0.0	0.2	0.0%	4
	Cryptocurrency	7.7	35.5	43.2	1.9%	11
	Data Center	195.0	465.0	660.0	29.5%	12
	Education	1.5	2.4	3.9	0.2%	7
	Electronics	26.4	0.0	26.4	1.2%	1
	Gas / Fluids	6.6	0.0	6.6	0.3%	3
	Manufacturing	3.7	564.0	567.7	25.3%	4
	Medical / Health	6.2	0.0	6.2	0.3%	5
	Minerals / Metals	6.0	0.0	6.0	0.3%	6
	Retail	2.4	0.0	2.4	0.1%	11
	Utility / Government	2.5	541.0	543.5	24.3%	8
	Total	597.3	1643.0	2240.3	100%	52,047
		Concentrati	ion Risk Threshold:	112.0		