

RESOLUTION NO. XXXX

A RESOLUTION AMENDING RATE SCHEDULE NOS. 30 AND 31, AND ESTABLISHING A
NEW RATE SCHEDULE NO. 32, WHOLESALE POINT-TO-POINT TRANSMISSION SERVICE,
RATE SCHEDULE NO. 33, ANCILLARY SERVICES, AND RATE SCHEDULE NO. 34,
WHOLESALE TRANSMISSION DELIVERY OF RESERVED POWER TO LARGE LOADS

Recitals

1. Pursuant to RCW 54.16.040, Grant PUD is authorized to regulate and control the use, distribution, rates, service, charges, and price of electric energy;
2. Rate Schedule Nos. 30 and 31 were adopted on October 27, 2020 pursuant to Resolution 8953;
3. Effective March 1, 2022, Rate Schedule No. 30 will be modified to include reference to new Rate Schedule No. 33, Ancillary Services, for all charges and loss factors associated with Ancillary Services;
4. Effective March 1, 2022, Rate Schedule No. 31 will be modified to reflect a rate design change to create closer alignment between costs and revenue. The title of the rate schedule will also be modified to clarify these rates apply only to loads that receive Reserved Power;
5. Grant PUD has an obligation to offer open access to its transmission system under terms and rates that are comparable to those Grant offers itself;
6. Effective March 1, 2022, Rate Schedule No. 32, Wholesale Point-to-Point Transmission Service, will establish rates for the use of Grant PUD's transmission system;
7. Grant PUD supplies Ancillary Services to several entities taking transmission or wheeling service and expects to supply these services to additional entities in the future. To date, Grant has not had a mechanism in place to be fully compensated for all of these services;
8. Effective March 1, 2022, Rate Schedule No. 33, Ancillary Services, will establish Ancillary Service rates to fully recover the costs of providing these services;
9. Grant PUD's Board of Commissioners directed staff to develop a rate for delivery of Reserved Power for Reserved Power Customers that does not include a Return on Customer Funded Capital (ROE). Rate Schedule 34 meets this request from the Board of Commissioners.
10. Effective March 1, 2022, Rate Schedule No. 34, Wholesale Transmission Delivery of Reserved Power to Large Loads, will establish rates for large load customers who receive reserved power and would otherwise be on Rate Schedule No. 30; and
11. Grant PUD's General Manager and Grant PUD staff recommend amending Rate Schedule No. 30 and Rate Schedule No. 31 as set forth in Exhibits A and B, and establishing new Rate Schedule Nos. 32, 33, and 34 as set forth in Exhibits C, D, and E.

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

Section 1. Effective March 1, 2022, Rate Schedule No. 30, Wholesale Transmission Delivery for Large Load Customers, and Rate Schedule No. 31, Wholesale Transmission Delivery for Reserved Power to Small Loads, are hereby amended as set forth in Exhibits A and B hereto.

Section 2. Resolution 8953 is hereby superseded, and this resolution supersedes any other resolutions which are inconsistent with this resolution.

Section 3. Effective March 1, 2022, Rate Schedule No. 32, Wholesale Point-to-Point Transmission Service, is hereby established as set forth in Exhibit C hereto.

Section 4. Effective March 1, 2022, Rate Schedule No. 33, Ancillary Services, is hereby established as set forth in Exhibit D hereto.

Section 5. Effective March 1, 2022, Rate Schedule No. 34, Wholesale Transmission Delivery of Reserved Power to Large Loads, is hereby established as set forth in Exhibit E hereto.

PASSED AND APPROVED by the Commission of Public Utility District No. 2 of Grant County, Washington, this 23rd day of November 2021.

President

ATTEST:

Secretary

Vice President

Commissioner

Commissioner

MEMORANDUM

November 9, 2021

TO: Kevin Nordt, General Manager/Chief Executive Officer

VIA: Dave Churchman, Chief Customer Officer
Rich Flanigan, Sr. Manager Wholesale Marketing and Supply

FROM: Amanpreet Singh, Senior Financial Analyst
Rod Noteboom, Manager of Transmission Services

SUBJECT: Amend Rate Schedules 30 and 31, and establish a new Rate Schedule 34

Purpose: To request Commission approval of three rate schedules – RS 30, RS 31, and RS 34.

- The proposed changes to Rate Schedule 30 are simply to remove the Ancillary Services from the Rate Schedule and reference new Ancillary Services rates and loss factors in Rate Schedule No. 33, Ancillary Services.
- The changes to Rate Schedule 31 are to modify the rate design to add fixed charges and reduce variable charges to more closely align with PUD costs. This change is designed to be revenue neutral and the revenue from RS 31 is not anticipated to materially change.
- The new Rate Schedule 34 is applicable to Reserved Power customers consistent with the guidance provided by the Commission. This rate is similar to Rate Schedule 30, but does not capture a return on investment.

The specific requests are as follows:

1. Effective March 1, 2022, amend Rate Schedule 30, Wholesale Transmission Delivery for Large Load Customers, updating the Ancillary charges and loss factors as provided in Exhibit A;
2. Effective March 1, 2022, amend Rate Schedule 31, Wholesale Transmission Delivery for Reserved Power to Small Loads, updating the structure and loss factors as provided Exhibit B; and
3. Effective March 1, 2022, establish new Rate Schedule 34, Wholesale Transmission Delivery of Reserved Power to Large Loads, as provided in Exhibit E.

Rate Schedule 30 Discussion:

Background: The current Rate Schedule 30 is composed of three separate rates, which were approved by the Commission in 2019 via Resolution No. 8953:

- 30-A loads that take delivery at a nominal voltage at 115 kV;
- 30-B loads that utilize only the PUD's 13.2 kV system; and
- 30-C loads that utilize the PUD's 115/230 kV system and take delivery at a nominal voltage of 13.2 kV and for loads at voltages below 13.2 kV as determined by Grant PUD.

Proposal: Update the charges for Ancillary Services and loss factors. Ancillary Services are currently specified within Rate Schedule 30. Going forward, Rate Schedule 30 will refer to Rate Schedule 33 for Ancillary Services and loss factors.

Justification: Ancillary Services rates need to be updated to reflect the recent cost of service work performed by staff in consultation with GDS. Rate Schedule 33 has been developed to specify rates and procedures for all applicable Ancillary Services. This will result in an increase in the rates for the Ancillary Services and will better reflect the cost to provide the services.

Financial Considerations: The increase in the Ancillary Services charges will amount to an increase of approximately 4% of the new total bills for 30-A and approximately 1.5% for 30-C. The impact for 30-B would be in between these two values and a value was not determined since there are no current loads applicable to this rate.

Rate Schedule 31 Discussion:

Background: The current Rate Schedule 31 is composed of three separate rates:

- 31-A residential load;
- 31-B loads not exceeding 500kW for general service, commercial, multi-residential and miscellaneous outbuilding lighting, heating and power (excepting irrigation service) requirements; and
- 31-C for pumping loads not exceeding 2,500 HP and other miscellaneous power needs including lighting.

These rates were approved by the Commission in 2019 via Resolution 8953. The intention was to update these rates once the Cost of Service had been completed. Now that the Cost of Service is complete, staff recommends moving forward in a multi-stage process. The first step would be a rate design change intended to better align the rate structure with PUD costs by increasing fixed charges and reducing variable energy charges. The second step would be a review of the costs and revenue collected during 2021 and determine if any changes to the rate levels are appropriate.

Proposal: Using a revenue neutral approach based on 2020 data, staff is proposing a delivery, basic, and minimum charge for Rate Schedule 31-A, a delivery and basic charge for Rate Schedule 31-B, and a delivery and basic charge for Rate Schedule 31-C. The objective of the design change is to align rates more closely with actual costs while keeping the total revenue largely unchanged (revenue neutral). In general, the bills will increase for those meters that have comparatively low energy usage and will decrease for those meters with relatively higher energy usage. The overall revenue collected is anticipated to be very similar to the total revenue collected under the current rate design. The name of the Rate Schedule was changed to specify these rates are only applicable to loads that receive Reserved Power. Reserved Power is power designated as Reserved Power by the United States Bureau of Reclamation.

Justification: Currently, Rate Schedule 31 is based solely on the delivery of energy. This rate design is not reflective of the costs borne by Grant PUD as delivery costs are primarily fixed while the current rate design collects revenue based upon usage. The costs of wheeling are better represented by fixed monthly charges and demand charges. The new rate design creates a closer alignment between an individual customer's costs and the revenue received from that customer.

Financial Considerations: This update to the rate structure is being done on a revenue neutral basis which means Grant PUD will not see a meaningful increase or decrease in revenue when compared to

the current rate design. In 2022 staff will review the cost of service as it applies to this rate class and determine if any changes are appropriate.

Rate Schedule 34 Discussion:

Background: The new Rate Schedule 34 is composed of three separate rates for Reserved Power customers:

- 34-A loads that take delivery at a nominal voltage at 115 kV;
- 34-B loads that utilize only the PUD's 13.2 kV system; and
- 34-C loads that utilize the PUD's 115/230 kV system and take delivery at a nominal voltage of 13.2 kV and for loads at voltages below 13.2 kV as determined by Grant PUD.

These rates are needed to accommodate the customers who receive Reserved Power who would otherwise be on Rate Schedule 30.

Proposal: Update the charges for delivery, Ancillary Services, and designation of losses compared to the existing Rate Schedule 30.

Justification: At the Commission's directive, staff eliminated a return on customer funded capital for the Reserved Power Customers. The new rates represent this change.

This update to the Ancillary Services rates as contained in Rate Schedule 33 will more accurately collect the costs of providing Ancillary Services by Grant. The new Ancillary Services rates are higher than the current Ancillary Services rates.

Financial Considerations: This update to the delivery charge will reduce the bill compared to Rate Schedule 30 because there is no return on investment in the calculation. The increase in the Ancillary Services charges will amount to an increase of approximately 4% of the new total bills for 34-A and approximately 1.5% for 34-C. The impact for 34-B would be in between these two values and a value was not determined since there are no current loads applicable to this rate.

Recommendation: Commission approval to:

1. Effective March 1, 2022, amend Rate Schedule 30, Wholesale Transmission Delivery for Large Load Customers, updating the Ancillary charges and loss factors as provided in Exhibit A;
2. Effective March 1, 2022, amend Rate Schedule 31, Wholesale Transmission Delivery for Reserved Power to Small Loads, updating the structure and loss factors as provided Exhibit B; and
3. Effective March 1, 2022, establish new Rate Schedule 34, Wholesale Transmission Delivery of Reserved Power to Large Loads, as provided in Exhibit E.

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

RATE SCHEDULE NO. 30

Wholesale Transmission Delivery for Large Load Customers

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers delivering power to a Grant PUD point of receipt for service to 115kV and 13.2 kV and voltages below 13.2 kV as determined by Grant PUD. Customers under Rate Schedule 30 are wholesale transmission delivery Large Load Customers within Grant PUD's electric system that are not Grant PUD retail loads.

Effective: For service beginning January 1, 2021 through December 31, 2021.

Services Received: Delivery of energy from the point of receipt to the customer load and the necessary Ancillary Services required to serve these Large Loads connected to the Grant PUD electric system.

Monthly Billing Rates based on Load Type:

30-A: For loads that take delivery at a nominal voltage of 115 kV

Basic Charge: \$32 per month

Delivery: \$1.90 per kW of Billing Demand

30-B: For loads that utilize only the District's 13.2 kV system

Basic Charge: \$32 per month

Delivery: \$3.12 per kW of Billing Demand

30-C: For loads that utilize the District's 115/230 kV system and take delivery at a nominal voltage of 13.2 kV and for loads at voltages below 13.2 kV as determined by Grant PUD.

Basic Charge: \$32 per month

Delivery: \$5.02 per kW of Billing Demand

Applicable Ancillary Services to 30-A, 30-B, and 30-C

— Regulation and Frequency Response ————— \$0.00013/kWh

1) — Operating Reserves ————— \$0.00033/kWh

Billing Demand: The Billing Demand under this schedule shall be the highest 60 minute demand during the month as determined by the load's demand meter, adjusted for losses and power factor. If a customer



Exhibit A
Resolution No. 8953

Formatted: Top: 0.69"

~~subject to this rate schedule has language in their delivery contract to utilize a ratchet concept or other concept to determine and utilize a monthly billing demand, then the rates in this Schedule 30 will apply to the demand used for billing purposes as determined in the customer's contract.~~

~~**Power Factor Adjustment:** If the power factor (pf) for the month is less than 0.95 leading or lagging, the peak demand will be multiplied by the term $0.95/pf$. The power factor will be determined using the total kWh and kVARh for the billing period.~~

~~**Loss Adjustment:** The peak demand will be increased by the applicable Transmission Loss Factor.~~

~~**Service:** Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies which may be amended from time to time by Grant PUD, and contracts between Grant PUD and customer.~~

~~**Tax Adjustment:** The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.~~

Definitions:

~~**Ancillary Services:** those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system. These include but are not limited to:~~

- ~~• Regulation and Frequency Response service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz).~~
- ~~• Operating Reserve service is needed to serve load in the balancing authority area in the event of a system contingency.~~

~~**Transmission Loss Factor:** A value that compensates for the loss of power and energy on the Grant PUD system to facilitate delivery. If Customer's contract does not contain the applicable loss factors, the loss factors in the Grant PUD Ancillary Services Rate Schedule will apply.~~

~~**Large Load Customer:** 115kV and 13.2 kV wholesale transmission delivery customers, and customers that take delivery below 13.2 kV as determined by Grant PUD, within Grant PUD's electric system that are not Grant PUD retail loads.~~

~~8953~~ RATE SCHEDULE NO. 30

Wholesale Transmission Delivery for Large Load Customers

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers delivering power to a Grant PUD point of receipt for service to 115kV and 13.2 kV and voltages below 13.2 kV as determined by Grant PUD. Customers under Rate Schedule ~~No. 30~~ must have an agreement with Grant PUD regarding the service, and bear wholesale transmission ~~delivery Large Load~~ Customers within Grant PUD's electric system ~~and that are not be a~~ Grant PUD retail ~~customers loads~~.

Effective: For service beginning ~~March~~ January 1, 2022.

Services Received: Delivery of energy from the point of receipt to the customer load and the necessary Ancillary Services required to serve these ~~se Large L~~ loads connected to the Grant PUD electric system.

Monthly Billing Rates based on Load Type:

30-A: For loads that take delivery at a nominal voltage of 115 kV

Basic Charge: \$32 per month

Delivery: \$2.51 per kW of Billing Demand

30-B: For loads that utilize only the District's 13.2 kV system

Basic Charge: \$32 per month

Delivery: \$4.36 per kW of Billing Demand

30-C: For loads that utilize the District's 115/230 kV system and take delivery at a nominal voltage of 13.2 kV and for loads at voltages below 13.2 kV as determined by Grant PUD.

Basic Charge: \$32 per month

Delivery: \$6.87 per kW of Billing Demand

Applicable Ancillary Services to 30-A, 30-B, and 30-C

1. Scheduling, System Control and Dispatch Service
2. Reactive Supply and Voltage Control from Generation and Other Sources Service
3. Regulation and Frequency Response for Service to Loads
4. Operating Reserves Service

~~1) Regulation and Frequency Response~~ \$0.00013/kWh

~~2) Operating Reserves~~ \$0.00033/kWh

Rates for Ancillary Services are in Rate Schedule No. 33 – Ancillary Services.

Billing Demand: ~~The Billing Demand shall be the highest 60-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor and losses. The Billing Demand under this schedule shall be the highest 60-minute demand during the month as determined by the load's demand meter, adjusted for losses and power factor.~~ If a customer subject to this rate schedule has language in their delivery contract to utilize a ratchet concept or other concept to determine and utilize a monthly billing demand, then the rates in this Schedule 30 will apply to the demand used for billing purposes as determined in the customer's contract.

Power Factor Adjustment: ~~If the power factor (pf) for the month is less than 0.95 leading or lagging, the peak demand will be multiplied by the term 0.95/pf. The power factor will be determined using the total kWh and kVARh for the billing period. Power Factor will be adjusted in accordance with the PUD Customer Service Policy.~~

Loss Adjustment: The peak demand ~~and scheduled energy will be adjusted~~ ~~increased~~ by the applicable ~~Transmission Loss Factors as contained in customer's agreement with Grant PUD. If customer's agreement does not contain applicable loss factors, the loss factors in Rate Schedule No. 33 – Ancillary Services will be used.~~

Service: Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies, ~~Transmission Business Practices which may be amended from time to time by Grant PUD,~~ and ~~agreements/contracts between Grant PUD and customer, which may be amended from time to time by Grant PUD.~~

Tax Adjustment: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.

Definitions:

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system. ~~These include but are not limited to:~~

- ~~Regulation and Frequency Response service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz).~~
- ~~Operating Reserve service is needed to serve load in the balancing authority area in the event of a system contingency.~~

~~Transmission Loss Factor:~~ A value that compensates for the loss of power and energy on the Grant PUD system to facilitate delivery. If Customer's contract does not contain the applicable loss factors, the loss factors in the Grant PUD Ancillary Services Rate Schedule will apply.

~~Large Load Customer:~~ 115kV and 13.2 kV wholesale transmission delivery customers, and customers that take delivery below 13.2 kV as determined by Grant PUD, within Grant PUD's electric system that are not

Commented [DC1]: I don't understand how this works, but I trust that you do and are comfortable with the wording. I haven't seen kVar hours before but again assume this makes sense to those who understand it.

Commented [RN2R1]: This is how our billing system does the calc in the background, it forms the power triangle using the kWh an kVarh and determines the pf to apply to the peak. There are other ways this could be done, such as looking at the peak MVA in all hours, but it is just not how we do it.
I deleted this and changed edited above to generally have same language as Rate Sch 14
We don't adjust Sch 14 for losses so it cannot be exactly the same. Our reference to Customer Service Policies should be sufficient.

Commented [DC3R1]: Do you think we should state that we will bill for power factor adjustment in accordance with the Customer Service Policies?

Commented [RN4R1]: I added the 95% to conform more closely with other rate sch language



~~Grant PUD retail loads.~~

Exhibit A
Resolution No. XXXX

|

RATE SCHEDULE NO. 30
Wholesale Transmission Delivery for Large Load Customers

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers delivering power to a Grant PUD point of receipt for service to 115kV and 13.2 kV and voltages below 13.2 kV as determined by Grant PUD. Customers under Rate Schedule No.30 must have an agreement with Grant PUD regarding the service, be wholesale transmission Customers within Grant PUD's electric system and not be a Grant PUD retail customer.

Effective: For service beginning March 1, 2022.

Services Received: Delivery of energy from the point of receipt to the customer load and the necessary Ancillary Services required to serve the load connected to the Grant PUD electric system.

Monthly Billing Rates based on Load Type:

30-A: For loads that take delivery at a nominal voltage of 115 kV

Basic Charge: \$32 per month

Delivery: \$2.51 per kW of Billing Demand

30-B: For loads that utilize only the District's 13.2 kV system

Basic Charge: \$32 per month

Delivery: \$4.36 per kW of Billing Demand

30- C: For loads that utilize the District's 115/230 kV system and take delivery at a nominal voltage of 13.2 kV and for loads at voltages below 13.2 kV as determined by Grant PUD.

Basic Charge: \$32 per month

Delivery: \$6.87 per kW of Billing Demand

Applicable Ancillary Services to 30-A, 30-B, and 30-C

1. Scheduling, System Control and Dispatch Service
2. Reactive Supply and Voltage Control from Generation and Other Sources Service
3. Regulation and Frequency Response for Service to Loads
4. Operating Reserves Service

Rates for Ancillary Services are in Rate Schedule No. 33 – Ancillary Services.

Billing Demand: The Billing Demand shall be the highest 60-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor and losses. If a customersubject to

this rate schedule has language in their delivery contract to utilize a ratchet concept or other concept to determine and utilize a monthly billing demand, then the rates in this Schedule 30 will apply to the demand used for billing purposes as determined in the customer's contract.

Loss Adjustment: The peak demand and scheduled energy will be adjusted by the applicable loss factors as contained in customer's agreement with Grant PUD. If customer's agreement does not contain applicable loss factors, the loss factors in Rate Schedule No. 33 – Ancillary Services will be used.

Service: Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies, Transmission Business Practices and agreements between Grant PUD and customer, which may be amended from time to time by Grant PUD.

Tax Adjustment: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.

Definitions:

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system.

RATE SCHEDULE NO. 31

Wholesale Transmission Delivery for ~~Reserved Power to Small Load~~ Customers

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers who qualify for Reserved Power and have an agreement with Grant PUD regarding the delivery of Reserved Power to Grant PUD for the small loads as specified in this rate schedule. ~~Grant PUD retail customers using the this rate schedule are not eligible for service under this rate schedule.~~ delivering power to a Grant PUD point of receipt for service to Small Load Customers within Grant PUD's electric system that are not Grant PUD retail customers loads.

Effective: For service beginning ~~January-March 1, 2021~~ March 1, 2022.

Services Received: Delivery of energy from the point of receipt to Reserved Power load ~~Small Load customers~~ and the necessary Ancillary Services required to serve these ~~small~~ Reserved Power loads within the Grant PUD electric system.

Monthly Billing Rates based on Load Type:**31-A:** For residential service customers load for single-phase

serviceDelivery: ~~\$0.038730~~ \$0.0243 per kWh

Basic Charge: ~~Currently no charge~~ \$0.55 per Day

Minimum Charge: \$20.00 per Month

31-B: For loads *not exceeding 500 kW* (as measured by Billing Demand) for general service, commercial, multi-residential and miscellaneous outbuilding lighting, heating and power (excepting irrigation service) requirements.

Delivery: ~~\$0.024320~~ \$0.00945 per kWh

Basic Charge: ~~Currently no charge~~ \$0.70 per Day

31-C: For pumping loads not exceeding 2,500 horsepower and other miscellaneous power needs including lighting.

Delivery: ~~\$0.026229~~ \$0.22 per kWh

Basic Charge: ~~Currently no charge~~ \$1.65 per Day

Service: Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies, Transmission Business Practices and agreements between Grant PUD and customer, which may be amended from time to time by Grant PUD. ~~Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies which may be amended from time to time by Grant PUD.~~

~~**Billing**~~ **ILLING Demand** ~~**EMAND:**~~ The Billing Demand under this schedule shall be the larger of the following demand factors:



Exhibit B
Resolution No. XXXX

~~The highest 15-minute demand during the billing period as determined by demand meter. Metered demand will be adjusted up to 95 percent power factor on accounts having reactive meters.~~

Commented [LM1]: Follow up with Trung.

Tax Adjustment: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.

Definitions:

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system.

Reserved Power: Power designated as Reserved Power by the United States Bureau of Reclamation.

Small Load Customers: residential, small commercial, and pumping loads that receive wholesale delivery service.

RATE SCHEDULE NO. 31
Wholesale Transmission Delivery for Reserved Power to Small Loads

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers who qualify for Reserved Power and have an agreement with Grant PUD regarding the delivery of Reserved Power to Grant PUD for the small loads as specified in this rate schedule. Grant PUD retail customers are not eligible for service under this rate schedule.

Effective: For service beginning March 1, 2022.

Services Received: Delivery of energy from the point of receipt to Reserved Power load and the necessary Ancillary Services required to serve the Reserved Power load within the Grant PUD electric system.

Monthly Billing Rates based on Load Type:

31-A: For residential service load for single-phase service

Delivery: \$0.0243 per kWh

Basic Charge: \$0.55 per Day

Minimum Charge: \$20.00 per Month

31-B: For loads *not exceeding 500 kW* (as measured by Billing Demand) for general service, commercial, multi-residential and miscellaneous outbuilding lighting, heating and power (excepting irrigation service) requirements.

Delivery: \$0.00945 per kWh

Basic Charge: \$0.70 per Day

31-C: For pumping loads not exceeding 2,500 horsepower and other miscellaneous power needs including lighting.

Delivery: \$9.22 per kW

Basic Charge: \$1.65 per Day

Service: Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies, Transmission Business Practices and agreements between Grant PUD and customer, which may be amended from time to time by Grant PUD.

Billing Demand: The Billing Demand under this schedule shall be the highest 15-minute demand during the billing period as determined by demand meter.

Tax Adjustment: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.

Definitions:

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system.

Reserved Power: Power designated as Reserved Power by the United States Bureau of Reclamation.

RATE SCHEDULE NO. 34
Wholesale Transmission Delivery of Reserved Power to Large Loads

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers who qualify for Reserved Power and have an agreement with Grant PUD regarding the delivery of Reserved Power to Grant PUD for the loads as specified in this Rate Schedule. Customers using this Rate Schedule are not Grant PUD retail customers.

Effective: For service beginning March 1, 2022.

Services Received: Delivery of energy from the point of receipt to the customer's load and the necessary Ancillary Services required to serve the load connected to the Grant PUD electric system.

Monthly Billing Rates based on Load Type:

34-A: For loads that take delivery at a nominal voltage of 115 kV

Basic Charge: \$32 per month

Delivery: \$2.11 per kW of Billing Demand

34-B: For loads that utilize only the Grant PUD 13.2 kV system

Basic Charge: \$32 per month

Delivery: \$3.60 per kW of Billing Demand

34-C: For loads that utilize the Grant PUD 115/230 kV system and take delivery at a nominal voltage of 13.2 kV and for loads at voltages below 13.2 kV as determined by Grant PUD.

Basic Charge: \$32 per month

Delivery: \$5.71 per kW of Billing Demand

Applicable Ancillary Services to 34-A, 34-B, and 34-C

1. Scheduling, System Control and Dispatch Service
2. Reactive Supply and Voltage Control from Generation and Other Sources Service
3. Regulation and Frequency Response for Service to Loads
4. Operating Reserves Service

Rates for Ancillary Services are in Rate Schedule No. 33 – Ancillary Services

Billing Demand: The Billing Demand shall be the highest 60-minute demand during the month as determined by demand meter, adjusted up to 95 percent power factor and losses.

Loss Adjustment: The peak demand and scheduled energy will be adjusted by the applicable loss factors contained in Schedule 33 – Ancillary Services.

Service: Service under this Schedule is subject to the terms and conditions in Grant PUD’s Customer Service Policies, Transmission Business Practices and agreements between Grant PUD and customer, which may be amended from time to time by Grant PUD.

Tax Adjustment: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.

Definitions:

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system.

Reserved Power: Power designated as Reserved Power by the United States Bureau of Reclamation.

MEMORANDUM**November 9, 2021****TO:** Kevin Nordt, General Manager/Chief Executive Officer**VIA:** Dave Churchman, Chief Customer Officer
Rich Flanigan, Sr. Manager Wholesale Marketing and Supply**FROM:** Rod Noteboom, Manager of Transmission Services
Amanpreet Singh, Senior Financial Analyst**SUBJECT:** Rate Schedule 32 – Wholesale Point-to-Point (PTP) Transmission Service**Purpose:** To Request Commission approval to establish new Rate Schedule 32, Wholesale Point To Point (PTP) Transmission Service, effective March 1, 2022.**Discussion:** PTP Transmission Service allows a customer to use the Grant transmission system to deliver power from one point on the Grant system, the Point of Receipt (POR), to another point on the Grant system, the Point of Delivery (POD). A customer is required to have a contract with Grant that specifies each reservation the customer has purchased, the terms of service, and the applicable Ancillary Services for each reservation. Ancillary Services will be charged per the Ancillary Service Rate Schedule No. 33.

The primary users of PTP service are expected to be solar generation facilities. The first facility is not expected to utilize the service until late 2023 at the earliest. Grant will be developing the business practices for PTP service over the next couple of years and will complete this work prior to commencement of any service under this Schedule.

The PTP rate was calculated using the Transmission Cost of Service and revenue requirements that have been used for other transmission rate schedules previously approved by the Grant PUD Commission. The point-to-point transmission rate was developed using standard FERC methodology and detailed information on this calculation is posted on the PUD's website.

Justification: Grant receives regular inquiries regarding the cost of point-to-point transmission service, and it has become increasingly necessary to have a posted rate for this common transmission service to provide service to these customers. This rate conforms with standard FERC methodology and is needed for the PUD to receive transmission revenue from generation resources located within the PUD's balancing area.**Financial Considerations:** Grant is entitled to receive compensation for use of the Grant transmission system. Schedule 32 allows Grant to be compensated at the same rate its retail customers pay for use of the transmission system. Revenue collected under this rate schedule will help to lower the overall per unit costs of the Grant transmission system which can be recognized in future cost of service studies.

As an example of the amount of revenue that could be collected under this rate schedule, at a rate of \$2.51/kW month, a customer with a 120 MW reservation will pay \$3,614,400 per year.

Recommendation: Commission approval to establish new Rate Schedule 32, Wholesale PTP Transmission Service, effective March 1, 2022.**Legal Review:** See attached e-mail(s).

RATE SCHEDULE NO. 32
Wholesale Point-to-Point Transmission Service

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers who have an agreement with Grant PUD for Point-to-Point (PTP) Transmission Service.

Effective: For service beginning March 1, 2022.

Services Received: Grant PUD will receive power from customer at a Grant PUD Point of Receipt (POR) and deliver the power to customer at a Grant PUD Point of Delivery (POD).

Monthly Billing Rates:

Delivery: \$2.51/kW of the reserved capacity specified in customers applicable agreement for PTP Service.

Ancillary Services: The applicable Ancillary Services will be specified in the customer's agreement for PTP Service. The rates for Ancillary Services will be as specified in the Grant PUD Rate Schedule 33 for Ancillary Services.

Losses: Losses will be billed per the terms of Financial Loss Recovery in the Grant PUD Rate Schedule 33 for Ancillary Services.

Service: Service under this Schedule is subject to the terms and conditions in Grant PUD's Customer Service Policies and Transmission Business Practices, which may be amended from time to time by Grant PUD.

Tax Adjustment: The amounts of any tax levied by any city or town, in accordance with RCW 54.28.070 of the Laws of the State of Washington, will be added to the above charges.

Definitions:

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system.

Point of Delivery: The location where Grant delivers power and energy to customer.

Point of Receipt: The location where Grant receives power and energy from customer.

MEMORANDUM**November 9, 2021****TO:** Kevin Nordt, General Manager/Chief Executive Officer**VIA:** Dave Churchman, Chief Customer Officer
Rich Flanigan, Sr. Manager Wholesale Marketing and Supply**FROM:** Rod Noteboom, Manager of Transmission Services
Amanpreet Singh, Senior Financial Analyst**SUBJECT:** Rate Schedule 33 – Ancillary Services**Purpose:** To Request Commission approval to establish a new Rate Schedule 33, Ancillary Services, effective March 1, 2022.**Discussion:****What are Ancillary Services?**

Ancillary Services are necessary to support the transmission of electric power from generation and other system resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operation of the interconnected transmission system. Ancillary Services are generally provided by generation resources. National policies and industry practice recognize that transmission service requires certain defined Ancillary Services, which must either be provided by a transmission service supplier, self-supplied (in some cases), or purchased from other sources. Ancillary Services are provided to both retail and wholesale customers, although the methods for allocating costs and invoicing differ. The generation resources that Grant PUD currently uses to provide retail ancillary services included in bundled retail rates will also provide wholesale ancillary services.

When Grant supplies wholesale wheeling services to a load in Grant's Balancing Authority (BA), Grant generally supplies the following Ancillary Services:

1. Meets the load on a second-to-second basis (regulation)
2. Supplies energy in the hour or receives excess energy if the hourly schedule of energy received for transmission does not match the actual load for the hour (energy imbalance)
3. Supply operating reserves equal to 3% of the load or generation (operating reserves)
4. Control the voltage at the location of the load and between the source and load (voltage control)
5. Provide frequency response to the bulk electric system due to the load being in the Grant BA (frequency response service)
6. Provide the systems, personnel and expertise associated with operating a BA that allow the power to be scheduled into and through the Grant BA (scheduling, system control and dispatch service)
7. Supply power for the losses created on the Grant system due to the transmission of energy to the load (loss compensation)

Costs are associated with each of these services, which must be recovered from the customer(s) receiving the services.

Ancillary Services must be supplied if the Grant Balancing Authority hosts a generator that wheels power across the Grant system.

What is Flexible Capacity?

Several Ancillary Services require generation capacity that can ramp up or down on a second-by-second basis to ensure that frequency is maintained and reliability standards are met. This flexible capacity must be held in reserve and cannot be used for other purposes, such as meeting retail load or generating power to be sold in wholesale markets. Holding flexible capacity in reserve can also lead to spilling water at Priest and Wanapum that would not otherwise be spilled. The cost of this flexible capacity is a primary input to several ancillary rates.

Cost of Flexible Capacity for Ancillary Services

The cost of flexible capacity to provide Ancillary Services is **\$8.63/MW-month**. This cost was determined to be the embedded cost of capacity from the Priest Rapids Project during the 2018 cost of service test year.

Individual Ancillary Services in Rate Schedule 33

- 1. Scheduling, System Control and Dispatch Service:** This service is required to schedule the movement of power through, out of, within, or into a Balancing Authority Area.

Rate: Grant PUD does not currently have a separate rate for Scheduling, System Control and Dispatch Service. The costs for this service are included in the wholesale delivery charge determined by the Cost of Service Study (COSS).

- 2. Reactive Supply and Voltage Control from Generation and Other Sources Service:** To maintain transmission voltages on the Transmission Provider's transmission facilities within acceptable limits, generation facilities and non-generation resources capable of providing this service that are under the control of the Control Area operator are operated to produce (or absorb) reactive power.

Rate: Grant PUD does not currently have a separate rate for Reactive Supply and Voltage Control from Generation and other Sources. The costs for this service are included in the wholesale delivery charge determined by the COSS.

- 3. Regulation and Frequency Response for Service to Loads:** Regulation and Frequency Response service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz).

Staff performed an analysis to determine the amount of flexible capacity required to supply this service to all loads in the Grant BA in 2018. This analysis used a methodology approved by the Federal Energy Regulatory Commission (FERC) and determined that an amount of flexible capacity of 1.46% of the monthly peak load is required to meet the regulation requirements for load in the Grant BA. The total cost for this service was determined by multiplying the cost of the flexible capacity per MW by the total annual flexible capacity required in MW-months (the sum of the monthly peak loads), and then dividing by the annual sum of all the load in the Grant BA in kWh. Most of the load in the Grant

BA is the Grant retail load however the cost of providing this service is allocated to both retail load and third-party load such as the Reserve Power load served by USBR to determine this rate

Rate: \$0.00021/kWh

4. **Energy Imbalance Service for Loads:** Energy Imbalance Service is provided when a difference (“deviation”) occurs between the scheduled and the actual delivery of energy to a load located within a balancing authority over a single hour.

Rate: Grant PUD does not currently have a separate rate for Energy Imbalance Service for Loads. Energy imbalance is currently provided using energy deviation accounts as defined in customer contracts. Generally, deviation accounts keep track of positive and negative amounts of imbalance energy, which is then physically returned to Grant in lieu of a payment or subtracted from the energy owed to Grant in lieu of a credit.

5. **Operating Reserves Service:** Operating Reserves Service is required to meet Grant’s BAL002 obligations in the balancing authority area in the event of a system contingency, as defined by the North American Electric Reliability Corporation (NERC).

The Grant BA must maintain operating reserves equal to 3% of load and 3% of generation in the Grant BA. Grant may consider the ability of a customer to self-supply this service in the future.

An analysis was performed to determine the amount of Operating Reserves required to supply this service to all loads and all generation that does not self-supply this service in the Grant BA in 2018. The total cost was determined by multiplying the cost of the flexible capacity per MW by the total annual capacity required, and then dividing by the sum all the energy load (in kWh) in the Grant BA and all the generation that does not self-supply these reserves in the Grant BA in 2018. Most of the load in the Grant BA is Grant’s retail load. The generation currently in the Grant BA that does not self-supply are Potholes East Canal and Quincy Chute.

Rate: \$0.00043/kWh of load in the Grant PUD balancing authority
 \$0.00043/kWh of generation in the Grant PUD balancing authority

6. **Generator Imbalance Service:** Generator Imbalance Service is provided when a difference (“deviation”) occurs between the scheduled and actual output of energy from a generator located in a balancing authority area.

Actual generation in excess of a schedule receives a payment based on the market price for power at the time of the imbalance. A formula creates an incentive for the customer to minimize deviations by reducing the payments per MWh for larger deviations.

Scheduled power in excess of actual generation is charged based on the market price for the power at the time of the imbalance. A formula creates an incentive for the customer to minimize deviations by increasing the charges per MWh for larger deviations.

7. **Real Power Losses:** Real power losses are associated with all transmission service.

When power flows over the Grant transmission system, losses occur which must be supplied by Grant PUD. Loss factors were determined using engineering calculations. Losses are higher when power on a line is higher, and so losses during peak demand are higher than average losses.

Service under Rate Schedules 30 & 31: If loss factors are not specified in the customer's contract, the following loss factors apply:

Delivery Voltage	Loss Factors for Energy Schedules	Loss Factors for Demand Billing
115/230 kV	1.3%	1.4%
13.2 kV	3.2%	3.5%
Below 13.2 kV	6.7%	7.1%

- 8. Solar Integration/Regulation Service:** Solar Integration/Regulation Service is provided when a difference occurs between the instantaneous output of a solar generation facility and the scheduled output for the facility. Solar Integration/Regulation Service provides the necessary incremental and decremental capacity to allow the Grant PUD balancing authority to deliver the scheduled output from the solar generation facility. The energy imbalance associated with the difference between the actual generation and the scheduled output is separately covered by Generator Imbalance Service, and Operating Reserves are separately covered by Operating Reserve Service.

Grant PUD calculated the amount of flexible capacity required to supply this service for a single solar plant located in Grant County. This analysis was done using a methodology used previously by the analyst for a FERC jurisdictional process. Grant PUD determined that an amount of flexible capacity equal to 14.68% of the maximum output of the solar plant is required. The rate was calculated by multiplying 14.68% by the cost of flexible capacity per kW and will be applied to the capacity reserved for the solar generation plant.

This rate applies to facilities that have no storage that is used to smooth the facility output and where the inverter is sized to convert the full production of the facility from DC to AC.

Rate: \$1.27/kW billed monthly based on the reserved contract demand

Additional rates for Solar Integration/Regulation may be determined in the future that recognize the demonstrated ability of a facility to require a different need for such service by using storage or other means.

The Solar Integration/Regulation rate is subject to change for reasons including but not limited to

- The need for Grant PUD to buy additional flexible capacity.
- Variations in the configuration of different solar generation facilities based on the use of storage and other configuration/operational differences.
- The ability of Grant to use actual data from utility scale solar generation operating in Grant county and connected to the Grant PUD system.

Comparisons with Other Wholesale Suppliers for Costs of Capacity to Support Ancillary Services

Comparisons for Ancillary Services across suppliers and even within some suppliers are difficult, because some posted rates already incorporate “purchase obligations”, which is a percentage of contract demand or measured peak demand (the 14.68% above), to yield a charge per kW-month or per MWh.

The table below shows the cost of capacity used to support ancillary services that require standby or flexible capacity; spinning and non-spinning reserves were used for the comparison.

Cost of Capacity to Support Ancillary Services	
Provider	Cost of Capacity (\$/kW month)
Grant	\$8.63
Avista	\$11.82-\$12.83
BPA	\$8.35
Idaho Power	\$6.53
Northwestern	\$12.12-\$12.99
Portland General	\$6.70
Puget Sound Power	\$9.00-\$9.25
Seattle City Light	\$8.58

Sources

Avista, Puget, Idaho Power, Northwestern, PGE, PSE: rate schedules 5 and 6 posted on OASIS as of March 2021

Seattle: SCL 2020 OATT Capacity Cost for Ancillary.pdf

Rates <https://www.seattle.gov/Documents/Departments/CityLight/OATTTariff.pdf>

BPA: “Generation Inputs Study”, December 2020, section 4.

Seattle’s rates, adopted in 2020, are based on a calculated cost of capacity of \$102.91/kW-year using a methodology similar to Grant’s embedded cost approach (\$132.48/kW-year). Both Seattle’s and Grant’s calculations use a 2018 test year, but accounting costs differ between the two for many reasons.

BPA’s 2020 methodology for calculating the cost of capacity for ancillary services combines embedded, accounting costs (somewhat like Grant, Seattle and Northwest investor-owned utilities) and variable costs. BPA also accounts for the complexities of the federal hydropower system, whereas Grant and Seattle have simpler approaches. BPA’s methodology yields a total cost of spinning (fast response) reserves of \$100.20/kW-year; BPA’s spinning reserves are the closest analogy to the reserves provided by Grant’s flexible capacity.

Effects on Rate Schedules 30 and 31

Rate Schedule 30 - Wholesale Transmission Delivery Large Load: Language in the rate schedule was added to indicate that Schedule 33 is the source for ancillary services charges and loss factors

Rate Schedule 31 - Wholesale Transmission Delivery Small Load: Language in the rate schedule was added to indicate that Schedule 33 is the source for loss factors

Justification: Grant supplies Ancillary Services to several entities and is not always paid or fully compensated for these services under contracts written years ago. The establishment of Ancillary Service rates is a necessary step to fully recover the costs of providing these services. Some Ancillary

Services are currently listed in Rate Schedule 30 for Wholesale Transmission Delivery, but Grant does not currently have a comprehensive rate schedule for all Ancillary Services.

Financial Considerations: The rates for Ancillary Services have been calculated based on the costs to supply the services. For Grant to be consistently made whole for supplying the services, Grant must be compensated for these costs.

Below is expected annual revenue from the proposed ancillary services rate schedule for selected current and future loads not including losses:

- Regulation and Reserves for some current loads
 - QCBID based on 2020 loads: \$74,000
 - ECBID based on 2020 loads: \$2,800
 - USBR based on 2020 loads: \$1,400
- Solar Integration and Reserves for a future Solar Plant
 - Prospective 120 MW Solar Plant: \$2,060,000

Recommendation: Commission approval to establish new Rate Schedule 33, Ancillary Services, effective March 1, 2022.

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

RATE SCHEDULE NO. 33
Ancillary Services

Rates shown on this Rate Schedule are set by the Grant PUD Commission and are subject to change at the discretion of the Commission.

Available: To eligible transmission customers taking service under Rate Schedules for Wholesale Service that specify charges for Ancillary Services.

Effective: For service beginning March 1, 2022.

Services Received: Ancillary Services as necessary to take transmission or wheeling service under Rate Schedule Nos. 30, 32, and 34 and other rates schedules as specified or as may be further specified in a customer's contract for service with Grant PUD.

- 1. Scheduling, System Control and Dispatch Service:** This service is required to schedule the movement of power through, out of, within, or into a Balancing Authority Area.

Rate: Grant PUD does not have a separate rate for Scheduling, System Control and Dispatch Service.

- 2. Reactive Supply and Voltage Control from Generation and Other Sources Service:** In order to maintain transmission voltages on transmission facilities within acceptable limits, generation facilities and non-generation resources capable of providing this service that are under the control of the balancing authority operator are operated to produce (or absorb) reactive power.

Rate: Grant PUD does not have a separate rate for Reactive Supply and Voltage Control from Generation and other Sources.

- 3. Regulation and Frequency Response for Service to Loads:** Regulation and Frequency Response service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz).

Rate: **\$0.00021/kWh**

- 4. Energy Imbalance Service for Loads:** Energy Imbalance Service is provided when a difference ("deviation") occurs between the scheduled and the actual delivery of energy to a load located within a balancing authority over a single hour.

Rate: Grant PUD does not have a separate rate for Energy Imbalance Service for Loads. Energy Imbalance is currently provided using energy deviation accounts as defined in customer contracts.

- 5. Operating Reserves Service:** Operating Reserves Service is required to meet Grant's BAL-002 obligations in the balancing authority area in the event of a system contingency.

Rate: **\$0.00043/kWh** of load in the Grant PUD balancing authority
\$0.00043/kWh of generation in the Grant PUD balancing authority

- 6. Generator Imbalance Service:** Generator Imbalance Service is provided when a difference (“deviation”) occurs between the scheduled and actual delivery of energy from a generator located in a balancing authority area. If the Hourly Pricing Proxy is zero for the hour, there will be no charge or credit.

Generator Imbalance Service will be settled financially.

- A. Imbalances within Deviation Band 1: Deviation Band 1 applies to the portion of an hourly imbalance deviation less than or equal to $\pm 1.5\%$ of the scheduled amount of energy or ± 2 MW, whichever is larger in absolute value.

- 1) For hours when the Hourly Pricing Proxy is a positive value

- a) When energy generated by the customer during an hour is less than the energy scheduled (negative deviation), the charge is 100% of the Hourly Pricing Proxy.
- b) When energy generated by the customer during an hour is greater than the energy scheduled (positive deviation), the credit is 100% of the Hourly Pricing Proxy.

- 2) For hours when the Hourly Pricing Proxy is a negative value

- a) When energy generated by the customer during an hour is less than the energy scheduled (negative deviation), the credit is 100% of the absolute value of the Hourly Pricing Proxy.
- b) When energy generated by the customer during an hour is greater than the energy scheduled (positive deviation), the charge is 100% of the absolute value of the Hourly Pricing Proxy.

- B. Imbalances within Deviation Band 2: Deviation Band 2 applies to the portion of an hourly imbalance deviation greater than $\pm 1.5\%$ of the scheduled amount of energy or ± 2 MW, whichever is larger in absolute value, up to and including $\pm 7.5\%$ of the scheduled amount of energy or ± 5 MW, whichever is larger in absolute value.

- 1) For hours when the Hourly Pricing Proxy is a positive value

- a) When energy generated by the customer during an hour is less than the energy scheduled (negative deviation), the charge is 110% of the Hourly Pricing Proxy.
- b) When energy generated by the customer during an hour is greater than the energy scheduled (positive deviation), the credit is 90% of the Hourly Pricing Proxy.

- 2) For hours when the Hourly Pricing Proxy is a negative value

- a) When energy generated by the customer during an hour is less than the energy scheduled (negative deviation), the credit is 90% of the absolute value of the Hourly Pricing Proxy.
- b) When energy generated by the customer during an hour is greater than the energy scheduled (positive deviation), the charge is 110% of the absolute value of the Hourly Pricing Proxy.

- C. Imbalances within Deviation Band 3: Deviation Band 3 applies to the portion of an hourly imbalance deviation greater than $\pm 7.5\%$ of the scheduled amount of energy or greater than ± 5 MW of the scheduled amount of energy, whichever is larger in absolute value.

1) For hours when the Hourly Pricing Proxy is a positive value

- a) When energy generated by the customer during an hour is less than the energy scheduled (negative deviation), the charge is 125% of the Hourly Pricing Proxy, or \$0.10/kWh, whichever is greater.
- b) When energy generated by the customer during an hour is greater than the energy scheduled (positive deviation), the credit is 75% of the Hourly Pricing Proxy.

2) For hours when the Hourly Pricing Proxy is a negative value

- a) When energy generated by the customer during an hour is less than the energy scheduled (negative deviation), the credit is 75% of the absolute value of the Hourly Pricing Proxy.
- b) When energy generated by the customer during an hour is greater than the energy scheduled (positive deviation), the charge is 125% of the absolute value of the Hourly Pricing Proxy.

- D. Use of the Hourly Pricing Proxy: For purposes of financially settling energy imbalances in any of the deviation bands, the Hourly Pricing Proxy defined herein will be used subject to the following: For any hour during which Grant's Priest Rapids Project ("PRP"), consisting of Wanapum and Priest Rapids Dams, is in a Forced Spill Condition, no compensation shall be given for a positive deviation.

- E. Forced Spill Condition: For purposes of Generator Imbalance Service, a "Forced Spill Condition" exists when spill physically occurs on the PRP, typically during periods of high flows or upstream flood control implementation but also at other times. Discretionary spill, where Grant PUD may choose whether to spill, does not constitute a Forced Spill Condition. Spill solely for fish is included in discretionary spill and is not a Forced Spill Condition. Documentation for a Forced Spill Condition shall be provided to customer upon request.

7. Real Power Losses: Real power losses are associated with all transmission service.

Loss factors: If loss factors are not specified in the customer's contract, the following loss factors will apply for the replacement of losses associated with energy schedules, Financial Loss Recovery, and for purposes of demand billing:

Delivery Voltage	Energy Losses	Demand Losses
115/230 kV	1.3%	1.4%
13.2 kV	3.2%	3.5%
Below 13.2 kV	6.7%	7.1%

Financial Loss Recovery: Losses will be computed using the Energy loss factor for the appropriate voltage of delivery. For each hour, the actual flow in MWh will be multiplied by the loss factor and the Hourly Pricing Proxy.

Loss cost for hour = Energy flow for hour x loss factor x Energy Pricing Proxy

- 8. Solar Integration/Regulation Service:** Solar Integration/Regulation Service is provided when a difference occurs between the instantaneous output of a solar generation facility and the scheduled output for the facility. Solar Integration/Regulation Service provides the necessary incremental and decremental capacity to allow the Grant PUD balancing authority to deliver the schedule from the solar generation facility. The energy imbalance associated with the difference between the actual generation and the schedule is covered by Generator Imbalance Service, and Operating Reserves are covered by Operating Reserve Service.

This following rate applies to facilities that have no storage that is used to smooth the facility output and the inverter is sized to convert the full production of the facility.

Rate: **\$1.27/kW** billed monthly based on the reserved transmission contract demand

Additional rates for Solar Integration/Regulation may be determined to recognize the demonstrated ability of a facility to reduce the need for such service by using storage or other means.

The Solar Integration/Regulation rate is subject to change for reasons including but not limited to

- The need for Grant PUD to buy additional shaping capacity
- Variations in the configuration of different solar generation facilities based on the use of storage and other configuration/operational differences.

Definitions

Ancillary Services: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system.

Hourly Pricing Proxy: The Powerdex Hourly Index for Mid-Columbia. If data for any hour is not available, data from the same hour on the previous day shall be used. Should the Powerdex Hourly Index for Mid-Columbia become no longer generally available or if a similar index is deemed to be superior, Grant PUD will determine a reasonable replacement definition for the Hourly Pricing Proxy and shall specify such replacement definition in a revision to this rate schedule.

Proposed Transmission and Ancillary Service Rate Schedules

Grant PUD Commission Meeting
November 9, 2021

Rod Noteboom

Amanpreet Singh

Julio Aguirre

Dave Churchman

Updated and New Rate Schedules Proposed Today

- Schedule 30 - Wholesale Transmission Delivery for Large Loads
- Schedule 34 - Wholesale Transmission Delivery for Reserved Power Large Loads
- Schedule 31 - Wholesale Transmission Delivery for Reserved Power Small Loads
- Schedule 32 - Wholesale Point-to-Point Transmission Service
- Schedule 33 - Ancillary Services

Overview

- The Wholesale Transmission and Ancillary Service Rate Schedules presented today address several issues:
 - RS 30: Updates Transmission Rate Schedule 30 for Large Loads to reference the Ancillary Service Rate Schedule and to simplify and clarify the current language
 - RS 34: Establishes Transmission Rate Schedule 34 for Large Load Reserved Power users consistent with Commission guidance
 - RS 31:
 1. Modifies the proposed rates for the Small Load Reserved Power users consistent with Commission Guidance
 2. Specifies applicability to only Reserved Power users
 3. Modifies the rate design to include a fixed cost charge while reducing the energy charge
 - RS 32: Establishes a Point-to-Point rate schedule for use by Independent Power Producers (IPPs) such as solar power plants
 - RS 33: Establishes standard Ancillary Services rate schedule which includes loss factors for clarity and consistency across all applicable rate schedules

Schedule 30 - Wholesale Transmission Delivery for Large Load Customers

- Current transmission rate applies to all applicable wholesale loads for Large Load Customers
- With the addition of Rate Schedule 34, Reserve Power wholesale loads will take service under Rate Schedule 34
- Applicable Loss Factors and Ancillary Services are located in Rate Schedule 33

Schedule 34 - Wholesale Transmission Delivery of Reserved Power to Large Loads

- Applies to large loads that qualify for Reserved Power*
- Rate was developed based upon recent guidance received from the PUD Commission

**Reserved Power*: Power designated as Reserved Power by the United States Bureau of Reclamation

Schedule 31 - Wholesale Transmission Delivery for Reserved Power to Small Loads

- Rate Schedule 31 is for wholesale delivery to the following types of loads that utilize Reserved Power:
 - 31A: Residential
 - 31B: General Service
 - 31C: Pumping Loads

Issue Addressed in the Update to Rate Schedule 31

- The new Rate Schedule is only available to customers who utilize Reserved Power
- Rate Design
 - The current rates were first implemented in a contract on July 1, 2017 and were anticipated to be in place for a much shorter period of time
 - The current rates include an energy usage charge only
 - This is not a good way to charge for wheeling, because the actual costs of transmission are not tied to the amount of energy delivered
 - Wheeling costs are better represented by fixed monthly charges and demand charges

Updated Structure for Rate Schedule 31

- New rates change the structure of the rates in a revenue neutral approach
- Proposed Rate Schedules 31A - Residential, and 31B - General Service include a Monthly Charge and an Energy Charge
 - This aligns the rate structure more closely with PUD retail rates for similar loads
- Proposed Rate Schedule 31C - Pumping Load includes a Monthly Charge and a Monthly Demand Charge
 - This aligns the rate structure more closely with PUD retail rates for similar loads
 - The current Rate Schedule 3 uses a seasonal Horsepower Charge, which is a demand-based charge, but it is not currently based on actual measured demand
 - Proposed Rate Schedule 31C will use a monthly demand-based charge based on measured kW

Revenue Neutral Approach for Rate Schedule 31

- To get “revenue neutrality”, the proposed Base Charges and Energy/Demand Charges will result in the same revenue recovered in 2020 from customers served under this rate schedule
- Revenue Neutral Approach using 2020 data:
 - Set Base Charge equal to the otherwise applicable retail rate
 - Subtract Base Charge revenues from the 2020 Revenue
 - The remaining revenue was divided by the 2020 annual billing units (kWh for RS 31A and RS 31B and kW for 31C) to get the proposed energy (\$/kWh for RS 31A and RS 31B) and demand rates (\$/kW for RS 31C)
 - A \$20 minimum charge is proposed to RS 31A to align more closely with the rate structure of the otherwise applicable retail rate

Schedule 32 - Wholesale Point-to-Point (PTP) Transmission Service

- PTP transmission service charges for the use of transmission capacity to allow a customer to move power and energy from a Point(s) of Receipt to a Point(s) of Delivery
- The first customers will likely be solar generation plants. Other customers may follow if Grant develops an Open Access Transmission Tariff (OATT)

Schedule 33 - Ancillary Services

- *Ancillary Services*: those services necessary to support the transmission of electric power from resources to loads given the obligations of balancing authorities and transmitting utilities within those balancing authorities to maintain reliable operations of the interconnected transmission system

Ancillary Services on Rate Schedule 33

1. Scheduling, System Control and Dispatch Service
2. Reactive Supply and Voltage Control from Generation and Other Sources Service
3. Regulation and Frequency Response for Service to Loads
4. Energy Imbalance Service for Loads
5. Operating Reserves Service
6. Generator Imbalance Service
7. Real Power Losses
8. Solar Integration/Regulation Service

Thank You



Powering our way of life.



Power Delivery: Construction and Maintenance Update November 2021



Powering our way

Power Delivery – Construction and Maintenance Mission

Mission:

To safely operate and maintain the investment entrusted to us by our customers.

Vision Statement 2020-2025 (5-year dynamic scope):

Our vision is to be an industry expert in the safe and reliable operation of the transmission and distribution grid, including fiber communications. In partnership with other PUD stakeholders, we will strategically develop a safe and cost-effective approach to construction and maintenance that will allow us to work proactively, demonstrating excellence in service. We will strengthen the management of PUD assets to improve both the quality and the reliability of the power grid and fiber network.

Working Safely through the Virus

- Isolation of crews continues in order to ensure reliability (ESC, MLSC, RCSC)
 - ❖ Port of Ephrata – Line crew (8)
 - ❖ 1625 E. Wheeler Road – Line Crew (6)
 - ❖ Internal services office @ ESC – Substation Maintenance Crew (7)
 - ❖ Quincy Local Office – 2 Electronics Techs, 1 Fiber Tech
 - ❖ Moses Lake Local Office – 2 Electronics Techs, 1 Fiber Tech
 - ❖ **NEW:** Annex Building now has Pete D'Arcy and Fiber Maintenance Crew (8)

Fiber Network & Electronic Tech Shop

Fiber Network Techs

- a. Making shift from “Fiber expansion” to “Fiber Operations & Maintenance.” We now have over 33,000 active customers and Service uptime goals to meet.
- b. Multiple line extensions have been completed inhouse that we didn’t have the resources to complete before

Electronic Techs

- a. Broadband Network
 - i. Upgraded 12 Cisco 4006(Circa 1999-2001’) Wholesale Fiber Switches to current Generation models, with 5 remaining to do this year.
 - ii. Upgraded 13 Wireless Towers
 - iii. 20 new fiber hut/hubs built and turned up
 - iv. Added 40 Gigabit of Bandwidth
- b. New Protections and Control Standard tested and implemented for Substation SCADA control, Randolph, Quincy Plains, Burke in process.
- c. DB2 support with new SCADA System taking 2 FTR’s nearly full time

Meter and Relay Tech Shop

Meter Relay Techs:

- New Protection and Control standard tested and implemented with PDE, Burke Power quality,
- Continued DB2 support with Test and Commissioning of all new equipment
- Wahluke CT correction
- Additional vehicles, training and test equipment are being acquired to make individual techs more effective
- Mutual aid at Kittitas PUD for transformer testing (other utilities looking for support and expertise)

C&M Engineering:

- Continue to support Power Quality effort
- Support for all C&M crews in evaluation of faults and system trouble.
- Managing C&M Contracts including development of new contracts (Wood Pole Test and Treat, new Vegetation / Tree Trimming contract)
- Evaluating new standards for work and equipment in 2021

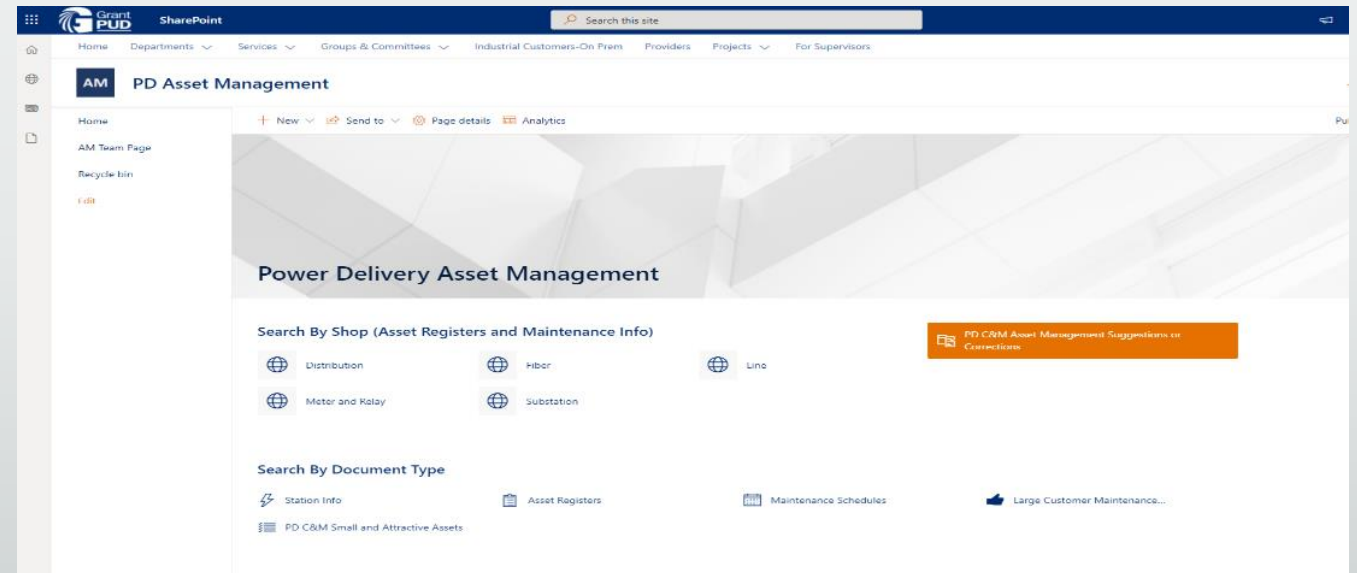
Strategic Asset Management Dept.

Asset Management Team (3)

- Clevest project work initiated.
- Planning under way for first year of wood pole sustain program in 2022 – Replacing 200 high risk poles based on age/condition
- New Sharepoint site as “one source of maintenance truth” for all C&M crafts built.

Future:

- Transmission Wood Pole program. Looking at the backbone of our power grid
- Fiber System infrastructure analysis



Power System Electricians

Work continues to in order to catch up on required maintenance post Covid stand down

For our customers:

- West Quincy Sub: WQ1RT and 2RT Mopac switch replacement and lightning arrester upgrade for bird mitigation completed (delayed since 2014)
- West Quincy Sub: Transformer bus work and new arrestors for bird abatement completed
- Note: of the 13 Data Farm transformer connections we needed to correct to reduce bird intrusion, during the last quarter the PSE group has corrected all but 6. Thank you to LCC for assistance.

Other issues:

- Seiler Substation LTC- Reports from oil samples showed high combustible gasses on SR1RT LTC. LTC was immediately placed in manual and repaired to prevent any possibility of explosion
- Substation Transformer Assist for Kittitas PUD

Line Crew

Pole Fire Mitigation Since 2020

Feeder	% COMPLETE		Structure Count	NOTES
Soap Lake (L8)	100%	✓		
White Trail (WT5)	100%	✓		
Dover (DR14)	100%	✓		
Seep Lake (SL6)	100%	✓		
Royal (R11)	85%			In Progress
Total Structure Count From Above			2049	
Royal (R11)	85%		37	In Progress
Larson (A10)	10%		67	In Progress
White Trail (WT6)	0			To be addresses as time permits
Seep Lake (SL10)	20%		33	In Progress
North Ephrata (N9)	100%		157	Complete 10/15/21
Total Structures Addressed to Date			2343	

Power Quality

Power Quality Effort:

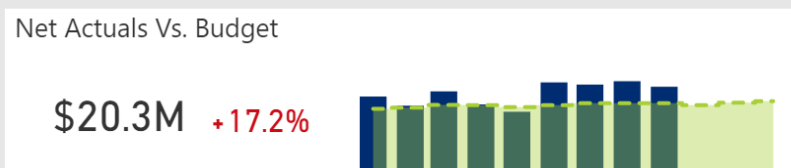
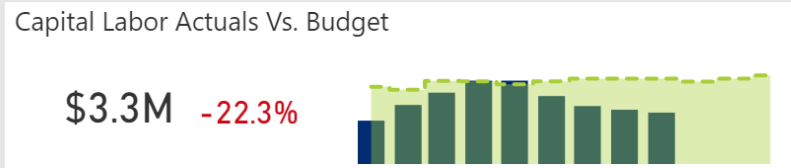
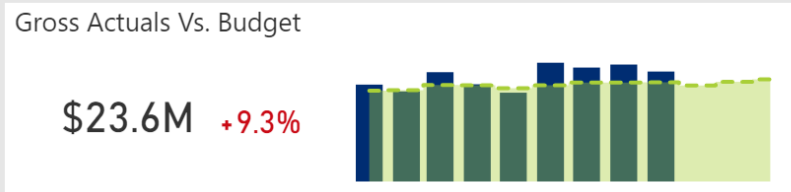
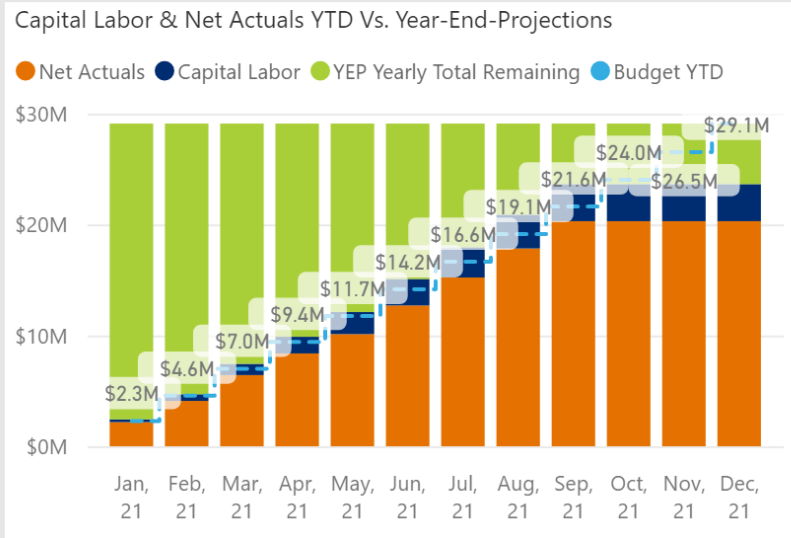
- Identifying fixed capacitor banks and evaluating need/placement on system with PDE as well as diversified loading conditions throughout the year
- Adding an additional size of switched capacitor bank to allow for better flexibility in system Var compensation. Changing the “one size fits all” approach to Var correction.
- Refining data profiling programs for voltage regulators in various situations including back feeding on bidirectional sites and using data to troubleshoot voltage issues on rural circuits.
- New design for capacitor bank installations adding a 4th cutout to help alleviate harmful effects from bird or other outages leading to banks being stuck on when not required.

Operating Unit

EC - Power Delivery

Department

EC1 - PD Delivery Const...



Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
Labor	\$17,661,388	\$18,623,143	\$961,755	5.4%	105.4%
Salaries & Wages	\$9,406,033	\$8,723,780	-\$682,253	-7.3%	92.7%
Benefits	\$5,917,356	\$6,483,514	\$566,157	9.6%	109.6%
Overtime	\$2,225,169	\$3,244,884	\$1,019,715	45.8%	145.8%
Other Labor	\$112,830	\$170,966	\$58,136	51.5%	151.5%
Operating Materials & Equipment	\$2,425,810	\$3,145,085	\$719,275	29.7%	129.7%
Purchased Services	\$1,341,717	\$1,691,775	\$350,058	26.1%	126.1%
G&A	\$122,562	\$46,347	-\$76,215	-62.2%	37.8%
IT	\$67,653	\$79,571	\$11,918	17.6%	117.6%
Utilities	\$3,744	\$9,811	\$6,067	162.0%	262.0%
Risk		\$18,943			
Claim Payment (Major)		\$18,943			
Transportation		\$28,349			
Total	\$21,622,874	\$23,643,022	\$2,020,148	9.3%	109.3%

- Capital Labor is a subset of the Labor above

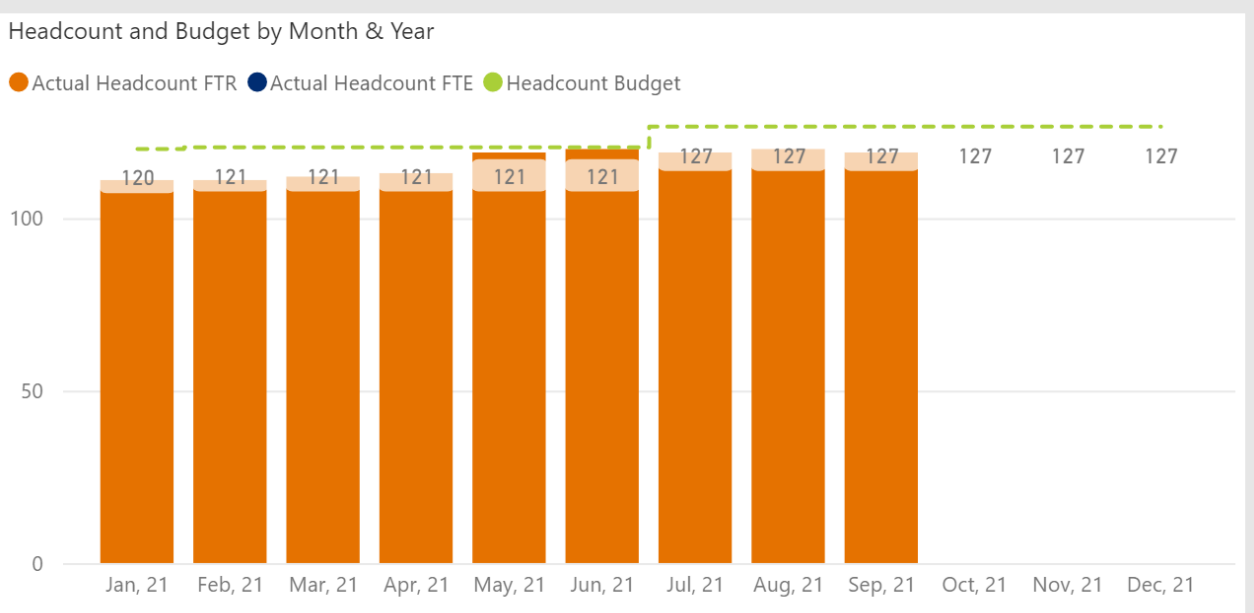
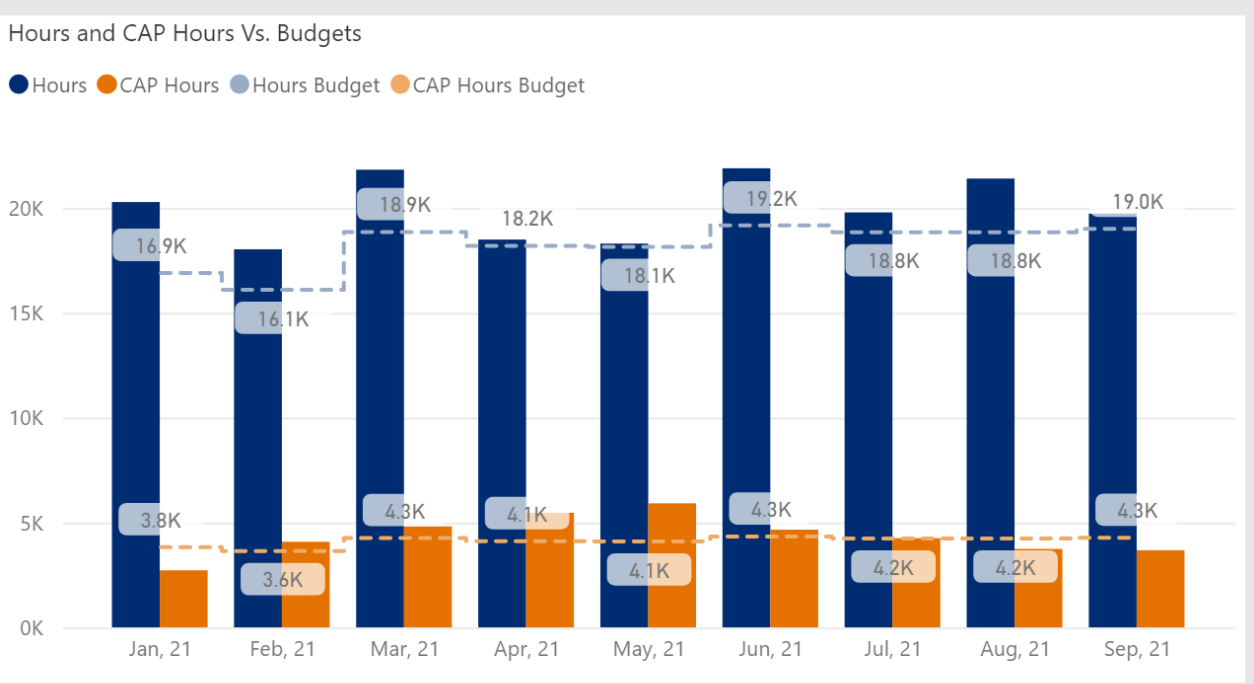
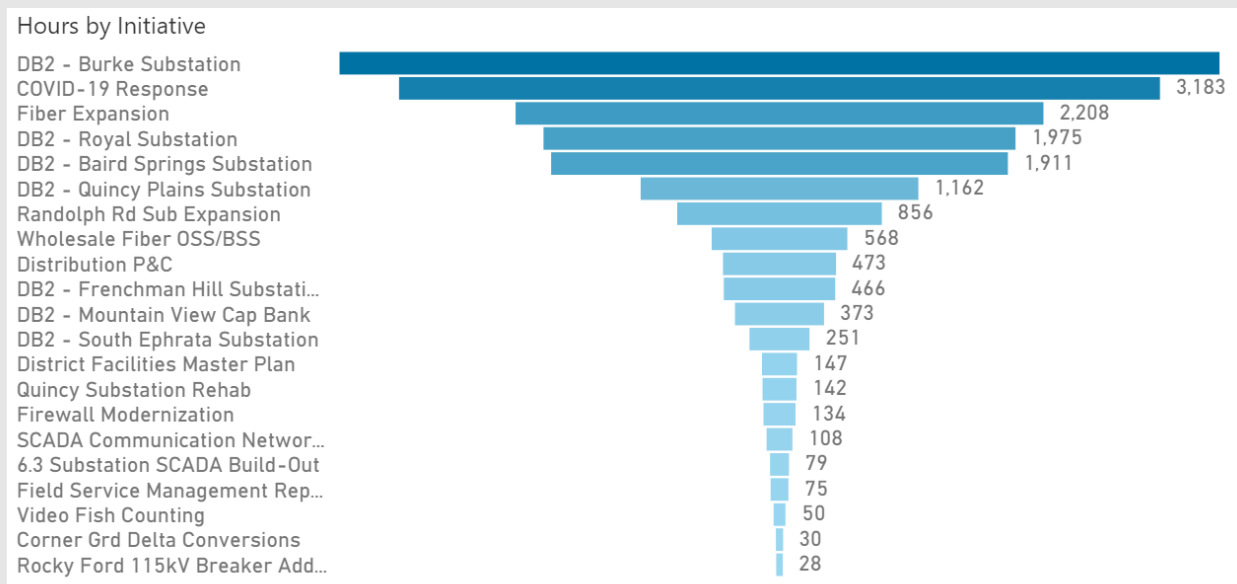
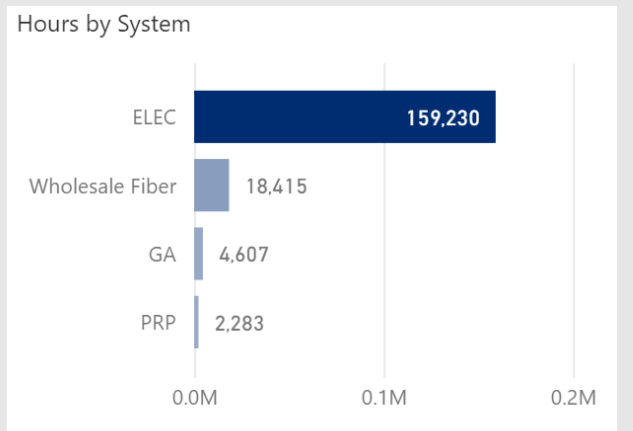
- Net Actuals vs Budget = Gross Actuals minus Capital Labor

Operational Unit

EC - Power Delivery

Department

EC1 - PD Delivery Const Maint

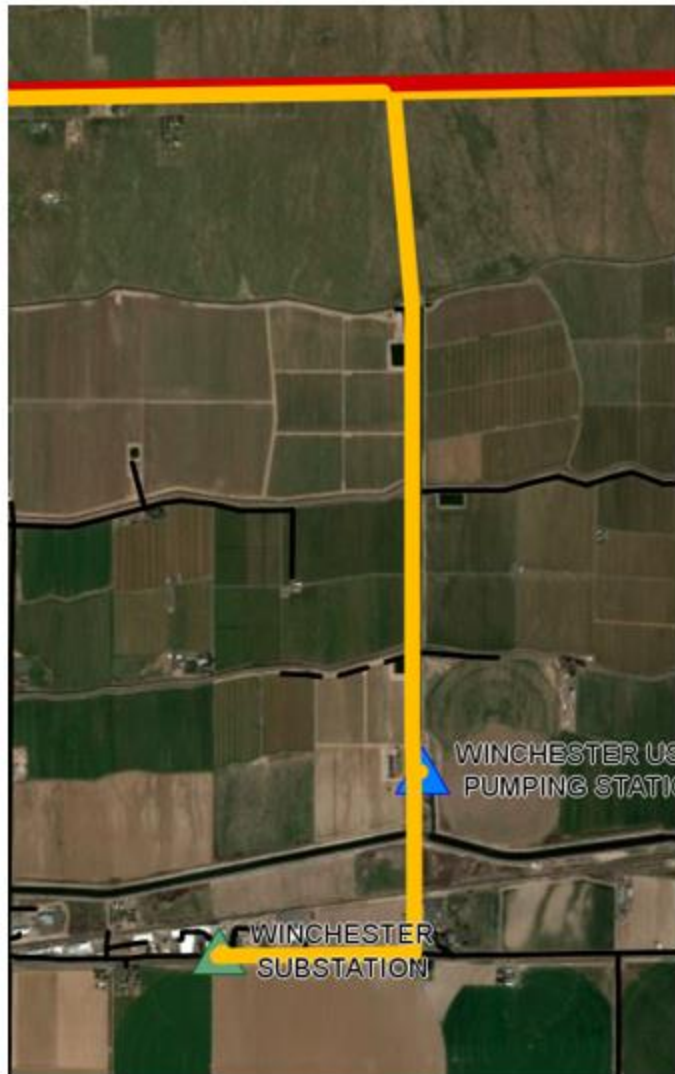


Introducing Danna Carvo, C&M Asset Management Specialist to share an analysis of the recent Winchester Transmission outage.

EVENT REPORT

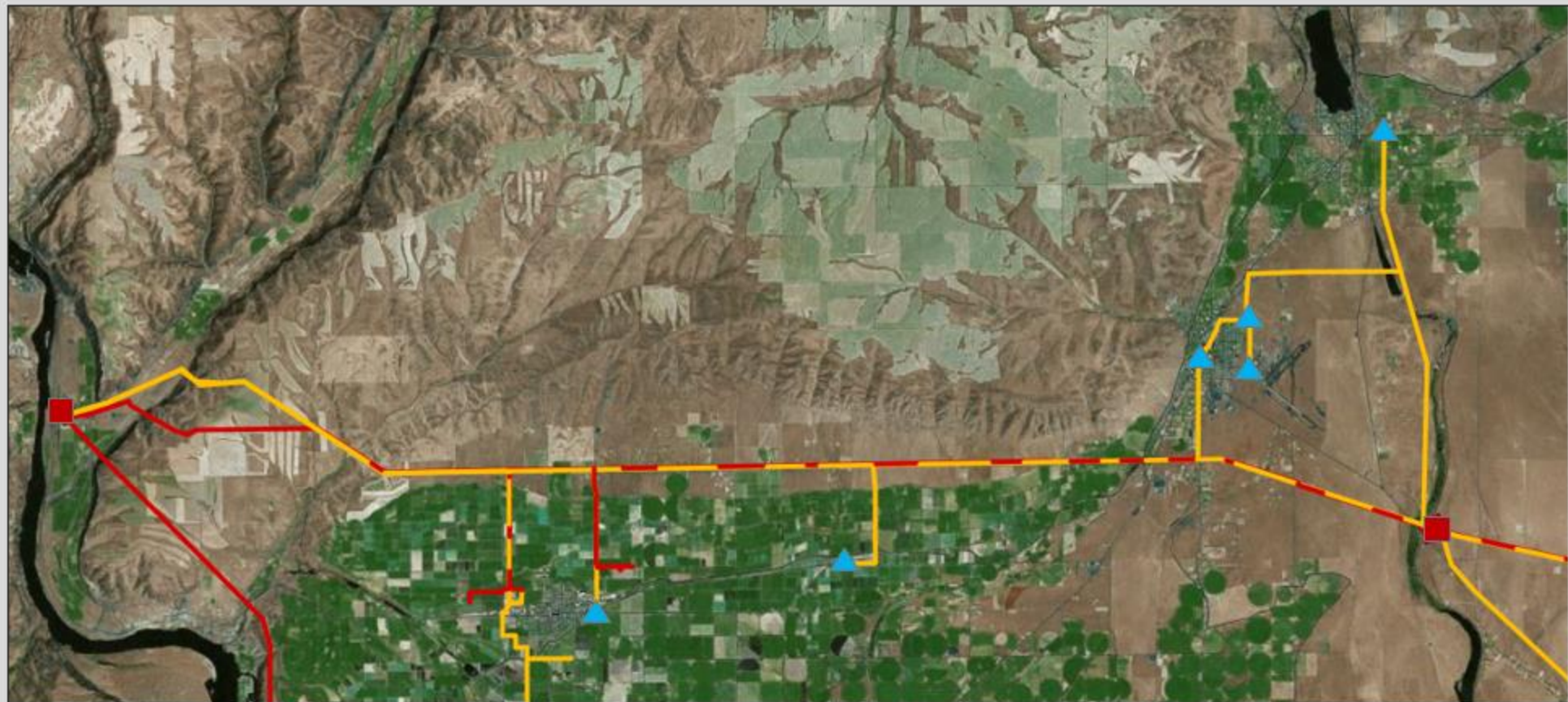
Winchester Transmission Poles 7/31/2021





Event Summary

- On 7/31/21 5 Transmission poles went down on the Winchester Tap impacting 6 Substations and over 9200 customers with the overall repair taking approximately 18 hours.
- Work involved replacing 5 poles with under build and Fiber.
- Cause believed to be wind compounded by pole 102820 being located in a flood irrigated field, with testing showing 5.54" circumference decrease in the pole which in turn led to 4 additional poles going down.
- Weather – Temperature was 76 at 9:55pm with winds at 16 mph from 7-8pm decreasing to 12 mph at 10pm



- ▲ Grant PUD Substations
- 115kV Breaker

Event Details

- **10:35pm:** Saturday 7/31/2021 – National Frozen Food reports outage, 5 poles down, 9297 customers out of power
- TR 2009679 was created in Arcos requesting 14 Lineman and 1 Station Operator
- Initially Filled – 4 Lineman and 1 Station Operator
- Additional Station Operator called out to assist with switching at multiple substations
- **11:14pm:** Secondary callout - 1 Warehouse
- **11:52pm:** Power restored for 8913 customers with alternate feed
- **12:16am:** Follow-up callout for Lineman – 5 Lineman and 2 Apprentices
- **12:30am:** Dispatch called GF to fill remaining Lineman positions
- **12:45am:** Station Operator called out to correct clearance parameters
- **5:45am:** Station Operator called out again for additional switching
- **6:01pm:** Repair complete and all customers restored
- **8/11/21:** Additional truck rolled out to clean up poles on site
- **10/15/21:** Additional truck rolled out to attach serial and location ID tags



Structure Information

	WIN 1/10		WIN 1/11		WIN 1/12		WIN 1/13		WIN 1/14	
	Old	New	Old	New	Old	New	Old	New	Old	New
Age	46	0	46	0	71	0	40	0	46	0
Height	65'	65'	65'	65'	65'	65'	65'	65'	65'	65'
Material	Round Western Red Cedar	Round Western Red Cedar	Round Western Red Cedar / Douglas Fir	Round Western Red Cedar	Round Western Red Cedar	Round Western Red Cedar	Round Western Red Cedar	Round Western Red Cedar	Round Western Red Cedar	Round Western Red Cedar
Pole Type	Transmission	Transmission	Transmission	Transmission	Transmission	Transmission	Transmission	Transmission	Transmission	Transmission
Wire Size: Transmission	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR	268.8 ACSR
Wire Size: Distribution	266 ACSR	266 ACSR	266 ACSR	266 ACSR	266 ACSR	266 ACSR	266 ACSR	266 ACSR	266 ACSR	266 ACSR
Pole Class	I/2	I	I/2	I	I/2	I	I/2	I	I/2	I
Serial #	102820	121816	102821	121815	102822	121814	102823	121813	102824	121812
Last tested	Osmose: 10/10/16	N/A	Osmose: 10/10/16	N/A	Osmose: 10/10/16	N/A	Osmose: 10/10/16	N/A	Osmose: 10/10/16	N/A
Results	30% strength decrease		No significant findings		No significant findings		No significant findings		No significant findings	



Right of Way

- The existing easement for Winchester Tap does not restrict the landowner's options for irrigation.
- Restricting irrigation has not been part of the District's approach historically
- Very seldom do we ever buy property for transmission – only in rare special cases.
- The District's standard practice is to put our structures as close to the County road right of way as possible to not encroach on farmers.
- We may be able to work with the land owners on a case by case basis. In some situations we have realigned ditches around poles.
- If we work on structures during the growing season we pay for any damage to crops.

Expenses - \$79,496

Labor: \$61,442.48 using \$123.45 for ST and \$144.84 for OT average per hr including overhead and Engineering for 350 hours

- Dispatch: 3.5 ST hours
- Supervising Foreman – 3 OT hours
- 3 Foreman: 16.5 OT hours each
- 8 Lineman: 18.5 OT hours each
- 2 Groundman: 18.5 OT hours each
- 2 Apprentice: 18 OT hours each
- 2 Station Operator – 25.5 OT hours total
- 10 Relief Pay – 10 ST hours each (not included in count for Labor hours)
- Warehouse Material Specialist Foreman – 17.5 OT hours
- PD C&M Senior Manager - 6 ST hours (Salary – hours not added to Labor expenses)
- GIS mapping: .5 ST hours
- Clean-up
 - 1 Foreman: 3.5 ST
 - 3 Lineman 6 ST hours each
- Pole tagging
 - 1 Lineman – 2 ST hours

Materials: \$18,053.47

Lost Revenue: N/A ~\$8200 of Energy not provided to customers during this outage was sold through other means by Wholesale Group

Trucks & Fuel: Not included in calculation

TOTAL: \$79,495.95

Event Impacts to Performance Goals

Customer Outage details

Outage in Minutes	No of Service Points	Total Minutes
77	8,913	686,301
232	377	87,464
632	5	3,160
1,173	2	2,346
TOTALS	9297	779,271 Min

Performance Goals for 2021

	ASAI	CAIDI
2021 Goals	99.985%	110 min or less
Prior to Event	99.9875%	152.824
After Event	99.9829%	122.194

- This outage impacted 17% of the 53,619 active Service Points on the system.
- The 2021 ASAI target allows 4.2 million customer minutes of outage annually. This one event consumed approximately 20% of annual allowance.

Next Steps

- Asset Class Strategies for Distribution and Transmission Wood Poles
- Evaluate the Risk associated with rot and irrigation
- Determine if any different approach or policies are needed for Wood Poles
- Inform Leadership and Commission on potential impacts of flood/surface irrigation on Infrastructure
- Follow-up on serial number and location demarcation process



Grant County

PUBLIC UTILITY DISTRICT

Excellence in Service and Leadership

2021 Q3 Budget to Actuals

November 9, 2021

2021 Q2 BvA Outline

1) BvA Reporting

- Process, Granularity & Responsibility

2) Q3 Overview

3) O&M

- Divisional View
- Functional View
- Cost-Type View
- Variances

4) Labor

- Headcount
- Overtime
- Labor
- Divisional View

5) Capital

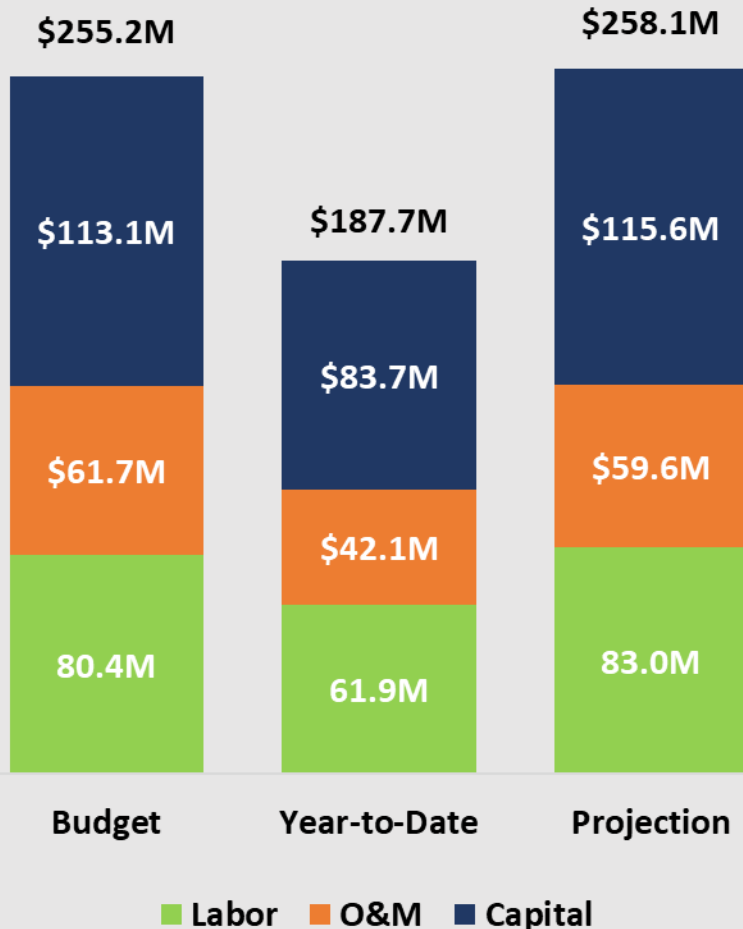
- 2020 vs 2021
- Portfolio View
- Variances

6) Enterprise

2021 Directs Year-End Projection Overview

2021 Q3 Budget to Actual

Projected Variance \$2.9M



	Budget Spent To-Date	Projected Year-End Variance \$	Projected Year-End Variance %
Direct Labor	77%	\$2.6M	3%
Direct O&M	68%	-\$2.1M	-3%
Direct Capital	74%	\$2.5M	2%
Total	74%	\$2.9M	1%

Comparison with Prior Years

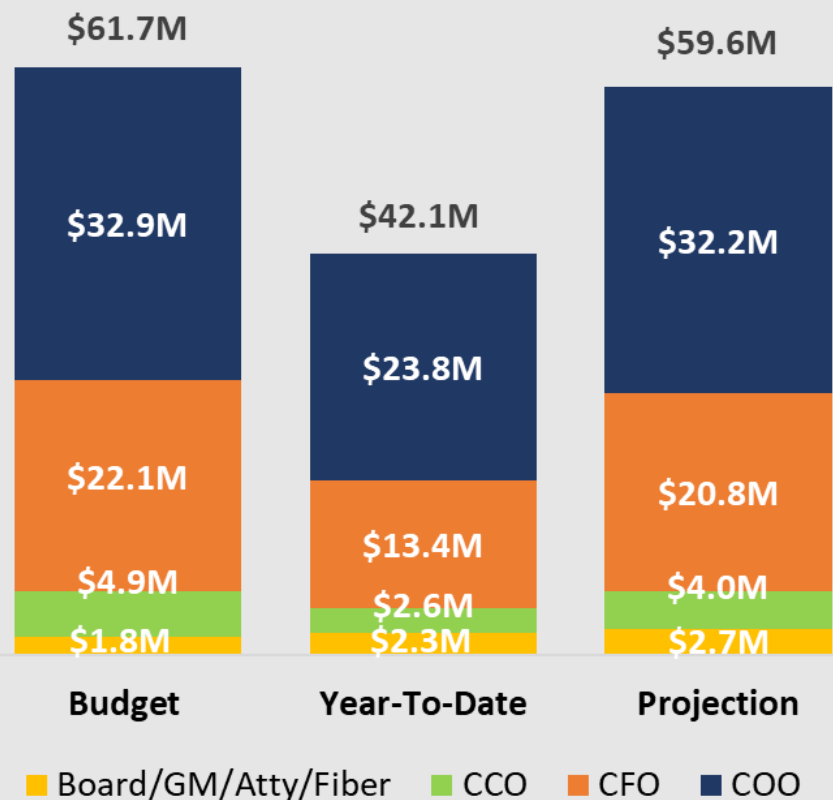
- YTD Labor spend is 77% of budget vs 2020 Q3 at 76% and 2019 Q3 at 76%
- YTD O&M spend is 68% of budget vs 2020 Q3 at 54% and 2019 Q3 at 59%
- YTD Capital spend at 74% of budget vs 2020 Q3 at 56% and 2019 Q3 spend of 45%

Q3 Variances

- Q3 vs Budget: Current Q3 projection of \$258.1M is \$2.9M, or 1.1%, unfavorable to budget
 - Labor = \$2.6M or 3.2% unfavorable, O&M = -\$2.1M or -3.4% favorable, Capital = \$2.5M, or 2.2% unfavorable
- Q3 vs Q2: Current Q3 projection of \$258.1M is \$1.9M, or 0.7%, favorable to Q2 projection of \$260.0M
 - Labor = \$2.3M or 2.9% unfavorable, O&M = \$0.4M or 0.7% unfavorable, Capital = -\$4.5M, or 3.7% favorable

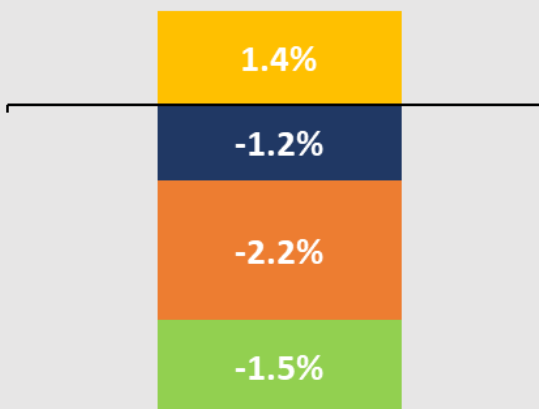
O&M by Division

O&M by Division



O&M Variance by Division

-\$2.1M or -3%



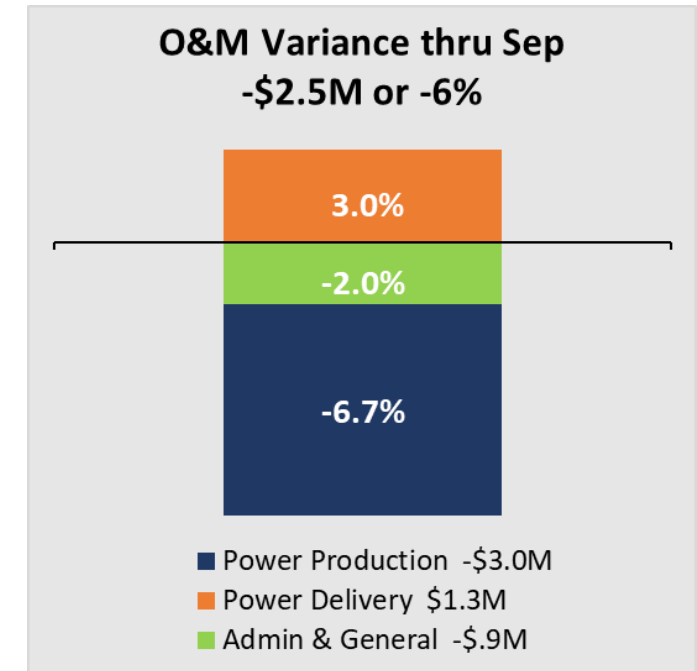
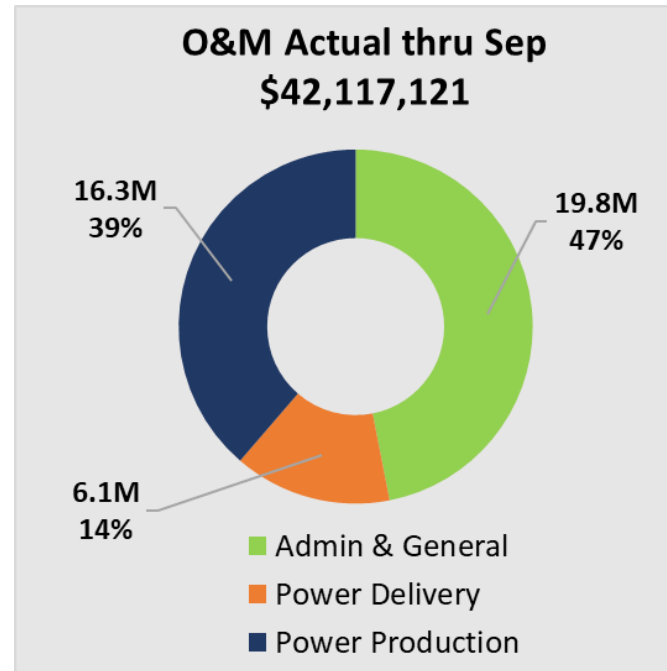
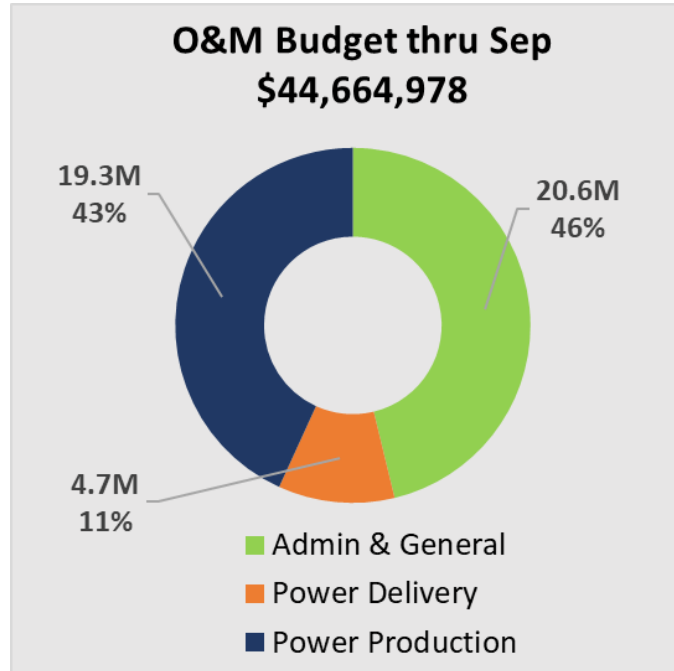
Board/GM/Atty/Fiber \$0.9M
 CCO -\$0.9M
 CFO -\$1.3M
 COO -\$0.7M

- **COO** group projecting 2% favorable to budget

- Environmental Affairs -\$2.0M or -13%, PP Engineering -\$0.4M or -15%, Cultural Resources -\$0.4M or -33%

- **Board/GM/Atty/Fiber** group projecting 48% unfavorable to budget
 - \$0.3M variance in membership/dues
 - \$0.6M variance in legal services due to 3 active cases
- **CCO** group projecting 18% favorable to budget
 - Customer Solutions -\$0.4M or -21%
 - Wholesale Marketing -\$0.2M or -31%
- **CFO** group projecting 6% favorable to budget
 - Internal Services -\$0.3M or -3%
 - CTO Group -\$0.9M or -13%

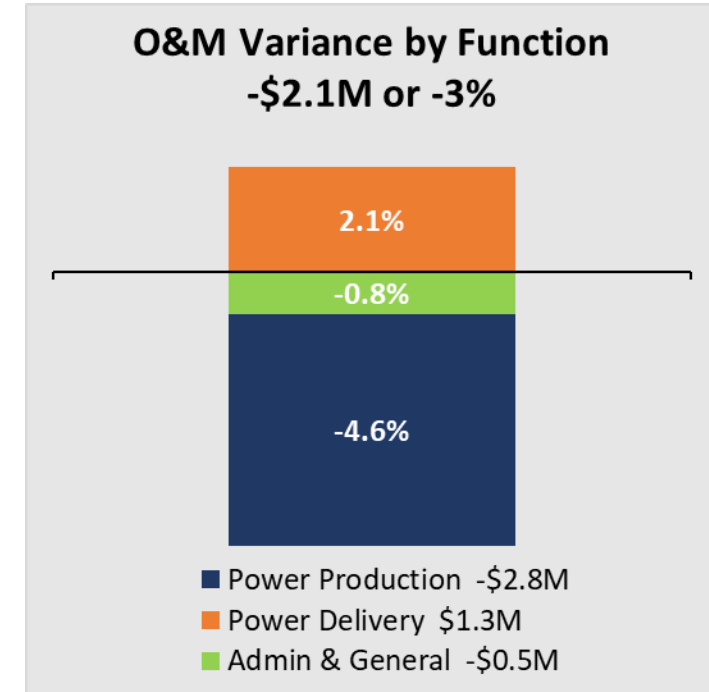
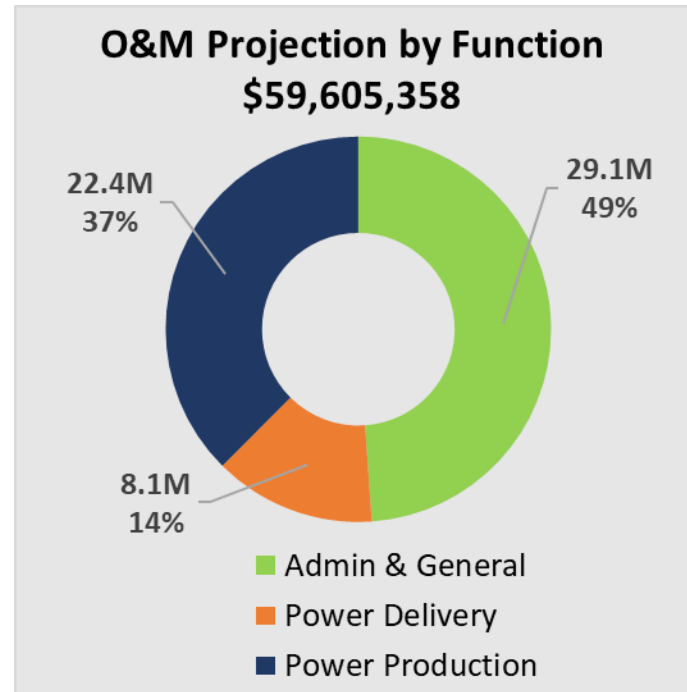
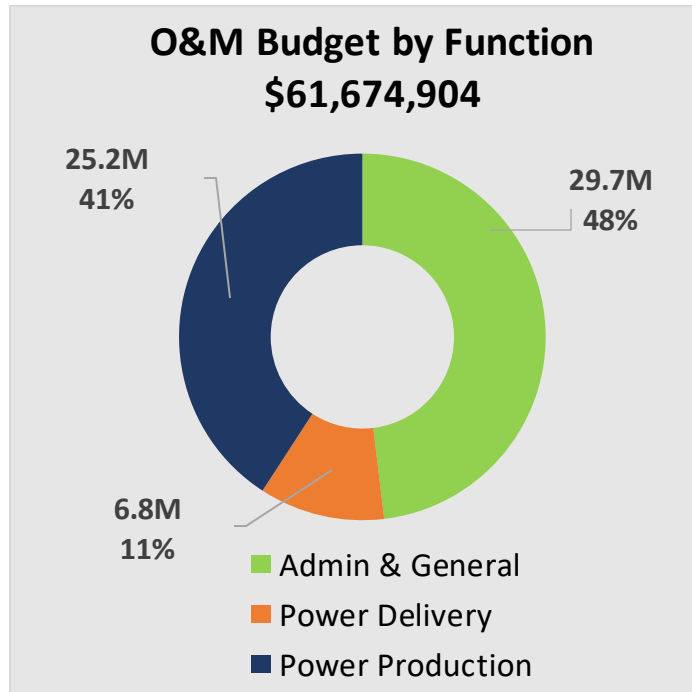
O&M by Function – Through September



YTD through Q3, O&M spend is \$2.6M or 5.7% favorable to budget

- Rate of expenditure in Q3, compared to Q2, has increased
 - O&M through June was \$3M and 10% favorable
- **Power Delivery**, through Q3 and compared to budget, has an increased share of enterprise-wide O&M expenses (+3%)
 - Compared to Q2, this has slowed (Q2 = 15%)
- **Power Production**, through Q3 and compared to budget, has slightly smaller share of enterprise-wide O&M expenses (-4%)

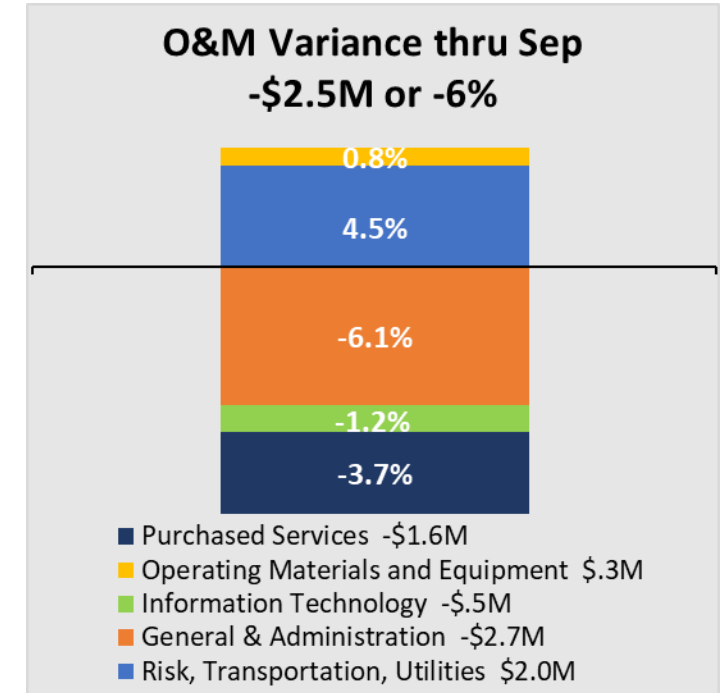
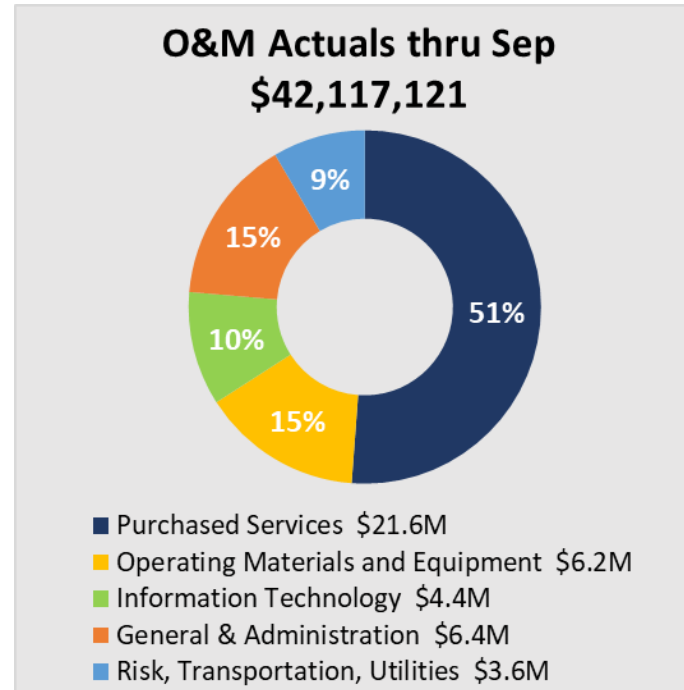
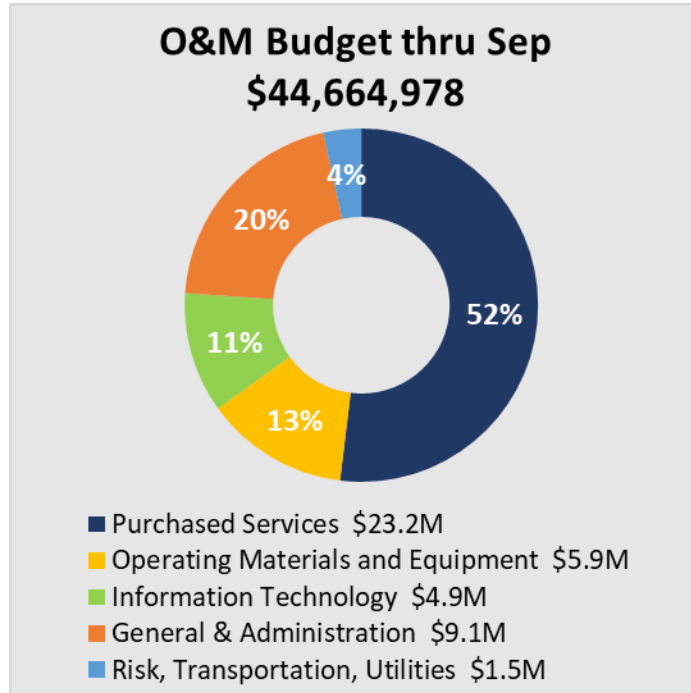
O&M by Function - Projection and Variance



Year-end O&M variance is projected to be \$2.1M favorable to budget, and \$0.4m unfavorable to Q2 projections.

- **Power Delivery** projected to finish \$1.3M unfavorable to budget
 - Line Dept \$0.9M, Electric Shop \$0.2M
- **Power Production** \$2.8 and **Admin & General** \$0.5M favorable to budget
 - Power Production: WD Ops -\$0.3M, Hatchery & Habitat -\$1.5M, Fish Passage -\$0.3M, License Implementation -\$0.4M, Engineering Asset Management -\$0.3M, Engineering -\$0.2
 - Admin & General: Facilities -\$0.3, IT -\$0.9M, Energy Services -\$0.3, Safety & Training \$0.9M

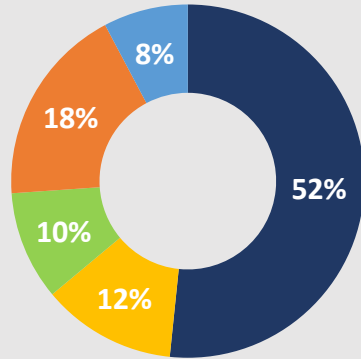
O&M by Cost Type – Through September



- **Purchased Services:** Contracted Labor +\$1.0M, Engineering +\$0.4M, Environmental -\$1.2M, Management Consulting -\$0.8M, Training -\$0.6M
- **IT:** Software -\$0.7M, IT Telecom -\$0.2M, Hardware +\$0.4M
- **General & Administration:** Misc Operating -\$1.3M, Customer Incentives -\$0.2M, Regulatory Expense -\$0.2M, Travel -\$0.2
- **Risk, Transportation, Utilities:** Insurance +\$1.9M

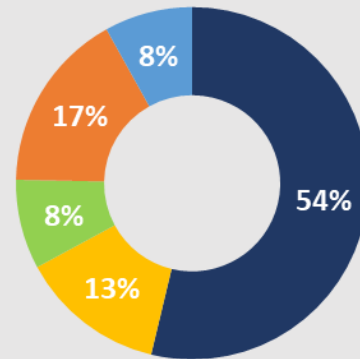
O&M by Cost Type – Projection and Variance

O&M Budget by Cost Type
\$61,674,904



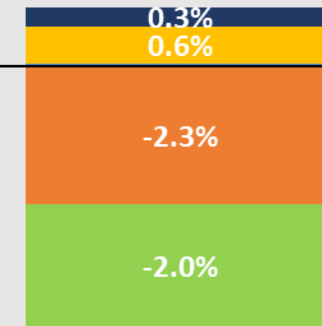
■ Purchased Services \$31.8M
■ Operating Materials and Equipment \$7.6M
■ Information Technology \$6.2M
■ General & Administration \$11.3M
■ Risk, Transportation, Utilities \$4.8M

O&M Projection by Cost Type
\$59,605,358



■ Purchased Services \$32.0M
■ Operating Materials and Equipment \$8.0M
■ Information Technology \$4.9M
■ General & Administration \$9.9M
■ Risk, Transportation, Utilities \$4.8M

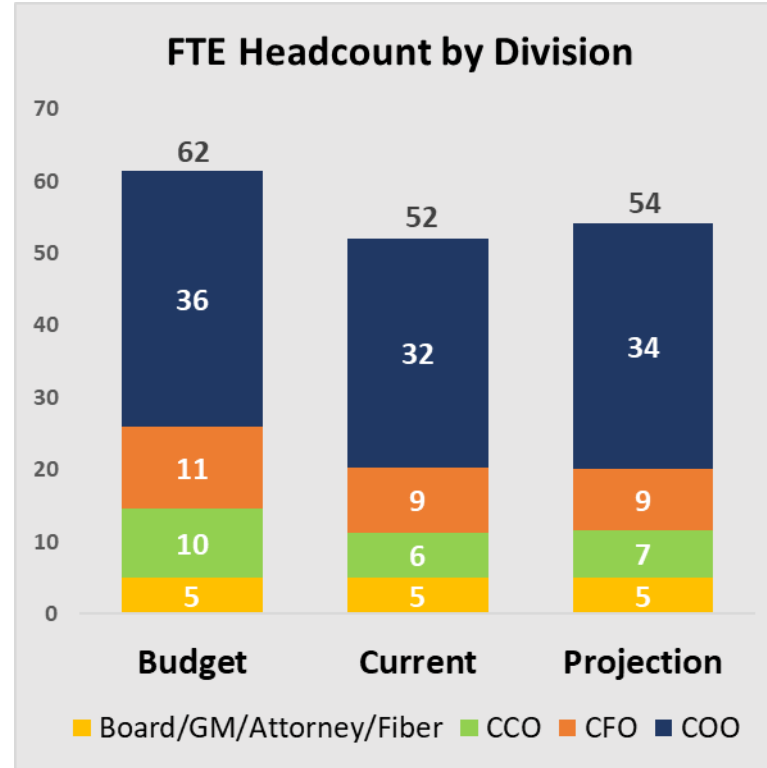
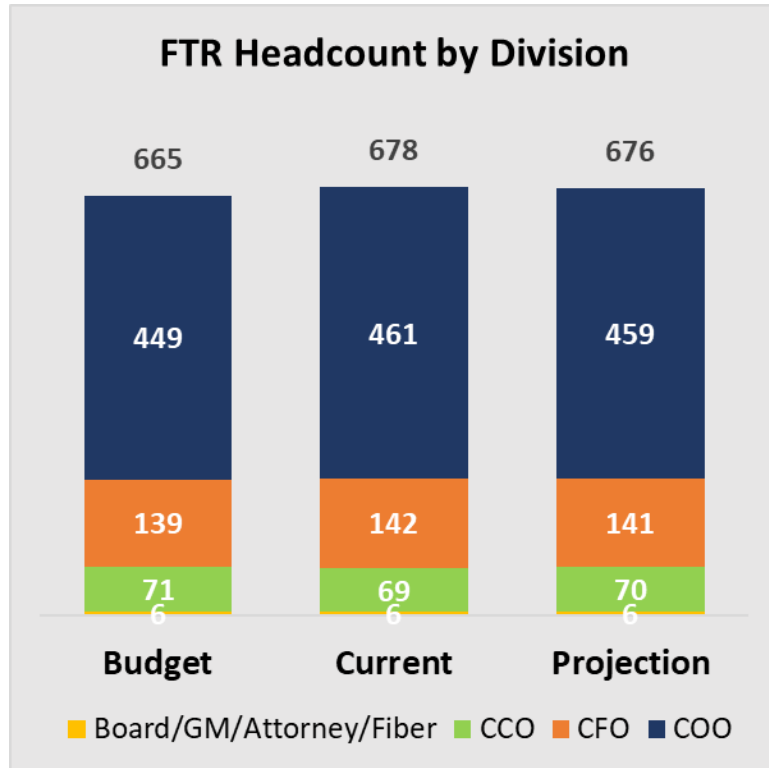
O&M Variance by Cost Type
-\$2.1M or -3%



■ Purchased Services \$0.2M
■ Operating Materials and Equipment \$0.4M
■ Information Technology -\$1.3M
■ General & Administration -\$1.4M
■ Risk, Transportation, Utilities \$0.0M

- **Purchased Services:** Q4 spending increases leave year-end total close to budget amount; Contracted Labor +\$1.2M Engineering +\$0.6M, Legal +\$0.2M; Janitorial +\$0.2M; Environmental Services -\$1.2M, Training -\$0.6, Management Consulting Services -\$0.3M
- **Information Technology:** Software -\$0.9M, IT Telecom -\$0.2
- **General & Administration:** Misc Operating -\$1.1M, Regulatory -\$0.4M
- **Risk, Transportation, Utilities:** Timing of payments eliminates insurance variance

Headcount



Enterprise

- YTD FTR = +13, FTE = -10
- YEP FTR = +11, FTE = -8

CCO

- YTD FTR = -2, FTE = -4
- YEP FTR = -1, FTE = -3

CFO

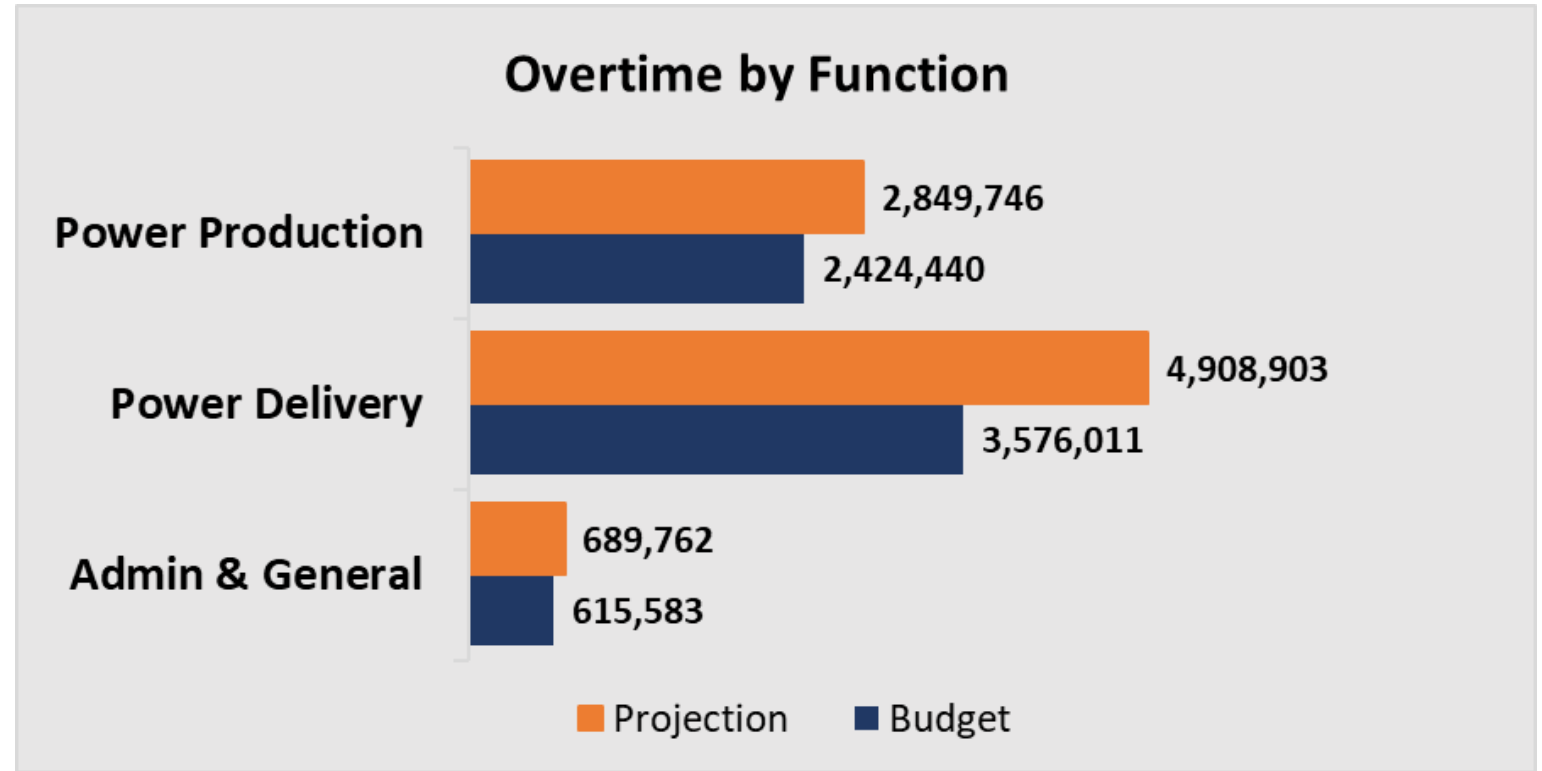
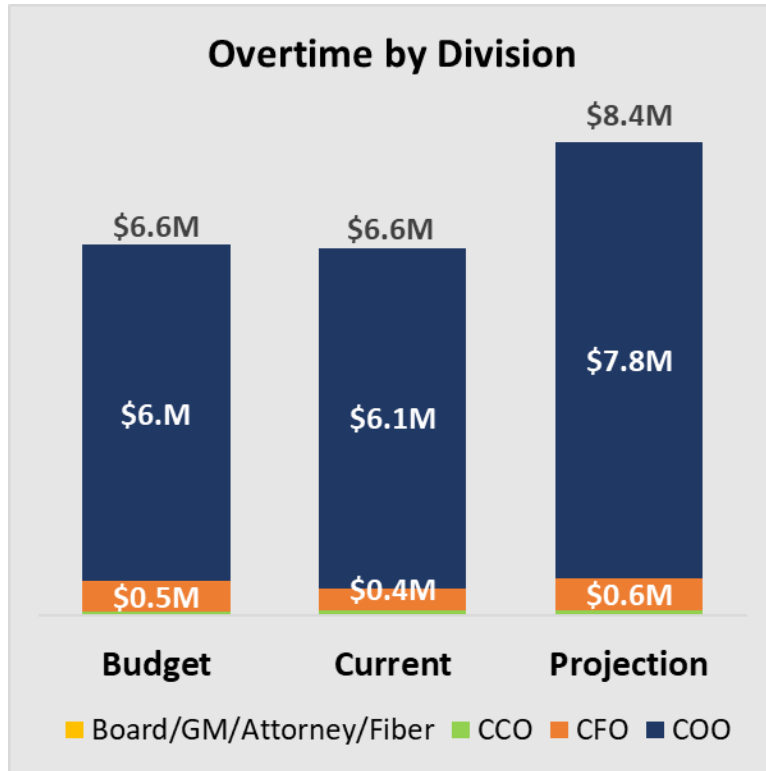
- YTD FTR = +3, FTE = -2
- YEP FTR = +2, FTE = -2

COO

- YTD FTR = +12, FTE = -4
- YEP FTR = +10, FTE = -2

- Year-end 2020 FTR count was 659, 19 FTR employees have been added through Q3
 - New Asset Management team +6 FTRs in Q3
 - Budgeted vacancy rate of 29 FTR positions/month; Actual rate between 11 and 14 positions per month
- FTE headcount is based on hours worked (e.g., four employees at quarter-time = 1 FTE headcount)

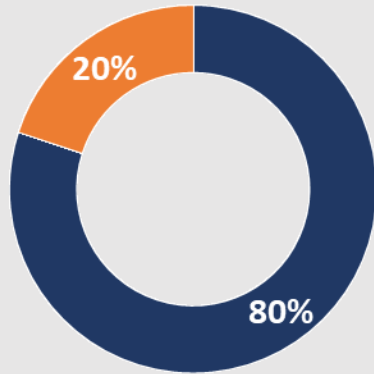
Overtime



- Q3 Year-end projection is \$1.3M unfavorable to budget
 - YTD spend is 99% of the annual Overtime budget, with expectation to be at 128% by Year-end
 - Year-end expectation is consistent with 2020 value of \$8.8M and 2019 value of \$7.9M
- Departments with significant overtime projections: Line \$2.5M, Dispatch \$0.9M, Electric Shop \$0.7M, WD Ops \$0.6M
- Year-end projection for Power Delivery is \$1.3M, or 37%, unfavorable to budget
- Year-end projection for Power Production \$0.4M or 17% unfavorable to budget

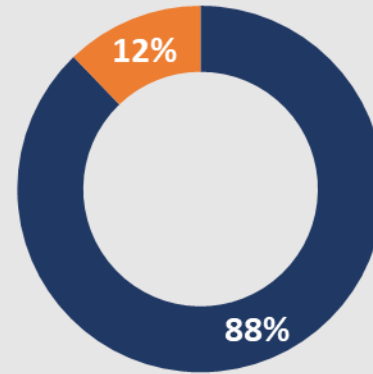
Labor – O&M and Capital Through September

Direct Labor - Budget thru Sep
\$59,938,753



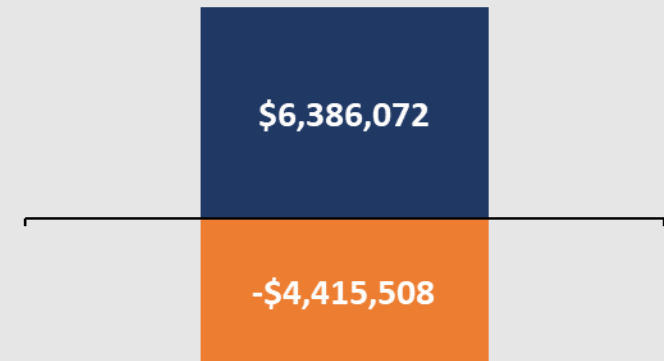
■ O&M \$47,981,132
■ CAP \$11,957,621

Direct Labor - Actual thru Sep
\$61,909,317



■ O&M \$54,367,204
■ CAP \$7,542,113

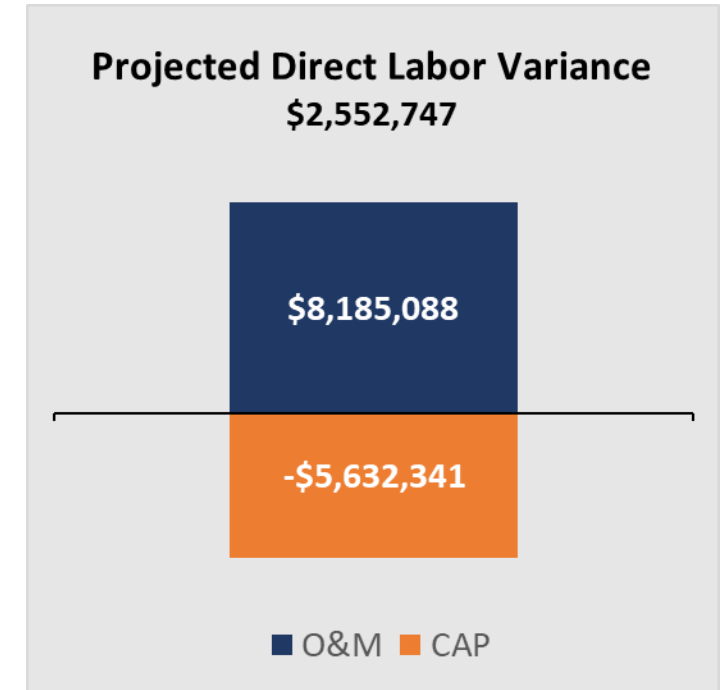
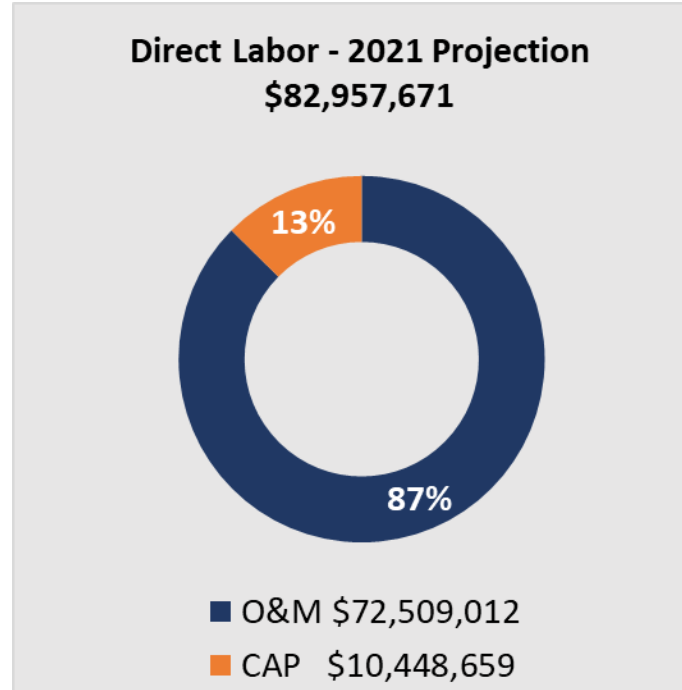
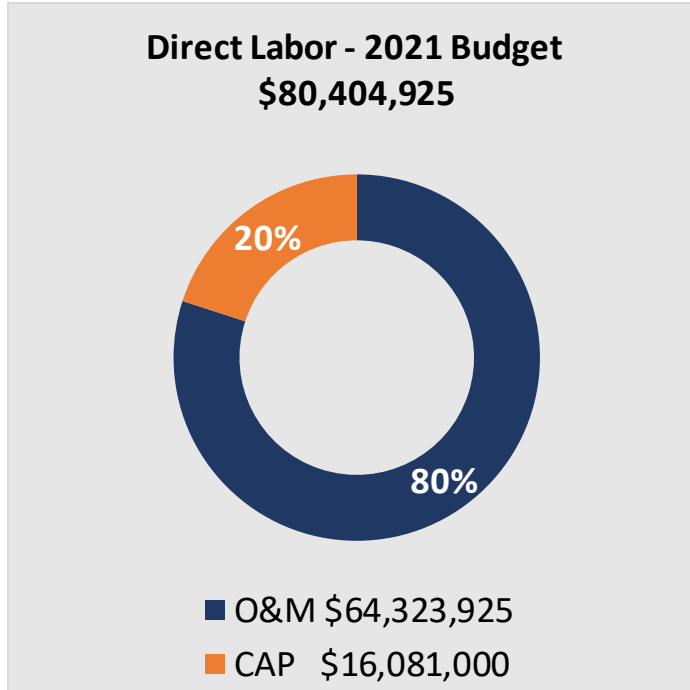
Direct Labor Variance thru Sep
\$1,970,564



■ O&M ■ CAP

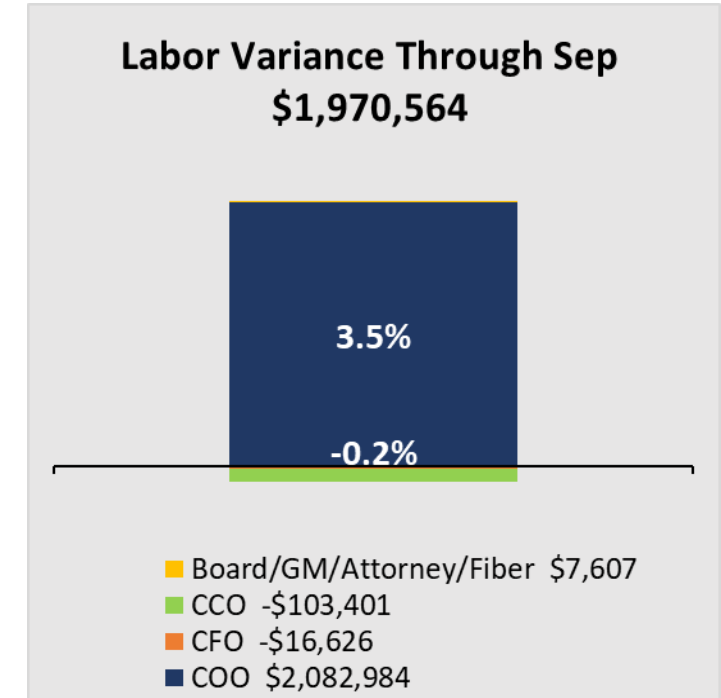
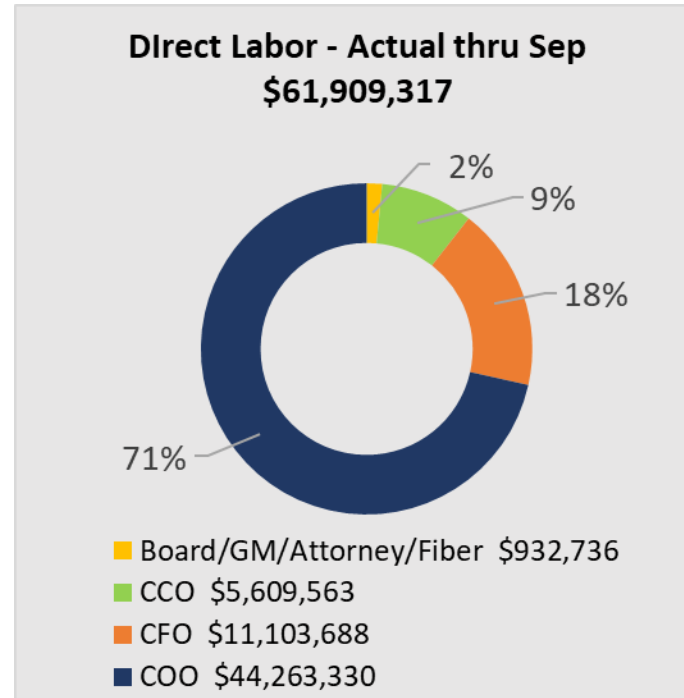
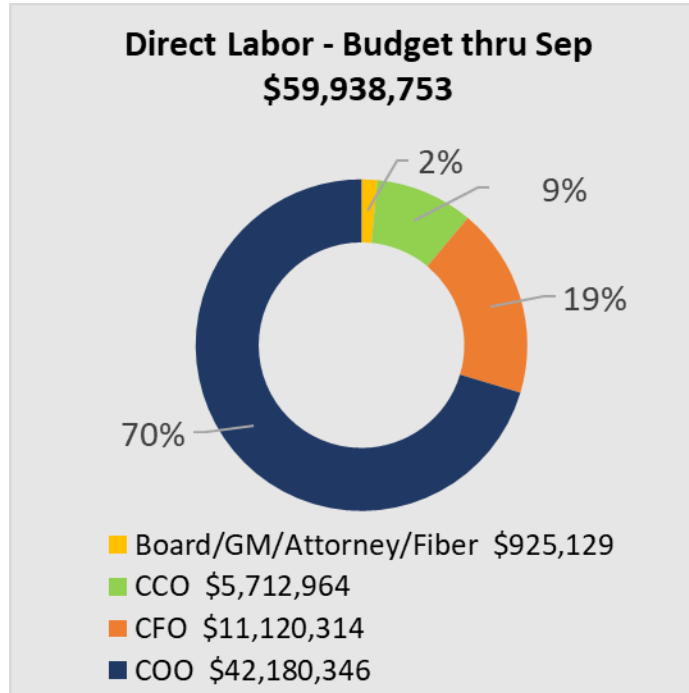
- Unloaded Labor through Q3 is \$2.0M unfavorable to budget
- Overtime represents \$1.7M or 88% of YTD variance
- 8% variance in Capital Labor percentage from budget expectations shifts \$4.8M in direct Labor from Capital to O&M through September

Labor – O&M and Capital



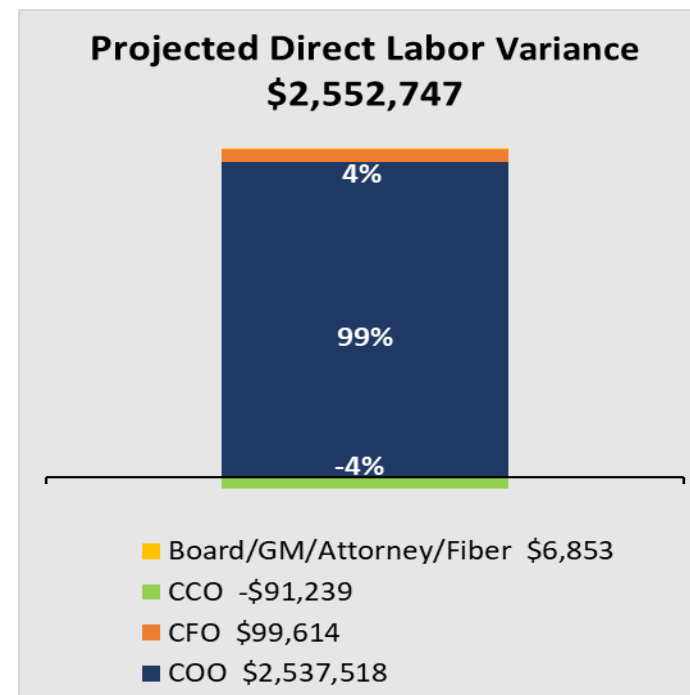
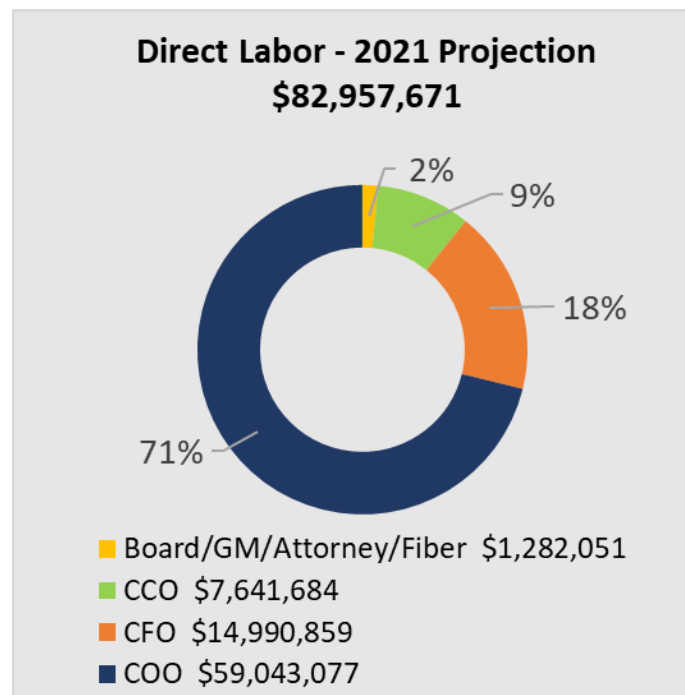
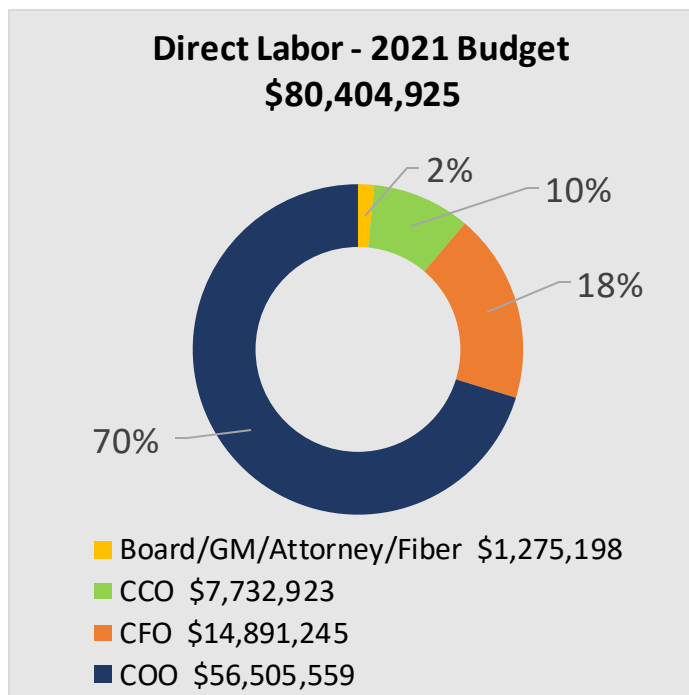
- Unloaded Labor projection is \$2.6M unfavorable to budget
 - Overtime represents \$1.8M or 72% of variance
- FTR headcount and staffing account for remaining 28% of variance
- Shift of Capital Labor percentage split to 13% vs the budget projection of 20% results in a \$6.1M shift in Labor expense to O&M

Labor By Division Through September



- **CCO**: Slightly favorable to budget, down 2 FTR and 4 FTE employees, small increase in overtime expense
- **CFO**: Small variation from budget, up 3 FTR employees, down 2 FTE employees
- **COO**: Increase in overtime and headcount affects this division more than others
 - Up 12 FTR employees, down 4 FTE employees; Overtime unfavorable \$1.7M

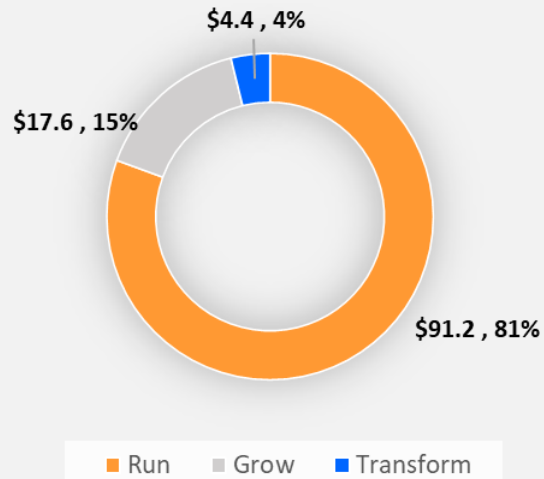
Labor By Division



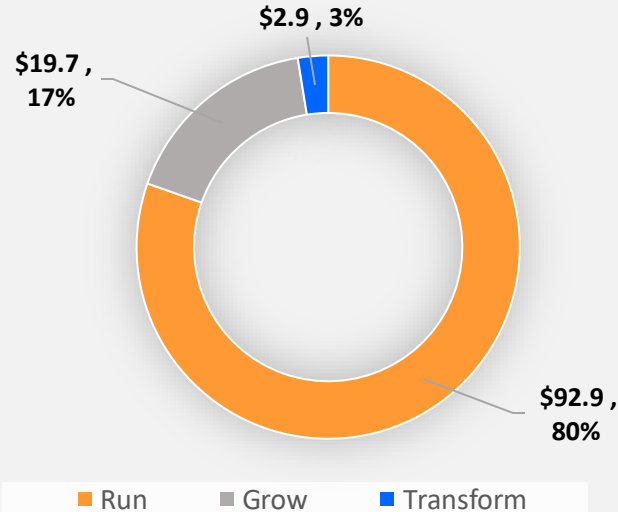
- **CCO**: -1% variance from budget
- **CFO**: +1% variance from budget
- **COO**: +4% variance from budget
 - 72% of the variance (\$1.8M) due to overtime variance
 - 28% of the variance (\$0.7M) due to increase in staffing

Capital – Year-End Directs Projection

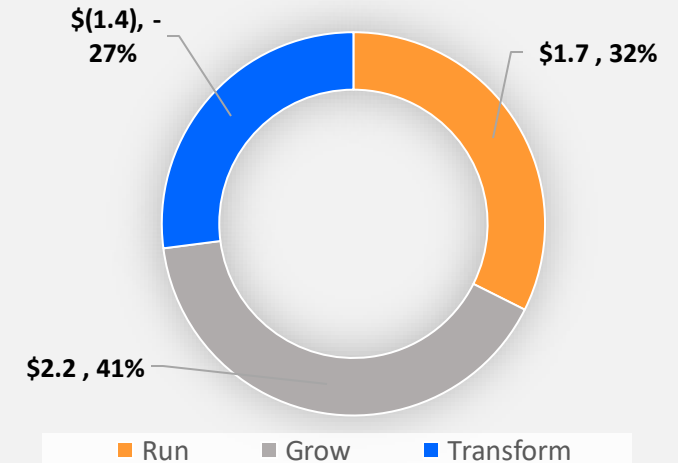
Budget 2021 = \$113.1M



Current Q3 = \$115.6M



Current vs Budget = \$2.4M



Current direct Capital Portfolio projections based on Q3 2021 results are expected to outperform 2021 Budget expectations by \$2.4M.

- This projection is a reduction of (-\$4.5M) from Q2, with noticed reduction in Transform work (-\$1.5M), Run work (-\$3.4M) and a slight increase in Grow work of (+\$0.4M)
- Current total expected Capital Project cost – including loaded labor (\$10.4M) – for 2021 is \$126.0M

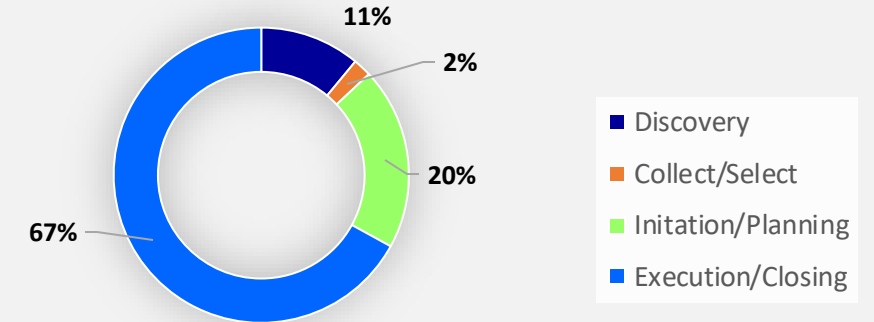
Capital – Project Phase & Performance

Project Portfolio Group (\$M)	2021 Project Budget	2021 Capital Portfolio Budget	PCF Discount
IS/Facilities	\$ 33.6	\$ 15.8	53%
Power Delivery	\$ 59.1	\$ 37.1	37%
Power Production	\$ 66.5	\$ 42.4	36%
Technology	\$ 11.8	\$ 3.1	74%
Fiber/Other	\$ 21.9	\$ 14.8	32%
Total	\$ 192.8	\$ 113.1	41%

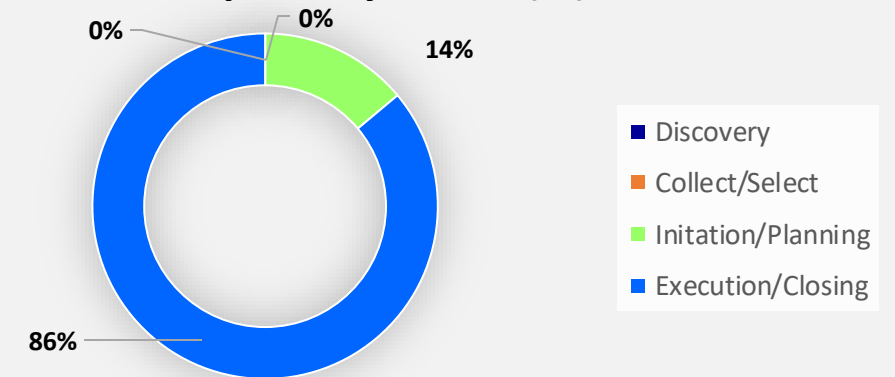
Project Portfolio Group (\$M)	Q3 2021 Project Budget*	Q3 2021 Capital YEP	PCF Discount
IS/Facilities	\$ 8.5	\$ 6.4	25%
Power Delivery	\$ 61.0	\$ 47.8	22%
Power Production	\$ 50.2	\$ 31.1	38%
Technolgoy	\$ 7.9	\$ 2.3	71%
Fiber/Other	\$ 25.9	\$ 28.0	-8%
Total	\$ 153.4	\$ 115.6	25%

* Based on Q3 Approved Spend

2021 Budget - Spend by Phase (%)



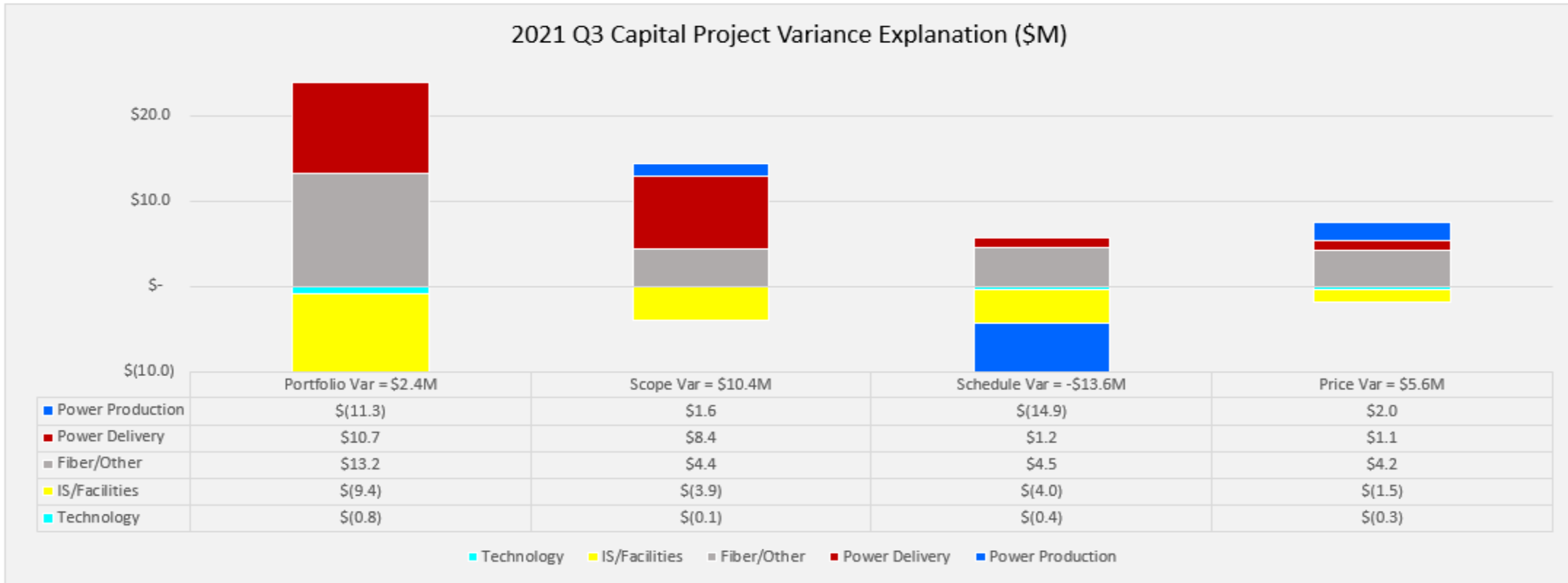
Q3 2021 - Spend by Phase (%)



Since the 2021 Budget was adopted, information accuracy has increased.

- The PCF discount has decreased by 16%.
- 2021 Budget PCF adj = 41%
- 2021 Q2 PCF adj = 40% vs current 25%

Capital – Portfolio Variances



Current 2021 expectations are varied across sub-portfolios.

- Operations sees the largest variance, though largely offsetting
 - Power Delivery is impacted by Scope changes (+\$8.4M) with some schedule and pricing related impacts (+\$1.2M, +\$1.1M)
 - Current Power Production impacted by Schedule (-\$14.9M), PR Embank Improvements being a large contributor associated with delays (-\$13.7M) and future unrealized related price impacts to total project from delays.
- Fiber related work, both the Expansion project and Connectivity work, should outperform the budget (+\$13.2M).
- Facilities is impacted by Schedule slip (-\$4.0M) with some Scope and minor pricing impacts (-\$5.4M)
- Technology is relatively flat compared to budget with minor Scope, Price and Schedule impacts (-0.8M)

Loaded Year-end Projection

	Year End Projection Components						
	O&M	Capital	Labor	Benefits *	Capitalized G&A	Inventory	Loaded YEP
O&M Elec	\$ 21,907,921	\$ -	\$ 32,937,950	\$ 13,147,230	\$ (2,254,184)	\$ (1,200,000)	\$ 64,538,918
O&M PRP	\$ 37,697,437	\$ -	\$ 39,236,900	\$ 15,514,109	\$ (2,158,707)	\$ -	\$ 90,289,739
O&M	\$ 59,605,358	\$ -	\$ 72,174,850	\$ 28,661,340	\$ (4,412,891)	\$ (1,200,000)	\$ 154,828,657
Cap Elec	\$ -	\$ 82,443,877	\$ 5,331,663	\$ 2,104,524	\$ 2,254,184	\$ -	\$ 92,134,248
Cap PRP	\$ -	\$ 33,143,062	\$ 5,105,839	\$ 2,246,783	\$ 2,158,707	\$ -	\$ 42,654,392
Capital	\$ -	\$ 115,586,939	\$ 10,437,503	\$ 4,351,307	\$ 4,412,891	\$ -	\$ 134,788,640
Total Expenditures	\$ 59,605,358	\$ 115,586,939	\$ 82,612,353	\$ 33,012,647	\$ -	\$ (1,200,000)	\$ 289,617,297
2021 Budget	\$ 61,674,904	\$ 113,148,053	\$ 80,404,925	\$ 32,916,796	\$ -	\$ (1,523,847)	\$ 286,620,830
Variance	\$ (2,069,546)	\$ 2,438,886	\$ 2,207,428	\$ 95,852	\$ -	\$ 323,847	\$ 2,996,467

* Leave (PL, etc.) expenses are contained in Labor expense. Benefit expense includes items such as Medical, Dental, Pension, Life Insurance, and VEBA.

- Budget Labor split 80% O&M / 20% Capital
- Year-End projection 87% O&M / 13% Capital
- Labor capital percentage reduction results in \$8.3M in Labor & Benefits applied to O&M versus Capital

	Loaded Budget	Loaded YEP	Loaded Variance	Under Budget / Over Budget
O&M	\$ 143,288,254	\$ 154,828,657	\$ 11,540,403	Over Budget
Capital	\$ 143,332,576	\$ 134,788,640	\$ (8,543,936)	Under Budget
Total Expenditures	\$ 286,620,830	\$ 289,617,297	\$ 2,996,467	Over Budget

Questions?

2021 Federal & State Legislative Update



Andrew Munro, Senior Manager
External Affairs & Communications

Cliff Sears, Senior Policy Analyst
Governmental/Regulatory Affairs

November 9, 2021 Commission Report

Agenda

1. State Cap and Invest & CETA Rulemaking
2. Federal Infrastructure Bill
3. Uncertain Path Forward for Reconciliation Bill
4. Reconciliation Bill (Build Back Better)
5. Lower Snake River Dams
6. Mandatory Vaccination Policies
7. Cyber / Telecom / Reliability / Funding
8. State Building Code and Energy Issues
9. Other Focus Areas



WA Rulemakings – Cap and Invest & CETA

1. Free allowance allocation to utilities to mitigate cost to utilities based on IRP planning projections.
 - a. Don't pay twice for CETA and Cap & Invest
 - b. Energy Intensive Trade Exposed (EITE) industries will also receive allowances through 2035. Uncertainty after that.
2. Cap and Invest rulemaking via Ecology will begin with a baseline cap for emissions between 2017 – 2019, then an initial industry allocation.
3. Key allocation issues of interest to Grant PUD:
 - a. Market purchases.
 - b. Industrial growth
 - c. Imports
 - d. Electrification of industrial gas load (EITE / non-EITE).
 - e. Special project funds & auction proceeds
 - f. Electrification of transportation
4. General agreement between the UTC and Commerce that the rules regarding accounting for use of clean energy have to be the same for IOUs and public utilities.
5. Commerce's "no coal" product after 2025 limits forward physical hedge transactions. May look at a future "no coal" product.



CETA Rulemaking:

Key Points:

Environmental Group's Approach



UTC Proposed CETA Accounting Rules

6. Consistent with the joint utility and Commerce positions, the UTC finally proposed rulemaking to account for use of clean energy based on a 4-year compliance period, but with annual reporting of hourly resources, load and contracts (more to follow on this point):

- Key point: Surplus hydro generation can be sold as unspecified and the REC retained / banked for use within 4-year compliance period to offset low water years.
- Key point: Clean energy generated in excess of load over the 4-year compliance period does not count. This is a lower cost option to achieve the 80% clean standard by 2030 than the environmental groups proposal.
- Contrast: Under the environmental groups' proposal, clean energy generated in excess of load over each hour or month, for example, does not count toward CETA. The shorter the time step, the more wind and solar become disqualified because their generation can't be shaped to meet load as easily as hydro. Ironically, because of their ability to permit and financial incentives to construct, this leads to further investments in these resources to achieve the 80% clean standard with higher levels of disqualification with the excess energy sold out of state at a loss. (Energy GPS Consulting LLC 2021)

7. Commerce has not adopted annual reporting of hourly data.

Federal Infrastructure Bill - \$1.2T

1. Hydropower provisions in Senate version: \$753M for direct funding of hydropower through appropriation. Proposal would fund:

- §242 - \$125M for New hydropower capacity (\$1M/facility/yr).
- §243 - \$75M Hydropower efficiency (\$5M/facility/yr).
- §247 - \$553M to improve dam safety, environmental improvements, and resiliency, but are structured as grants (not a tax credit) capped at \$5M/yr as long as funds are available.

2. Columbia River Treaty Funding: \$1.1 B for transmission, John Keys pumping plant, study to improve power flows between US and Canada.

3. Other Provisions:

- \$65 B for grid investments (i.e., Energy Infrastructure Act)
- \$47.2 B for resiliency – cybersecurity to address critical infrastructure's needs, wildfire mitigation, drought resiliency, and grants for weatherization
- \$7.5 B for clean school buses and low-carbon emitting ferries
- \$7.5 B for electric vehicle charging infrastructure
- \$65 B for broadband deployment





EASING CONGRESSIONAL
GRIDLOCK
A DIVORCE MEDIATOR'S GUIDE

Uncertain Path Forward for Reconciliation Bill

1. To date, the **Progressives in the House** have conditioned their vote on the Infrastructure Bill, on the Senate's support for the **\$3.5 Trillion Reconciliation Package** (*Build Back Better*).

2. As of drafting this report, we don't know how much of the **Reconciliation Bill** will be salvaged because:

- Progressive ideology is a primary driver.
- House moderates risk reelection but the progressives do not.
- Growing concerns over inflation.
- President Biden is willing to support a smaller bill.
- Voting rights bill could remain in the discussion.
- In 2022, Democrats will go after what they don't get now.
- Uncertainty over how it will be paid for.
- Striking deals with Senator Manchin and Senator Sinema.

3. **2022 Democratic Agenda**

- Voting rights
- Climate change
- Expansion of entitlements
- Immigration

Federal Reconciliation Bill - Build Back Better (BBB) - \$3.5 Trillion

1. Clean Energy Performance Program (CEPP) (2023-2030)

- Applies to eligible electricity suppliers who increase their percentage of clean electricity by at least four percent from their clean energy baseline (avg of 2019 and 2020). In 2023, the incentive is \$150/MWh for the increase above 2.5% of the baseline and the suppliers' clean energy percentage (carrot) and \$40 / MWh for each MWh of clean electricity that is below the annual four percent increase over the benchmark (stick). The calculation is slightly different after 2023.
 - **The CEPP is Probably Out.** Senator Manchin (D-W.VA) has stated he has strong concerns with the CEPP.
- Democrats are shooting down **Sen. Wyden's carbon tax alternative to CEPP** while others are busy trying to cut a deal with Manchin that would keep fossil fuels a viable alternative.
- Some Democrats have said they will not vote for the package if it doesn't include robust climate language.



Federal Reconciliation Bill - Continued

2. Bond Modernizations (House Ways and Means Comm. version)

- Restoration of Advance Refunding Bonds
- Direct payment bonds with a credit payment that begins with 35% and declines over time, subject to reduction for budget sequestration.
- Increase the small-issuer exemption from \$10 million to \$30 million

3. Transmission (House E. & Commerce Committee version):

- \$8 billion for grants and loans to construct new, or make upgrades to existing, transmission lines and interties.
- \$800 million to study impacts of transmission projects.
- \$100 million to evaluate forming or expanding organized wholesale electricity markets.
- Permitting and siting problems will likely persist.





Lower Snake River Dams

- May 2021 – Governor Inslee and Senator Murray publicly rebuke plans to breach Lower Snake River Dams.
- October 15, 2021 – Gov. Inslee and Sen. Murray announce plans to assess the breaching of the Lower Snake River dams. Will rely on and pull data from existing studies.
- October 21, 2021 – Department of Justice announces a settlement reached between the CRSO EIS plaintiffs and federal agencies on injunctive relief, including a stay on the CRSO EIS litigation until July 2022.
- October 22, 2021 – Gov. Inslee and Sen. Murray announce next steps to deliver a report on replacing the benefits of the Lower Snake River **by July 2022**.
- NW River Partners has reported concerns that process seems unlikely to result in an outcome that supports retaining the LSRDs.
- The federal Water Resources Development Act (WRDA) could be modified for funding future studies or action.
- Columbia Basin Collaborative and Simpson Plan are mixed in with the subject matter but it isn't clear how they all fit.
- Election year with Senator Murray concerned about challenges from more left of center candidates.

Vaccine Mandates

OSHA: Per **Pres. Biden's Path Out of the Pandemic Plan**, OSHA will issue emergency temporary standards (ETS) requiring all private employers (80 million workers) **with 100 or more employees to mandate (1) vaccination or (2) test weekly**. Requires employer to provide paid time off for vaccinations/recovery. Does not apply to remote workers.

Note: Although OSHA ETS does not apply to state/local gov't; Washington has its own OSHA plan called WISHA, covering state / local employees. State plans must follow federal OSHA and may be more restrictive.

WISHA: Governor Inslee or L & I's WISHA Dept. is anticipated to issue an Order in response to OSHA rule that will cover **public and private employers with over 50 employees**.

EEOC: Mandatory vaccine policies are OK if appropriate exemptions are provided for disability and religious reasons, unless accommodation causes an undue hardship. Reasonable accommodations for unvaccinated may include e.g., telework, separate space to work, masking and strict social distancing, periodic COVID-19 tests.

A photograph showing several glass vials and a syringe on a reflective surface. The vials are partially filled with a clear liquid. The syringe is lying horizontally in front of the vials.

Federal OSHA COVID-19 Healthcare ETS



COVID-19 VACCINE

CYBER

- Colonial Pipeline ransomware attack May 2021
- JBS Beef ransomware attack June 2021

Grid Supply Chain Security (developing issue)

Complete agreements for receipt and reporting use of funds:

- **\$155,000** for the Wanapum Indian Village.
- **\$258,000** for Precision Ag pilot study from the Department of Agriculture.
- **\$1.6M** grant/loan awarded from the PWB (Done).

Evaluation of Federal and State Grant Funds (Internal)

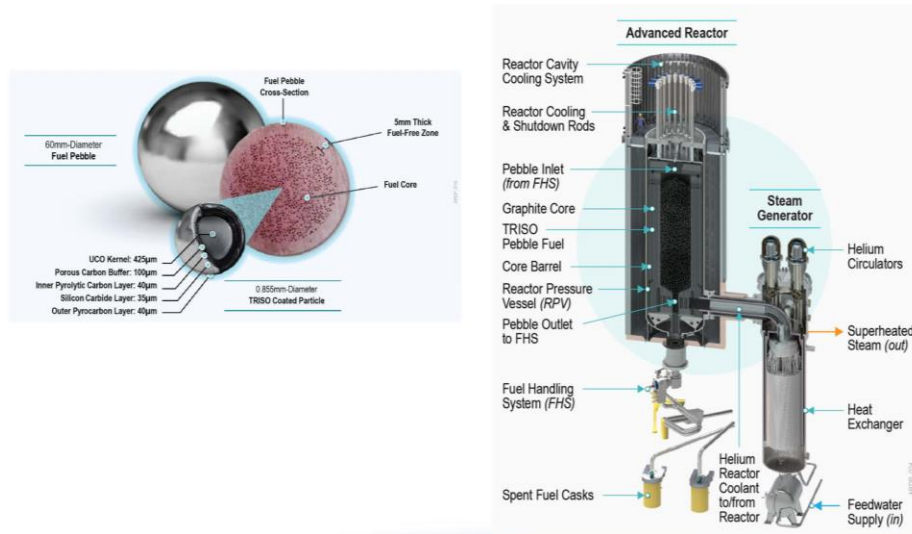


State Building Code and Energy Issues

- 1. Energy Performance Standards for Existing Buildings.** Sets GHG performance standards for smaller commercial and multifamily residential buildings; requires adoption of an energy management and benchmarking requirements and Commerce to develop recommendations for achieving energy intensity targets by 2029.
- 2. Targeted Electrification.** Authorizes an optional program for electrical utilities to develop a plan to convert natural gas uses to electric under a plan that provides net benefits to the utility with input from the natural gas company. The plan may also include the reduction of the utilities uses of fossil fuels from all sources. This plan may be used to develop offset credits for GHGs in power purchases under a credit trading program.
- 3. Clean Heat Transition Plan.** Applies to natural gas companies and requires development of a plan to transition away from fossil natural gas beginning 1/2024 and every 4 years thereafter. The plan will include consideration of benefits to disadvantaged communities.
- 4. 2031 Building Code.** The 2031 building code will establish 70% reduction in use of fossil fuels for existing buildings and net zero emissions for new buildings.
- 5. Potential legislation to “fix” the “Use” language in CETA.**



Overview – Pebble Bed HTGR



Other Focus Areas

1. Financial assistance for arrearages now estimated at around \$250M statewide (natural gas and electricity).
2. Renewable Northwest is considering running RTO Study Bill in Washington like the one in Oregon.
3. Ongoing discussion on reliability impacts from carbon reduction energy policies.
4. Allowances for EITE's post 2035.
5. Low Carbon Fuel Standards rulemaking.
6. Small modular reactor (SMR) – Soft outreach with Legislators, agency staff and others / 2023 negotiated procurement legislation if go forward decision appears likely.
7. Monitor request to extend tax credit for data centers.
8. Oppose bill requiring a net ecological gain concept in comprehensive planning.
9. Monitor EFSEC / HR Related legislation.
10. Diversity, Equity and Inclusion / Affirmative action

QUESTIONS?



Powering our way of life.

Internal Audit Report

Semi-Annual Report

Dmitriy Turchik, Manager of Internal Audit

Meeting Agenda

- Status of the 2021 Audit Plan
- Audit Plan Development
- Review 2022 Audit Plan
- Additional Discussion and Questions

2021 Audit Plan & Updates

- Overtime Audit
- Safety Assessments
- Net Metered Load Loss
- Crescent Bar Management Contract
- HCMS Implementation
- Leave Accrual and Usage
- Inventory
- CCS Implementation
- Treasury Operations
- Emerging risks

Status of 2021 Audit Plan & Updates

- Overtime Audit
 - Report published
- Safety Assessments
 - Report published
- *Management of Vendor Profiles – emerging risk added*
 - Draft report under managements review
- *Timesheet record keeping – emerging risk added*
 - Field work
- *Cash receipting and deposit – emerging risk added*
 - Field work
- HCMS Implementation
 - Drafting report
- Crescent Bar Management Contract
 - Field work

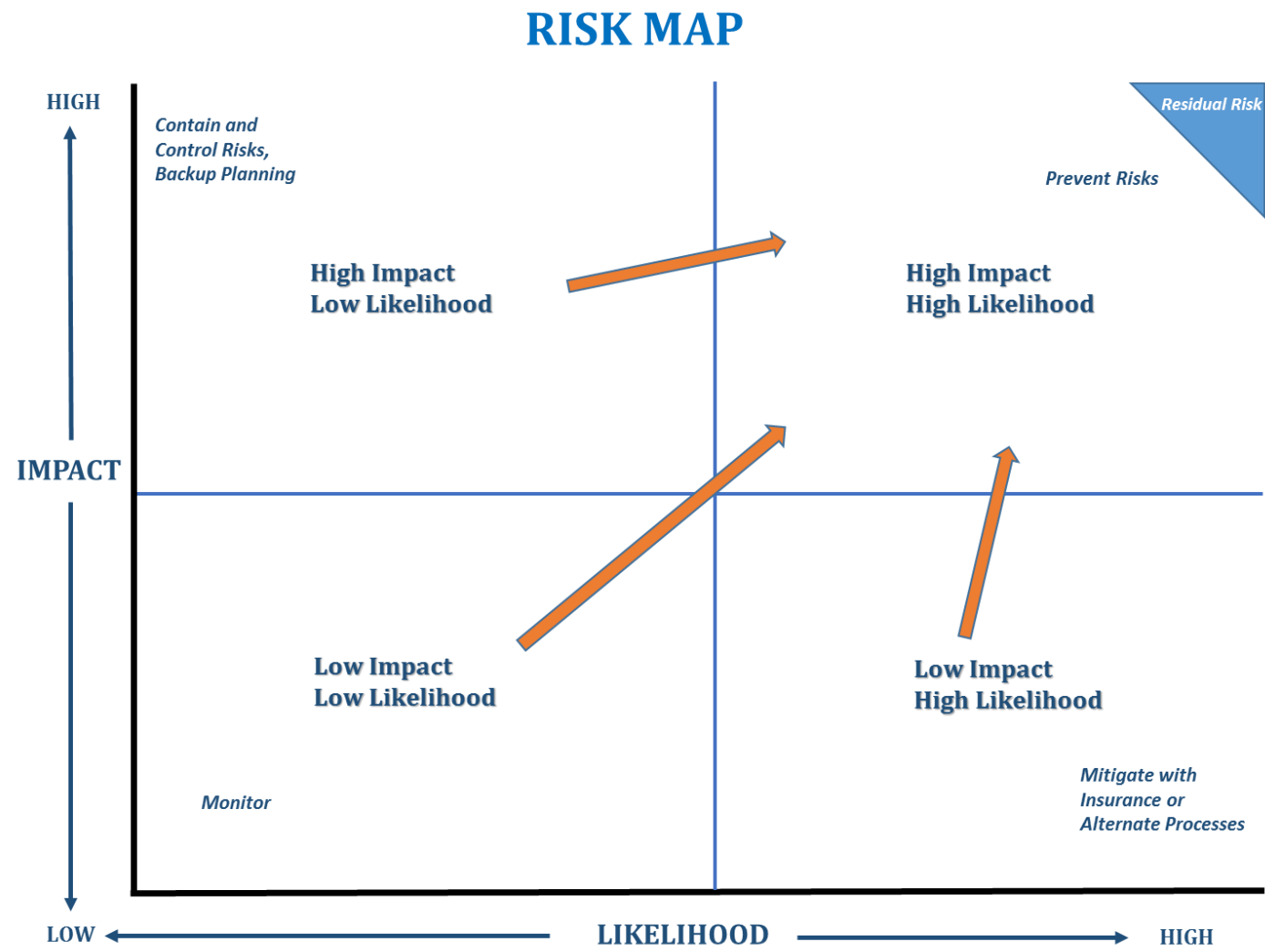
Status of 2021 Audit Plan & Updates

- Leave Accrual and Usage
- Inventory
- CCS Implementation
- Treasury Operations

Internal Audit Objectives

- Internal Audit department operates under:
 - Internal Audit Charter approved by the Commission in 2014
 - Red Book Standards – International Professional Practices Framework
- Ensure that Internal Audit Activities are
 - Consistent with organizational goals
 - Within the risk appetite and risk tolerance set by the Commission and District Management
- Evaluation of internal controls for adequacy, effectiveness, and efficiencies
- Risk Based Audit Approach
 - Annual audit plan development
 - Risk assessments (CXO's, Legal, ERM, and Sr. Mng)
 - Analytical Procedures
 - Performance of scheduled and requested audits

2022 Audit Plan



2022 Audit Plan

- Leave Accrual and Usage
- Inventory
- Vendor Payments
- Hiring Practices
- CCS Implementation
- Treasury Operations

2022 Audit Plan – continued

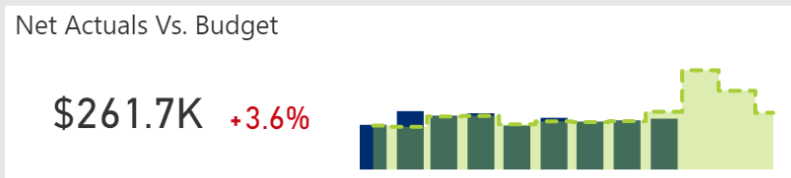
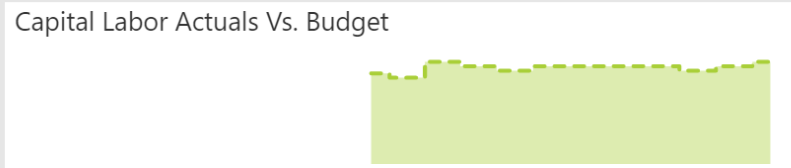
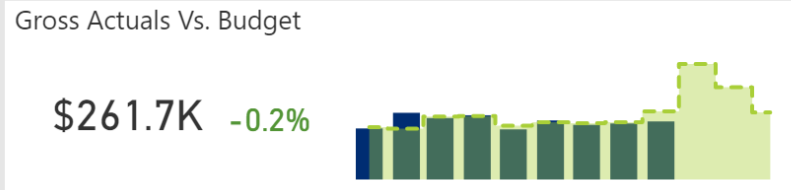
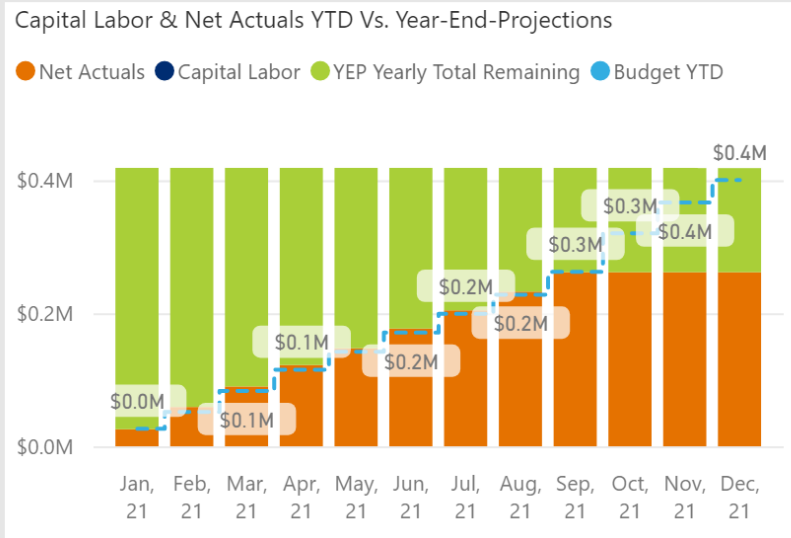
- Statutory Expenditure Review
 - Weekly voucher review
 - Bi-weekly payroll review
- Emerging Risk and Audit Requests
- Follow-up: Monitor Audit Recommendations

Operating Unit

FF - Risk Audit Compl

Department

FF2 - RAC Audit



Budget vs Actuals (Including Cap Labor)					
Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
Labor	\$249,183	\$249,592	\$409	0.2%	100.2%
Salaries & Wages	\$160,289	\$158,989	-\$1,300	-0.8%	99.2%
Benefits	\$87,677	\$88,801	\$1,123	1.3%	101.3%
Other Labor	\$1,217	\$1,802	\$585	48.1%	148.1%
Purchased Services	\$12,100	\$10,965	-\$1,135	-9.4%	90.6%
G&A	\$900	\$1,102	\$202	22.5%	122.5%
Total	\$262,183	\$261,659	-\$524	-0.2%	99.8%

- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

Operational Unit

FF - Risk Audit Compl

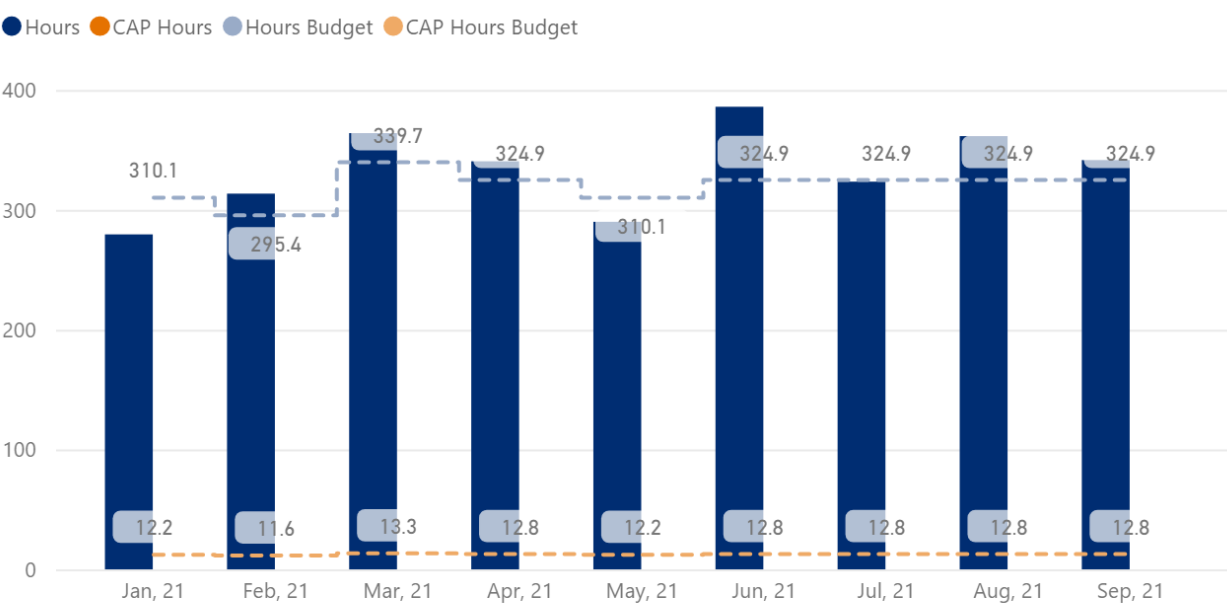
Department

FF2 - RAC Audit

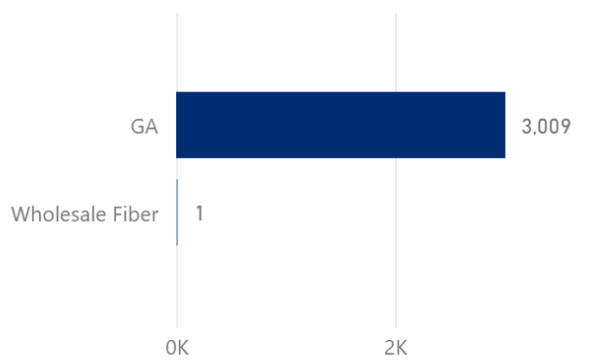
Hours by Program



Hours and CAP Hours Vs. Budgets

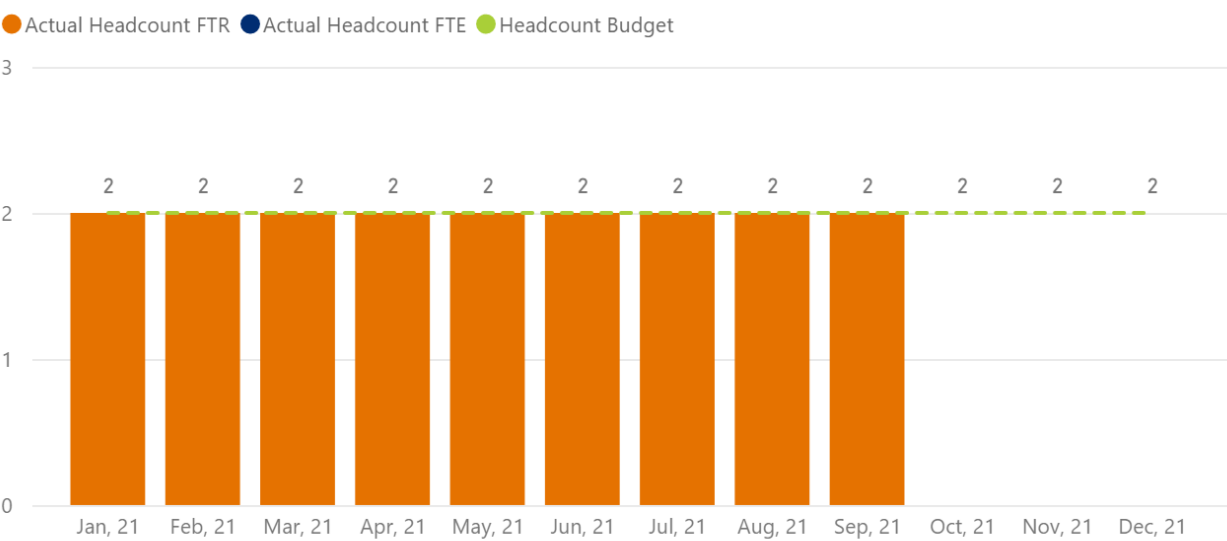


Hours by System



Hours by Initiative

Headcount and Budget by Month & Year



Thank You



Commission Officers:

2021	2022
President – Larry Schaapman Vice President – Judy Wilson Secretary – Nelson Cox Commissioner – Dale Walker Commissioner – Tom Flint	President – Vice President – Secretary – Commissioner – Commissioner –

Representative and Alternates:**WPUA (Washington PUD Association)**

2021	2022
Representative – Judy Wilson Alternate – Larry Schaapman Alternate – Tom Flint Alternate – Dale Walker Alternate – Nelson Cox	Representative – Alternate – Alternate – Alternate – Alternate –

ENERGY NW

2021	2022
Representative – Tom Flint Alternate – Dale Walker Alternate – Larry Schaapman Alternate – Judy Wilson Alternate – Nelson Cox	Representative – Alternate – Alternate – Alternate – Alternate –

CWPA (Central Washington Power Agency)

2021	2022
Representative – Nelson Cox Alternate – Larry Schaapman Alternate – Tom Flint Alternate – Judy Wilson Alternate – Dale Walker	Representative – Alternate – Alternate – Alternate – Alternate –

FAC Representative (Financial Advisory Committee)

2021	2022
Dale Walker / Larry Schaapman Judy Wilson	