



CHELAN COUNTY

# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements

APPLICATION TO UTILIZE PROGRESSIVE DESIGN BUILD  
ALTERNATIVE CONTRACTING PROCEDURE

SEPTEMBER 27, 2024

# Agenda

- Introductions
- Chelan County P.U.D.
- The Project
- Project Budget
- Project Schedule
- Agency Equity and Inclusion
- Why Design Build
- Public Body Qualifications
- Organization Chart
- Project Team APD Experience
- Lessons Learned
- Summary
- Closing





CHELAN COUNTY

# Introductions

# The Project Team: Here Today

---

## Chelan County P.U.D

- Sam Dilly, P.E. PMP, Principal Project Manager
- George Velazquez, PMP, MBA - Project Manager
- Salim Qazi, P.E., PMP, DBIA Associate – Project Manager
- John Sagerser – District DB Subject Matter Expert (SME)

## Parametrix

- Jim Dugan – PDB Advisor
- Dan Cody, RA. Assoc DBIA – PDB Procurement



# The Project Team: Not Presenting Today

---

## Chelan County P.U.D

- Katie Yount – Internal Legal Counsel

## District External Legal Counsel

- Graehm Wallace, Perkins Coie, LLP





Chelan County P.U.D.

- Chelan County P.U.D was established in 1936
- Second largest, non-federal, publicly-owned hydro generation capacity in the U.S.
- 800+ Employees
- 52,000 Customers
- 3,000 sq. mile service territory
- Approximately 2,000 megawatts of generating capacity
- 33 active substations
- Over 300 miles of transmission lines
- 35% of hydropower generated serves county residents, the remainder is sold through contracts and into the energy market.

*Our Mission: To enhance the quality of life in Chelan County by providing sustainable, reliable utility services.*



CHELAN COUNTY



CHELAN COUNTY

## The Project



# Rock Island Dam



# Rock Island Hydroelectric Dam

- The Rock Island Dam spillway is an aggregation of renovations, fish migration enhancement, and independent modification completed over its 85-year history.
- Preliminary analysis indicates that **31 spillways** need:
  - **New gates, multiple automated hoists and seismic improvements**
  - **Mitigation of concrete growth** caused by Alkali Silica Reaction (ASR) to meet current and future operational requirements.
  - Additional monitoring equipment
- It is estimated that the **Rock Island Dam spillway** gate improvement work will take approximately **seven years**. Cost will be approximately **\$98M**.
- **Significant concrete repairs and fish exclusion screens** will be necessary to continue fish ladder operations.
  - Short term contingency measures may need to be constructed to mitigate risk, while the design, permitting and licensing processes are underway
- It is estimated that the **Rock Island Dam fish ladder** improvement work will take approximately **seven years**. Cost will be approximately **\$29M**.
- **The Rock Island Dam facility will be required to remain operational** during the construction work and the work will be required to take place over multiple phases and multiple years.

# Rocky Reach Dam



# Rocky Reach Hydroelectric Dam

- **The Rocky Reach Dam spillway gates have been in service for more than 45 years.** The existing gates and equipment have **reached the end of their service life** and show progressive decreased performance.
- The initial work of this contract will:
  - **Upgrade the five highest use spillway gates, their associated hoists and other related equipment.**
- It is estimated that the Rocky Reach Dam spillway gate improvement work will take approximately **six years**.
- Cost of this work will be approximately **\$50M**.
- Further inspection of the remaining gates will occur during retrofit of the initial five gates, which may identify the need to upgrade the remaining seven gates.
- The Rocky Reach Dam facility will be **required to remain operational during the construction work** and the work will be required to **take place over multiple phases and multiple years**.



# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Budget

Category	Budget
<b>Costs for Professional Services (A/E, Legal, etc.) 12%</b>	\$21,252,000
<b>Estimated project construction costs (including const. contingencies @ 7%)</b>	\$100,345,000
<b>Equipment and furnishing costs</b>	\$N/A
<b>Off-site costs</b>	\$N/A
<b>Contract administration costs (owner, cm etc.) 13%</b>	\$23,023,000
<b>Contingencies (design &amp; owner) 10%</b>	\$17,710,000
<b>Other Related project costs (briefly describe)</b>	\$N/A
<b>Sales Tax (@8.34%)</b>	\$14,770,000
<b>Total</b>	<b>\$177,100,000</b>



# Project Funding

---

- The **CCPUD Board of Commissioners** reviewed the PDB delivery method for this project and **noted their support**.
- The program work and budget has been **included in the CCPUD 20-year and 5 year-long term forecasts**.
- The District has **allocated funds for the full amount** of the scheduled project value **in our cash reserve accounts**.
- CCPUD's **bond rating, AA+/stable**, is one of the top five utility bond ratings in America. If cash reserves and contracted sales did not meet project required funding, then the District **could issue bonds**.



# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Schedule

<b>PDB Procurement Schedule</b>	<b>Start</b>	<b>Finish</b>
<b>PRC Presentation</b>		<b>September 27, 2024</b>
<b>Release PDB RFQ</b>		<b>November 4, 2024</b>
<b>RFQ Submittals Due</b>		<b>December 13, 2024</b>
<b>Shortlist Candidates as Finalists</b>		<b>January 10, 2025</b>
<b>Issue RFP to Finalists</b>		<b>January 16, 2025</b>
<b>RFP Submittals Due</b>		<b>February 14, 2025</b>
<b>Interview Finalists</b>		<b>February 27, 2025</b>
<b>Notify Candidates of Most Qualified PDB</b>		<b>March 7, 2025</b>
<b>Phase 1 Scope/Fees Due</b>		<b>April 4, 2025</b>
<b>Board of Commissioners Approval of PDB Contract</b>		<b>April 2025</b>
<b>Phase 1 Contract</b>		<b>April 2025</b>
<b>Notice to Proceed with Phase 1 Services</b>		<b>May 2025</b>



# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Schedule

Design and Construction Schedule	Start	Finish
<b>Rocky Reach Dam Large Spill-gates</b>		
<b>Rocky Reach Dam Large Spill-gates Design (0-100%)</b>	<b>September 2025</b>	<b>July 2026</b>
Rocky Reach Dam Large Spill-gates Permitting/Approvals	July 2026	November 2026
Rocky Reach Dam Large Spill-gates Early Procurement	TBD	TBD
Rocky Reach Dam Large Spill-gates Phase 2 Services GMP Negotiations	August 2026	<b>December 2026</b>
<b>Rocky Reach Dam Large Spill-gates Phased Construction</b>	<b>December 2026</b>	<b>April 2029</b>
<b>Rocky Reach Dam Small Spill-gates</b>		
<b>Rocky Reach Dam Small Spill-gates Design (0-100%)</b>	<b>January 2026</b>	<b>January 2027</b>
Rocky Reach Dam Small Spill-gates Permitting/Approvals	January 2027	May 2027
Rocky Reach Dam Small Spill-gates Early Procurement	TBD	TBD
Rocky Reach Dam Small Spill-gates Phase 2 Services GMP Negotiations	February 2029	March 2029
<b>Rocky Reach Dam Small Spill-gates Phased Construction</b>	<b>May 2029</b>	<b>November 2032</b>





# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Schedule

Design and Construction Schedule	Start	Finish
<b>Rock Island Dam Prototype Spillway</b>		
<b>Rock Island Dam Prototype Spillway Renovation Design (0-100%)</b>	<b>August 2024</b>	<b>December 2025</b>
Rock Island Dam Prototype Spillway Renovation Permitting/Approvals & FERC Reviews	December 2025	April 2026
Rock Island Dam Prototype Spillway Renovation Permitting/Early Procurement	TBD	TBD
Rock Island Dam Prototype Spillway Renovation Phase 2 Services GMP Negotiations	October 2025	March 2026
<b>Rock Island Dam Prototype Spillway Renovation Phased Construction</b>	<b>April 2026</b>	<b>July 2027</b>
<b>Rock Island Dam Over-Under Gates</b>		
<b>Rocky Island Dam Over-Under Gates Renovation Design (0-100%)</b>	<b>July 2024</b>	<b>October 2025</b>
Rocky Island Dam Over-Under Gates Renovation Permitting/Approvals	October 2025	February 2026



# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Schedule

Design and Construction Schedule	Start	Finish
<b>Rock Island Dam Over-Under Gates</b>		
Rocky Island Dam Over-Under Gates Renovation Early Procurement	TBD	TBD
Rocky Island Dam Over-Under Gates Renovation Phase 2 Services GMP Negotiations	October 2025	March 2026
<b>Rocky Island Dam Over-Under Gates Renovation Phased Construction</b>	<b>April 2026</b>	<b>June 2027</b>



# Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Schedule

Design and Construction Schedule	Start	Finish
<b>Rock Island Dam Drop-gate</b>		
<b>Rock Island Dam Drop-gate Repairs Design (0-90%)</b>	<b>May 2025</b>	<b>December 2025</b>
Rock Island Dam Drop-gate Repairs Permitting/Approvals & Licensing	July 2025	January 2031
Rock Island Dam Drop-gate Repairs Early Procurement	TBD	TBD
Rock Island Dam Drop-gate Repairs Design (90-100%)	January 2031	February 2031
<b>Rock Island Dam Drop-gate Repairs Phased Construction</b>	<b>February 2031</b>	<b>November 2032</b>
<b>Rock Island Dam Spillway</b>		
<b>Rock Island Dam Spillway Modernization Design (0-100%)</b>	<b>January 2026</b>	<b>January 2027</b>
Rock Island Dam Spillway Modernization Permitting/Approvals	January 2027	May 2027
Rock Island Dam Spillway Modernization Early Procurement	TBD	TBD
Rock Island Dam Spillway Modernization Phase 2 Services GMP Negotiations	December 2026	March 2027
<b>Rock Island Dam Spillway Modernization Phased Construction</b>	<b>July 2027</b>	<b>October 2030</b>



# Agency Equity and Inclusion

- Chelan County PUD will create a strong culture of respect and professionalism in the workplace regardless of race, color, national origin, religion, sex, disability, medical history, and/or age.
- Chelan County PUD is committed to:
  - Creating an inclusive working environment where every employee feels valued and respected.
  - Developing a workforce that brings together diverse ideas, backgrounds, experiences and perspectives to live out our Mission/Vision/Values.
  - Creating a level playing field for recruiting, job performance and evaluation, opportunity, and advancement.
  - Measures to help us assess and track progress and address any problems we uncover.
  - Fulfilling our affirmative action responsibilities by removing barriers to employment opportunities for women, minorities, disabled persons, and protected veterans and others who are members of a group whose status is protected by law.





# Why D/B Delivery Method for the Rock Island and Rocky Reach Hydroelectric Dam Civil and Mechanical Improvements Project

# RCW 39.10.300 D/B Statutory Compliance

---

We believe that this project **complies with two of the three statutory criteria:**

- (1) The construction activities are highly specialized, and a design-build approach is critical in developing the construction methodology;**
- (2) The project provides opportunity for greater innovation or efficiencies between the designer and the builder;**
- (3) Significant savings in project delivery time would be realized.



# Advantages to D/B Delivery

---

- Significant **reduction in change order potential** due to errors and omissions
- Establish **cost certainty significantly earlier** than any other method of project delivery
- **Improved collaboration** resulting in increased efficiencies and improved cost control
- **Informed decisions** made by the DB team throughout the design process
- Improved ability to plan/design to **avoid market driven potential cost/schedule impacts**
- Increased ability to **mobilize to the project site earlier** than any other method of project delivery





## Public Body Qualifications



# Chelan County PUD

## Leadership Team

- **CCPUD has a long and successful history of planning and executing large capital projects, like the projects under this program, on time and within budget.**
- CCPUD has assembled a team of **District employees augmented with consultants (Parametrix and Perkins Coie) that have significant PDB experience.** That team will play the primary role for CCPUD in PDB procurement, design oversight, project management and construction management for this bundle of projects.
- **The Program Manager, Project Manager, Construction Manager and Internal Legal Counsel are employees of CCPUD.**
- **Parametrix** is currently under contract to provide **PDB procurement and advisory services throughout the project** and to augment CCPUD staff as needed and when needed.
- **Graehm Wallace** and the team at **Perkins Coie LLP** is our **external PDB legal counsel** and will assist with the development of RFQ/RFP solicitation documents and the contract documents. Perkins Coie LLP will also provide PDB legal consultation throughout the project(s).
- CCPUD is **currently using the PDB delivery method for three projects** related to the rehabilitation of **Rock Island Dam's Powerhouse #2.** Several CCPUD staff members are involved in those projects and are available to provide insight, guidance, and support to the CCPUD staff for this bundle of projects.

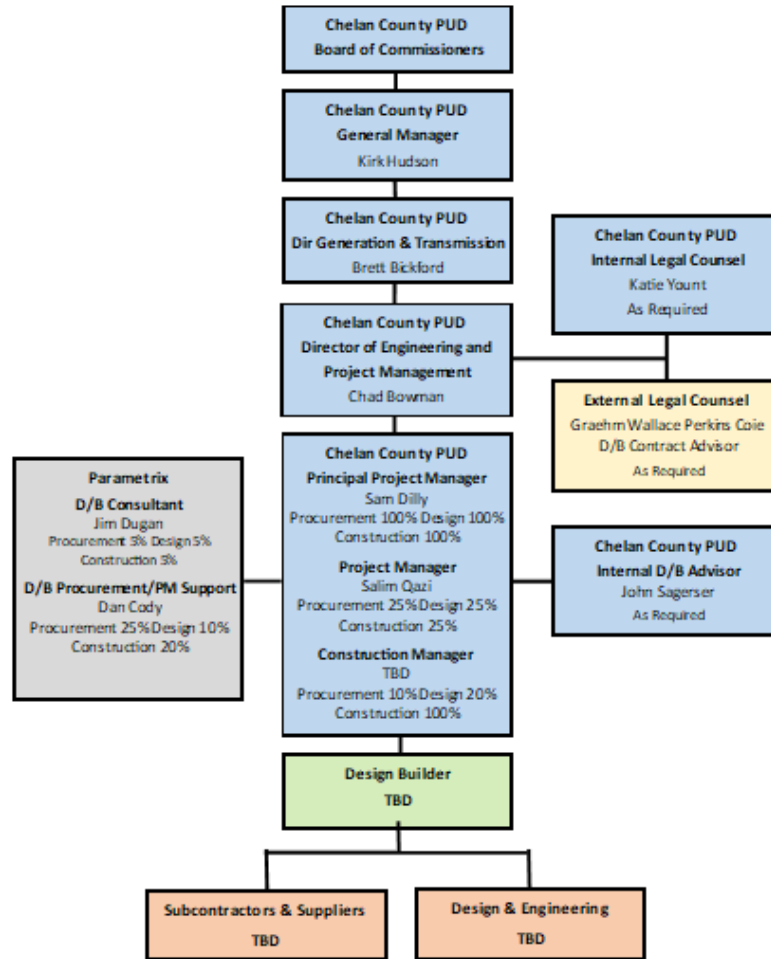
**Chelan County PUD satisfies the public body qualifications by staff augmentation with consultants experienced in PDB delivery and RCW 39.10.**



# PROJECT ORG CHART



CHELAN COUNTY



Name	Experience
<p><b>Sam Dilly, P.E., PMP</b> Principal Project Manager Chelan County PUD</p>	<p>30 Years as a Civil Engineer</p> <p><b>18 Years as Project Manager CCPUD</b></p> <p><b>3 GC/CM Projects:</b> CCPUD #1 Rock Island Dam Facilities, \$45M; CCPUD #1 RI and RR Dam Facilities Program, \$90M; CCPUD #1 Facilities Program Manager, \$300M</p> <p><b>1 Negotiated Project:</b> CCPUD #1 Rock Island Dam Spillway Cracks Repair, \$25M</p> <p><b>3 D/B/B Projects:</b> CCPUD #1 Tumwater Dam Maintenance, \$6.5M; CCPUD #1 Fish Hatchery Program Management, \$20M; CCPUD #1 Parks Shoreline Restoration Program, 15M</p>
<p><b>George Velazquez PMP, MBA</b> Project Manager Chelan County PUD</p>	<p>22 Years of experience in public power. 5 Years experience in the private contracting industry</p> <p><b>Manager for Rocky Reach – Lake Chelan Project Delivery Department</b></p> <p><b>6 D/B/B Projects:</b> CCPUD #1 Rocky Reach C11 &amp; C10 Water Filled Hub Refurbishment, \$25M; CCPUD #1 Rocky Reach RR Trash Rack Replacement, \$20M; CCPUD #1 Rocky Reach RR Juvenile Fish Bypass Surface Collector Pumps, \$13M; CCPUD #1 Rocky Reach Digital Electrical Governor Controls Replacement, \$7M; CCPUD #1 Rocky Reach C1-7 Turbine Hub Refurbishment, \$11M; CCPUD #1 Rocky Reach C8 &amp; C9 Hub Refurbishment, 24M</p>



Name	Experience
<p><b>Salim Qazi, P.E., PMP, DBIA</b>  <b>Associate</b>  Project Manager  Chelan County PUD</p>	<p>Registered professional mechanical engineer with 30 years of diversified experience in heavy industrial design, construction, maintenance and project management..</p> <p><b>6+ Years as Project Manager CCPUD</b></p> <p><b>5 D/B/B Projects:</b> CCPUD #1 Rock Island PH2 HVAC Upgrade, \$2.8M; CCPUD #1 Rock Island Spillway Gate Handling Prototype, \$20M; CCPUD #1 Rock Island Drop Gate Structure Remediation, \$30M; CCPUD #1 Rock Island PH2 Station Drainage Mod, \$2M; CCPUD #1 Rock Island PH1 HVAC Upgrade, \$2.4M</p>
<p><b>John Sagerser</b>  District DB Subject Matter Expert (SME)  Chelan County PUD</p>	<p>John is a leader with a proven record of building the teams and partnerships necessary to deliver projects that are successful for all parties involved.</p> <p><b>30 years experience in the generation of electrical energy.</b></p> <p><b>4 PDB Projects:</b> CCPUD Rock Island Dam Powerhouse #2 Motor Control Center Replacement, \$9.0M; CCPUD Rock Island Dam Powerhouse #2 Draft Tube Gate Refurbishment, \$7.0M; CCPUD Rock Island Dam Powerhouse #2 Generator Leads Replacement, \$6.5M; CCPUD Rock Island Dam Powerhouse #2 Turbine/Generator Unit Rehabilitation, \$350M</p> <p><b>2 D/B/B Projects:</b> CCPUD Rock Island Dam Powerhouse #2 HVAC Upgrade, \$2.8M; CCPUD Rock Island Dam Powerhouse #2 Unit U5 Unit Service Upgrade, \$2.0M</p>



Name	Experience
<p><b>Katie Yount</b> Internal Legal Counsel Chelan County PUD</p>	<p>23 years as a practicing attorney</p> <p><b>9+ years working on the District’s Rock Island and Rocky Reach Hydroelectric Support Facility Improvements Project.</b></p> <p><b><u>D/B/B Projects:</u></b> CCPUD Rock Island Dam Powerhouse #2 HVAC Upgrade, \$2.8M; CCPUD Rock Island Dam Powerhouse #2 Unit U5 Unit Service Water Upgrade, \$2.0M</p> <p><b><u>5 PDB Projects:</u></b> CCPUD Rock Island Dam Powerhouse #2 Motor Control Center Replacement, \$9.0M; CCPUD Rock Island Dam Powerhouse #2 Draft Tube Gate Refurbishment, \$7.0M; CCPUD Rock Island Dam Powerhouse Generator Leads Replacement, \$6.5M; CCPUD Rock Island Dam Powerhouse #2 Turbine/Generator Unit Rehabilitation, \$350M; CCPUD Power Transmission Lines and Substations Phase 1, \$40M</p>
<p><b>Jim Dugan</b> Progressive Design-Build Advisor Parametrix</p>	<p>Jim will provide a PDB advisory support role to the CCPUD team on this project.</p> <p><b>46 Years Program/Project Management</b></p> <ul style="list-style-type: none"> <li>• 20 years Design-Build Experience with the Austin Company (1978-1998)</li> <li>• <b>40+ GC/CM projects</b> since 2013</li> <li>• <b>30+ DB projects</b> since 2017</li> <li>• Highly knowledgeable of RCW 39.10</li> <li>• PRC member since 2016</li> <li>• PRC Vice Chair in 2019 and Chair in 2020</li> </ul>



Name	Experience
<p><b>Dan Cody</b>  Progressive Design-Build  Procurement Manager &amp; PM/CM  Support  Parametrix</p>	<p>Dan will provide support to the CCPUD team during PDB procurement and the development of the PDB RFQ and RFP documents as well as during the ensuing review, scoring and selection process.</p> <p><b>39 Years Design, Construction &amp; Project Management Experience</b></p> <ul style="list-style-type: none"> <li>• <b>31 GC/CM projects</b> since 2015</li> <li>• <b>30+ DB projects</b> since 2017</li> <li>• Highly knowledgeable of RCW 39.10</li> <li>• Registered Architect</li> <li>• <b>DBIA Associate</b></li> </ul>
<p><b>Graehm Wallace</b>  External Legal Counsel  Perkins Coie</p>	<p><b>27 Years Construction Law</b></p> <ul style="list-style-type: none"> <li>• <b>Extensive experience in GC/CM &amp; DB Contracts</b></li> <li>• Extensive construction claim experience</li> <li>• He served 100+ public agencies in WA State</li> <li>• Extensive knowledgeable of RCW 39.10</li> </ul>

# Summary

---

- Traditional delivery (D/B/B) is not feasible.
- Construction Activities highly specialized and DB is critical in establishing construction methodology.
- Greater innovation & efficiency between designer and builder.
- CCPUD Team, augmented with consultants, has:
  - Project delivery knowledge & experience.
  - Sufficient CA personnel with construction experience.
  - Management plan with clear/logical lines of authority.
  - Necessary & appropriate funding and adequate time.
  - Continuity of PM team & exp. w/ project scope/type.
  - Necessary/appropriate budget.
- Team is knowledgeable in DB process & capable to oversee & administer the contract.
- CCPUD has no audit findings on previous projects.





CHELAN COUNTY

Thank you