Hydrogen Fueling Station and Fuel Cell Generator with Storage – Progressive Design Build

Project Review Committee Presentation

Douglas County PUD

Deadline for Submittal: January 20th, 2025

PRC Meeting: February 27th, 2025

Presentation Overview

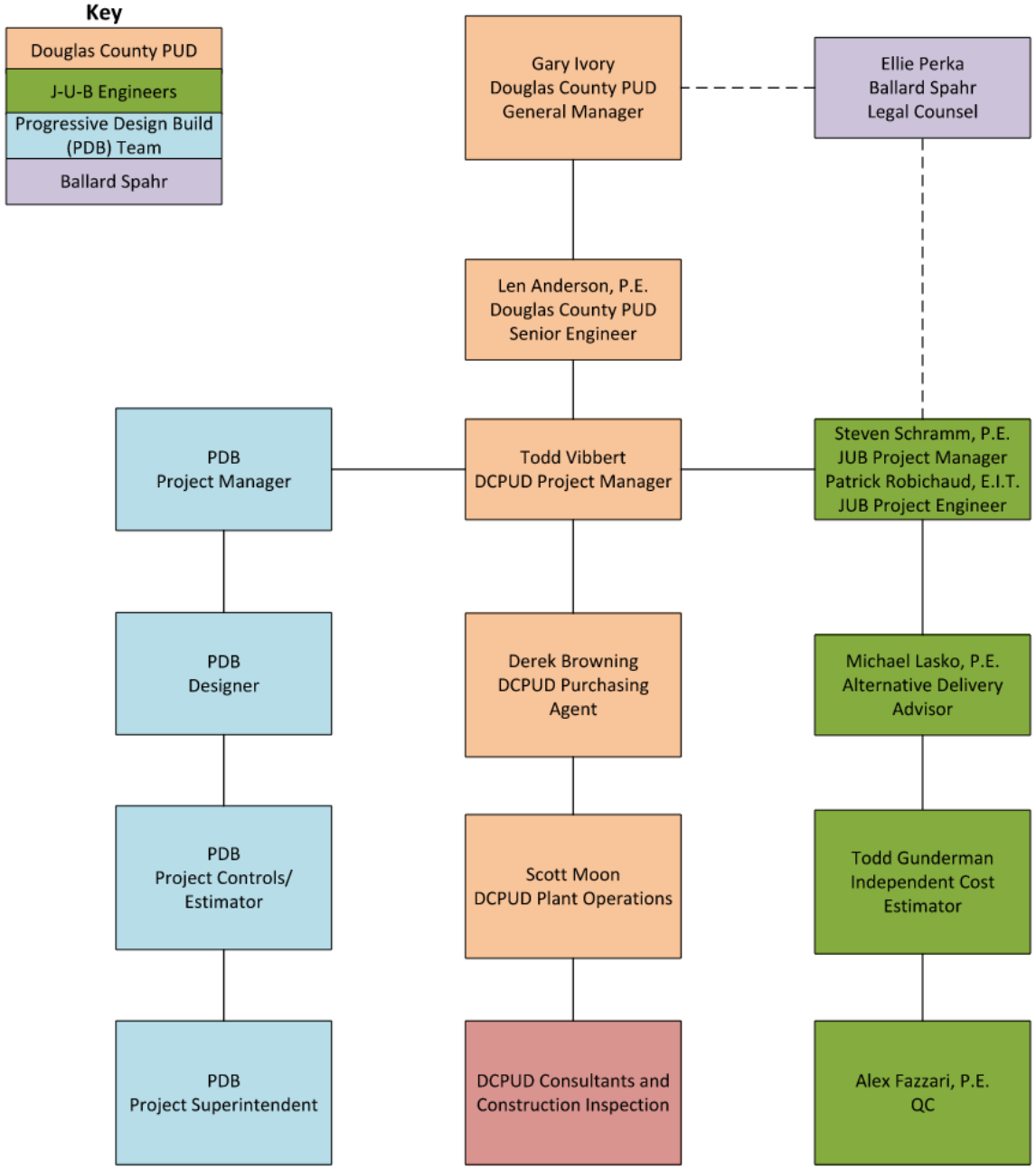
Team Introductions	Todd Vibbert – Douglas County PUD
Project Goals and Background	Len Anderson, PE – Douglas County PUD
RCW 39.10, 39.19 Requirements	Michael S. Lasko, PE – J-U-B
	Ellie Perka – Ballard Spahr
Project Schedule / Closing	Len Anderson, PE – Douglas County PUD

- Not Presenting
  - Derek Browning – Douglas County PUD
  - Steven Schramm, PE – J-U-B
  - Patrick Robichaud – J-U-B

Project Organization Chart

Project Team

- Douglas County PUD
  - J-U-B Engineers, Inc
  - Ballard Spahr



Douglas County PUD

- Started in 1945 as a non-profit, locally owned electric distribution.
- Built Well Dam Hydroelectric Project
  - Started power generation in 1967
- 17,500 Customers
- 210 Staff members
- Provides
  - Electric Power
  - Broadband
  - Water

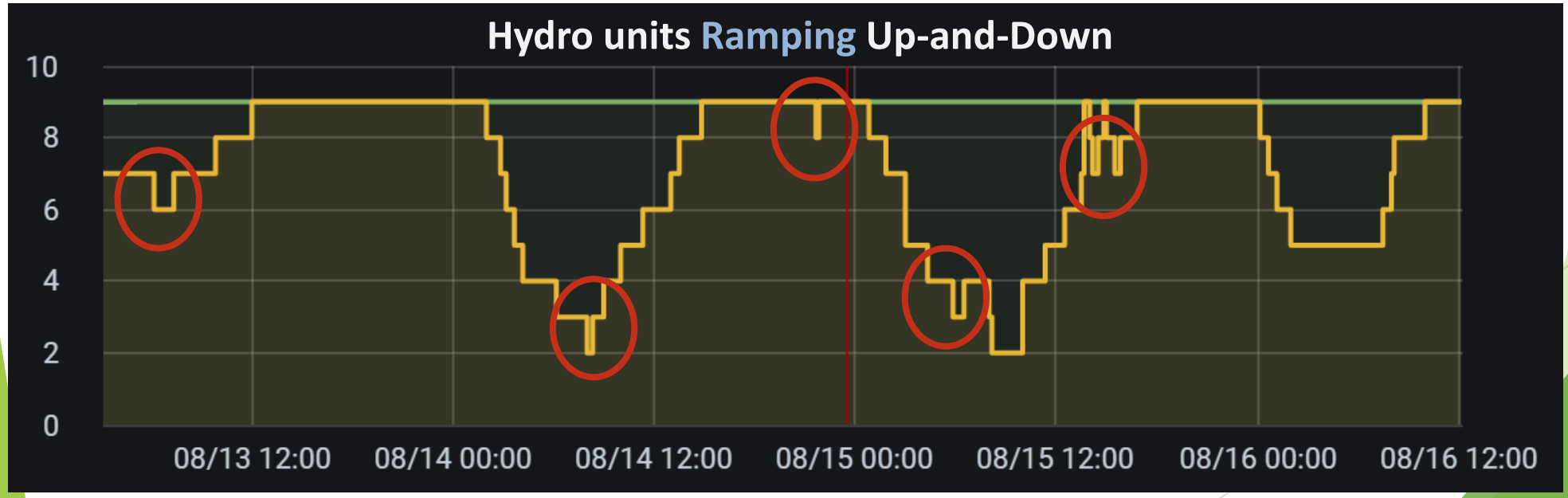
Project Goals and Background

Project Goals

- Douglas County PUD, J-U-B, Ballard Spahr, and PDB Team work collaboratively and transparently throughout the project life cycle.
- Deliver a quality and sustainable project that meets the performance requirements and adheres to Washington State's Revised Code of Washington (RCW).
- Minimize impacts to the public and stakeholders.
- Plan, design, and construct a hydrogen fueling station and fuel cell generating station to be operational by June 30th, 2026.
- Maximize project benefits by considering quality, budget, and schedule.
- Develop and implement a strategic approach to 3rd party coordination.
- Identify and manage risks and opportunities and suggest strategies to eliminate, minimize, or mitigate risk.

Benefits – Generating Green Hydrogen

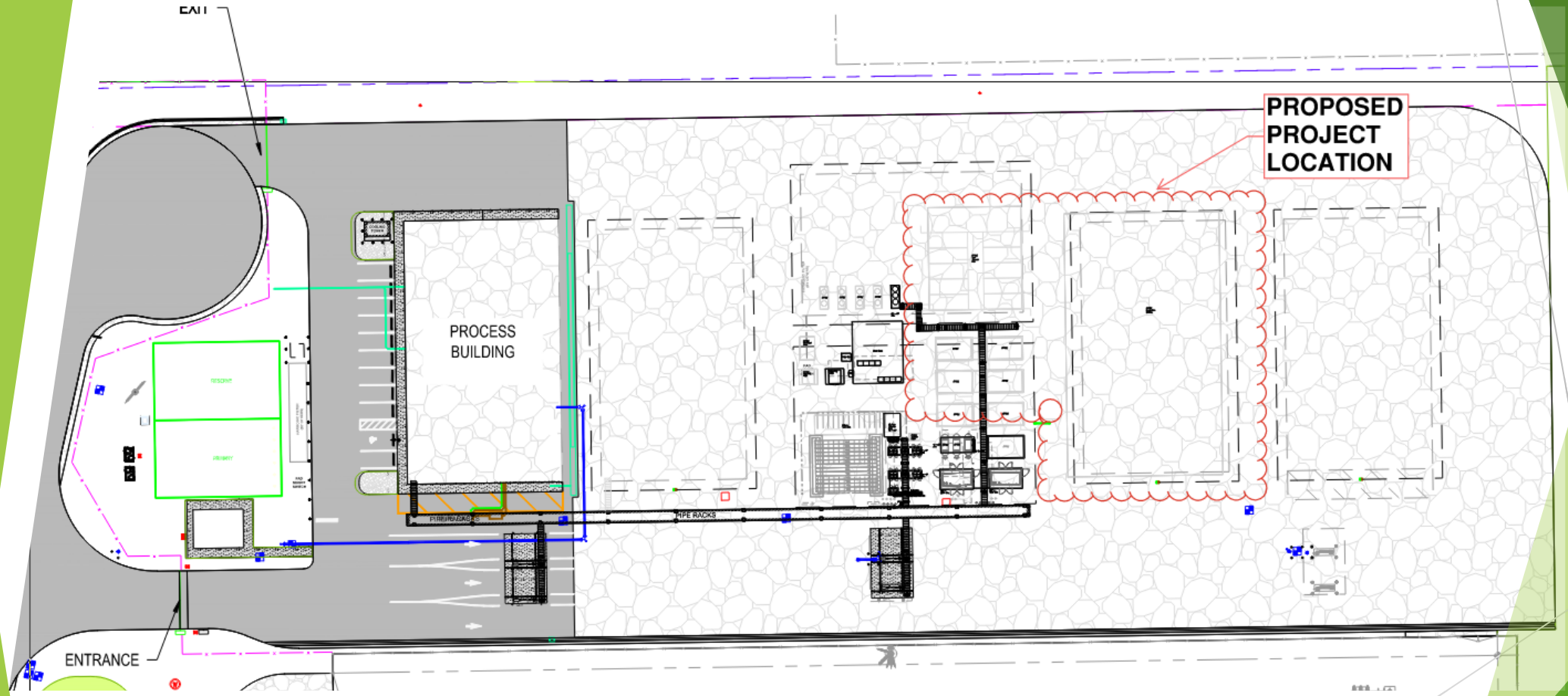
- Green hydrogen production provides an opportunity to prepare for the future and diversity
- 5MW project already completed
- Using power from Wells Hydroelectric project
  - Contractor: IMCO
- Hydrogen production allows
  - Balance integrating renewables
  - Variable seasonal pricing
  - Fish water quality concerns
  - Increase efficiencies of generators




Rocky Reach Dam Discovery Center
Eastbank State fish Hatchery
H2 Project #1
Shell
Daisy Hill Rd
97
2
Blaine
Bellingham
Mt Baker
+10785
Ross
Lake
Oroville
SAN JUAN ISLANDS
Anacortes
Skagit
Republic
Colville
Columbia River
Okanogan R
Mount Vernon
Winthrop
Omak
Oak Harbor
Franklin D Roosevelt Lake
Lakewood
Marysville
Glacier Peak
10541
Port Angeles
OLYMPIC
Mt Olympus
7969
Everett
Lake Chelan
Grand Coulee
Spokane R
Chelan
Banks Lake
Wilbur
Spokane
Seattle
Redmond
Bremerton
Bellevue
Coulee City
MTS
Renton
Wenatchee
Tacoma
Federal Way
Ephrata
Puyallup
Enumclaw
Quincy
Moses Lake
Ritzville
Olympia
Lacey
Hoquiam
Aberdeen
Grays Harbor
Ellensburg
Potholes Res
WENATCHEE MTS
Othello
Mt Rainier
14410
COLUMBIA
BASIN
Raymond
Centralia
Chehalis
South Bend
Morton
Yakima
Cowlitz River
CASCADE RANGE
Toppenish
Richland
Pasco
Dayton
Kennewick
Longview
Kelso
Mt St Helens
8363
Mt Adams
12276
Walla Walla
Goldendale
Columbia River
Vancouver
Battle Ground
Camas
5
90
82

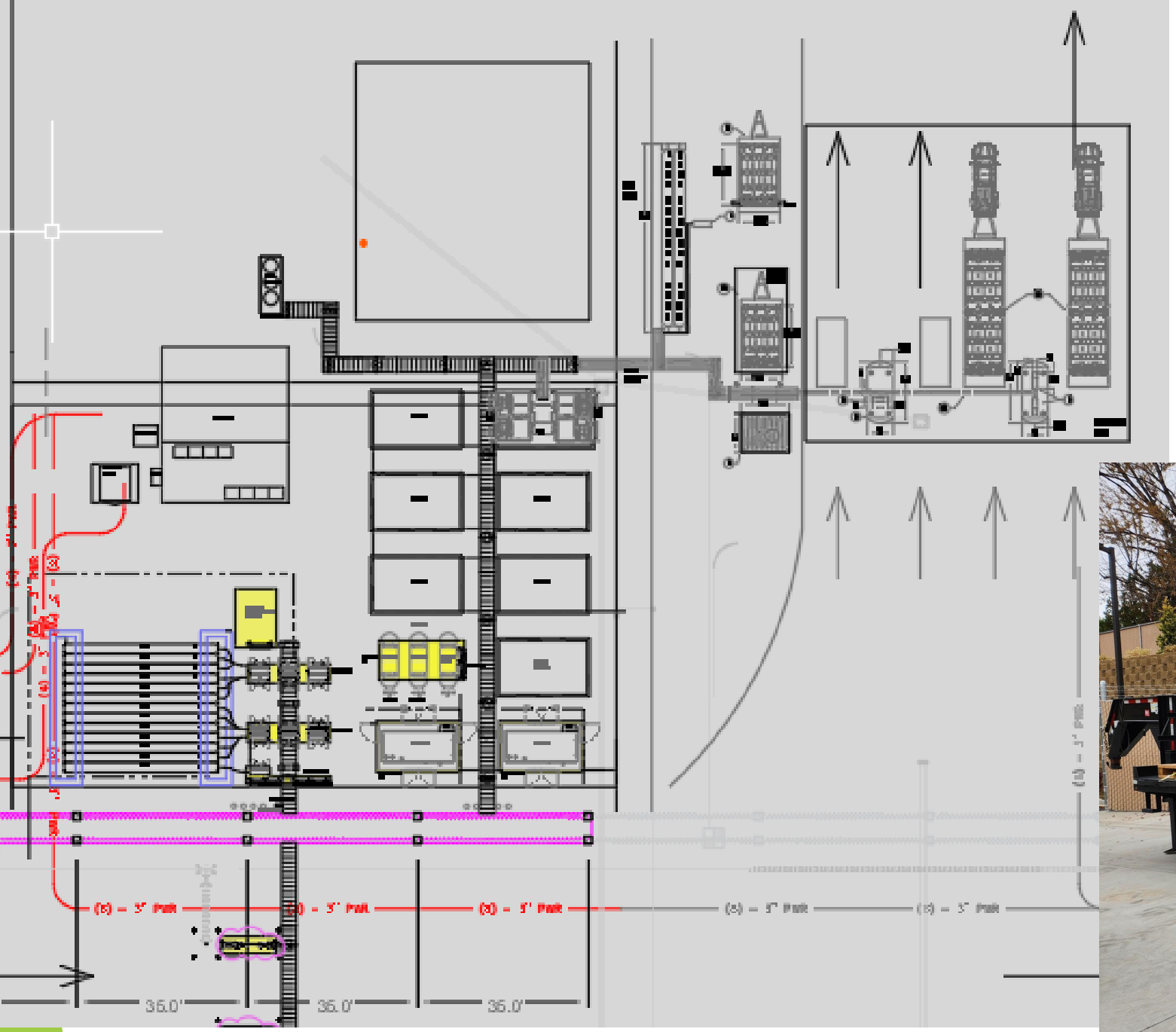

130 Acres with great
power & water supply
PACIFIC PRIDE
C & O Nursery
Lincoln Rock Park Rd
97
Shell

Fueling Station



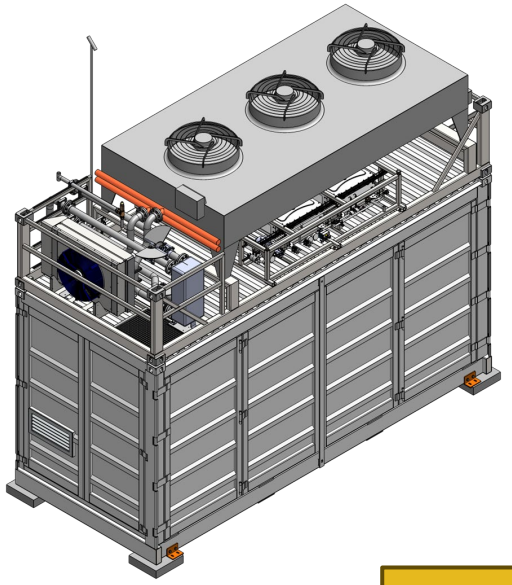
Fueling Station

Trailers-Primary
Vehicles-Secondary



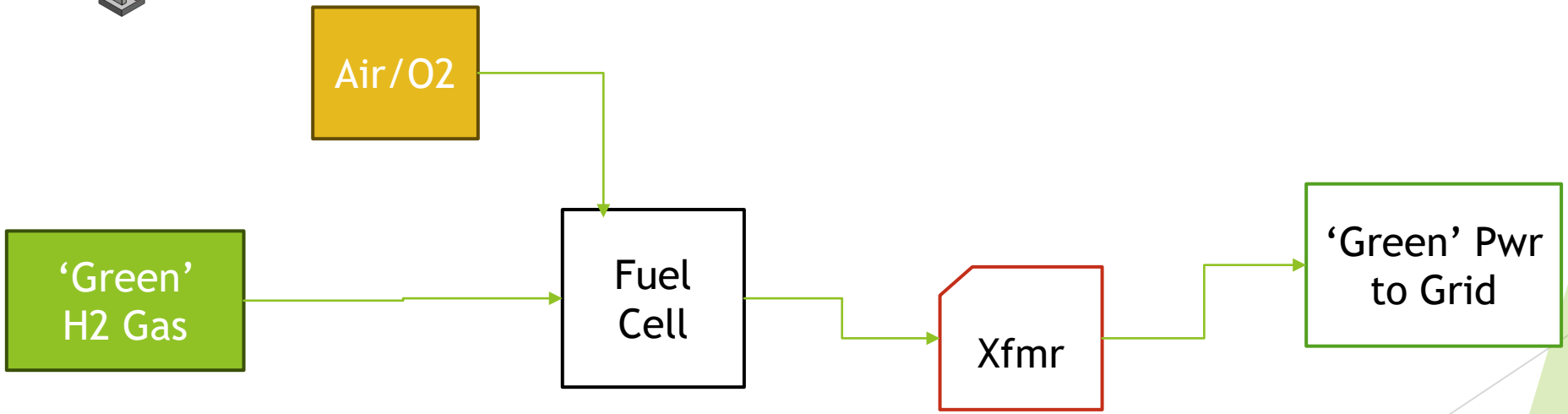
Fueling Station

- Need market for hydrogen. Fueling station provides the ability for public, commercial, and industrial use.
- PUD already has four Toyota Mirai hydrogen fuel cell vehicles.
  - East Wenatchee Police Department using one hydrogen police car.
- Fueling Station to fill tanks to bring to East Wenatchee Public fueling station.



Fuel Cell Generator

- Provide power back to the grid
- Provides Critical Backup Power to site
- Proof of concept



Estimated Budget and Funding

- Funding
  - WA Department of Commerce – **$2.75M**
  - WA Capital Budget – **$1.348M**
  - PUD Funds - **$3.135M**

Project Budget	
Costs for Professional Services (A/E, Legal etc.)	$360,000
Estimated project construction costs (with construction contingencies at 10%)	$4,345,000
Equipment and furnishing costs	$2,025,000
Off-site costs	$0
Contract administration costs (owner, cm etc.)	$100,000
Contingencies (design & owner)	$262,500
Other related project costs (permitting, cleaning, and other misc. piping)	$140,000
Sales Tax (PUD is tax exempt)	$0
Total	**$7,232,500**

Audit Findings

- Douglas County PUD has no audit findings to report.

Revised Code of WA (RCW) 39.10 Requirements

Project Satisfies RCW 39.10

- PUD Requests PRC review and certification (RCW 39.10.270 and 280)
  - Substantial fiscal benefit: less risk, greater opportunities for cost and schedule savings and long-term benefits (RCW 39.10.280 2a)
  - Qualified public body and consultant team with alternative project delivery experience (RCW 39.10.280 2c and 2d)
  - Resolved audit findings – PUD has had no audit findings (RCW 39.10.280 2e)
  - Total Project Cost of $7.2M exceeds $2M (RCW 39.10.300(1))
  - Project provides for greater innovation and efficiency between design and builder with owner input (RCW 39.10.300(1b))
  - Significant savings in project delivery time would be realized (RCW 39.10.300(1c))
- The Douglas County PUD has experience overseeing complex projects and J-U-B has alternative delivery expertise (RCW 39.10.320)

Project Satisfies RCW 39.19

- RCW 39.19 Authorized by the Governor and made effective July 25, 2021
  - Advertised Procurement Package will include Diversity, Equity, Inclusion and Belonging contracting opportunities and requirements that comply with the Washington State's Office of Minority and Women's Business Enterprises (OMWBE)
    - Advertise through Association of General Contracts (AGC)
  - Progressive Design Builder will be required to provide a Project Management Plan that ***meaningfully integrates*** women and minority business enterprises and will be evaluated by the PUD's selection process

Project Schedule / Closing

Project Schedule

PDB Procurement Activity	Date
J-U-B NTP	November 13, 2024
Deadline for PRC Application Submission	January 20, 2025
PRC Presentation and Authorization	February 27, 2025
Advertise RFP ★	March 5, 2025
Final Day to Submit Questions	March 26, 2025
Final Day to Respond to Questions	April 2, 2025
RFPs Due	April 16, 2025
Interviews with shortlisted firms	April 23, 2025
DCPUD Recommendation and Notification	May 7, 2025
Contract Negotiations (Pre-Construction)	June 4, 2025
Board Award PDB Contract (Pre-Construction)	June 18, 2025
PDB Notice to Proceed (Pre-Construction)	June 25, 2025
Substantial Completion of Hydrogen Fueling Scope	December 31, 2025
Substantial Completion of Fuel Cell Scope	June 30, 2026

Closing

- The Hydrogen Fueling Station and Fuel Cell Generator project is ideal for delivering with PDB:
  - Will provide economic development for growth – including pending industrial growth
  - Collaboration between operators, designers, and builders could save significant cost and improve operations
  - Unique project
  - Schedule challenges
  - Provides clean energy
- Highly qualified project team with alternative delivery experience

Questions