



AlexRenew

ITB 26-005: LOW-PRESSURE STEAM SYSTEM IMPROVEMENTS

PRE-BID MEETING AND SITE TOUR | JANUARY 13, 2026

Today's presentation is for information only

1. This meeting is mandatory. Please be sure you have signed in or your bid will not be considered eligible.
2. Invitation to Bid (ITB) will remain the governing document
3. Only an official addendum will modify the ITB
4. Any questions received at today's Pre-bid Meeting may be answered verbally. However, oral statements may not be relied upon and will not be binding.

Today's Presenters



Procurement Manager

Igor Scherbakov

Igor joined AlexRenew in 2023 and serves as the Procurement Manager, responsible for AlexRenew's procurement department.



Engineering Manager

Kevin Pilog

Kevin joined AlexRenew in 2023 and serves as the Engineering Manager, responsible for AlexRenew's Engineering Department.

SAFETY MINUTE

Four States That Impact Safety

Fatigue

Taking breaks, working in teams, and getting proper rest can lead to safer outcomes.

Rushing

When you feel rushed, remind yourself to slow down. Ask supervisors for help planning work so that you can do your best.

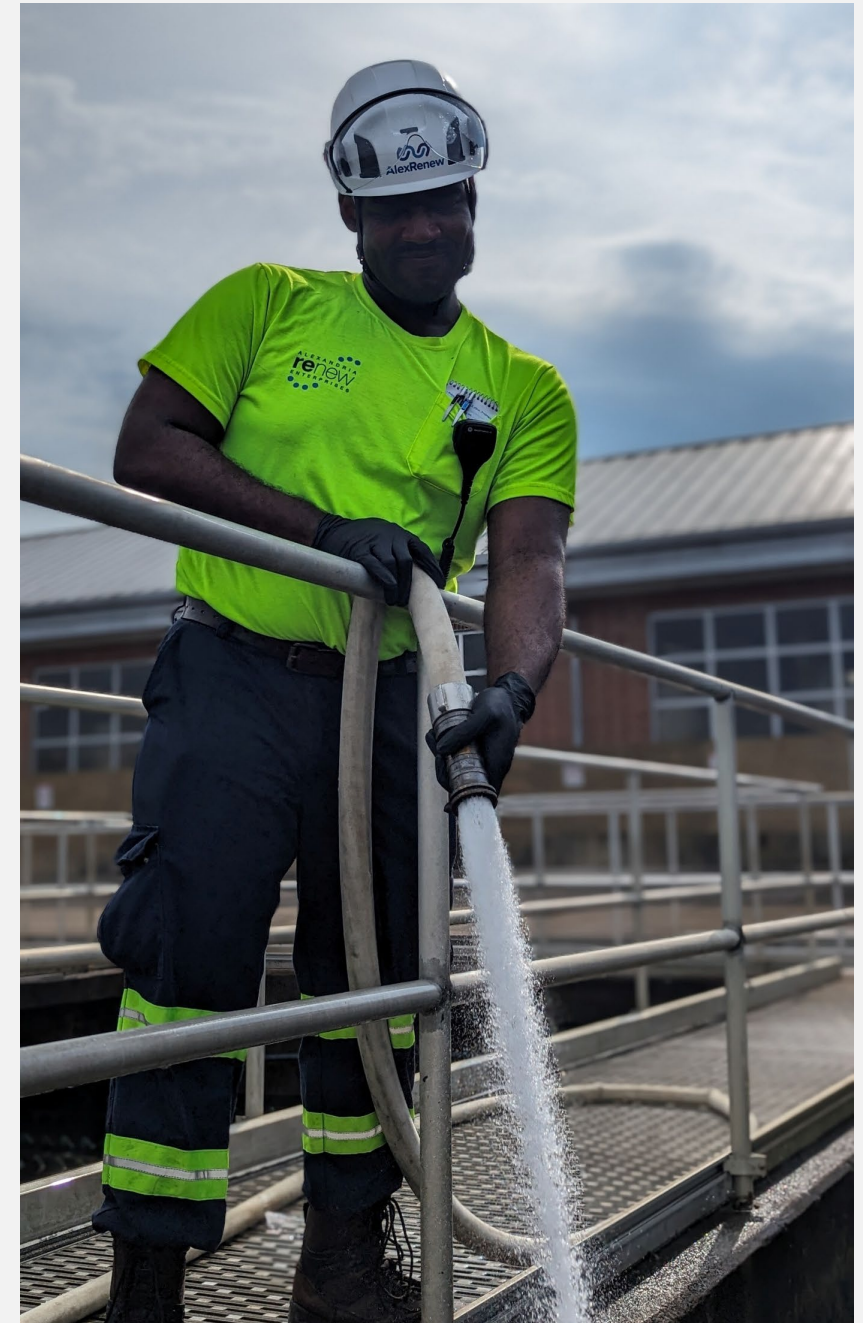
Frustration

Frustration happens! Take a break, strategize, and ask for help if you are starting to feel frustration.

Complacency

It's easy to become complacent with tasks we do everyday. Be aware and remind yourself to keep your mind and eyes on task.

Together we can make sure that everyone goes home safe every day!



ALEXANDRIA'S WATER SYSTEM



**Drinking water
distribution system**

Virginia American Water



**Sanitary and combined
sewer system**

City of Alexandria



**Wastewater treatment and
combined sewer outfalls**

AlexRenew



**Stormwater
system**

City of Alexandria

ALEXRENEW OVERVIEW

Purifies 13 billion gallons of wastewater each year

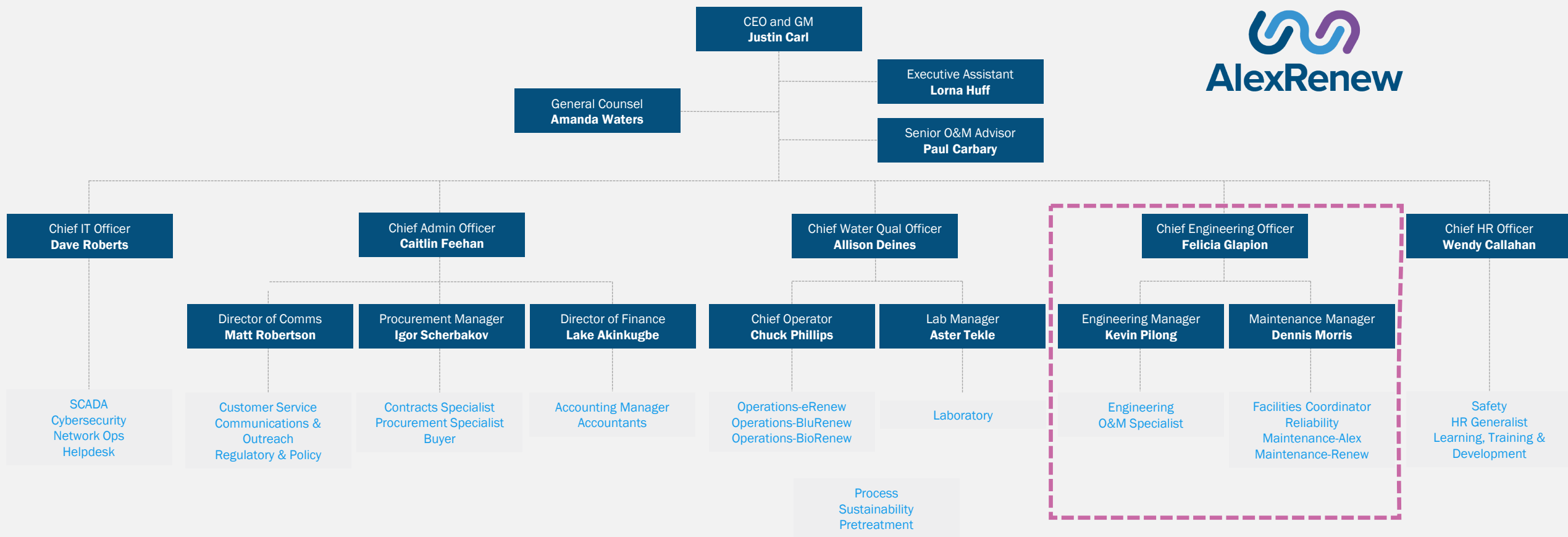
Serves a population of about 300,000 people in Alexandria and portions of Fairfax County

Established in 1952 as an independent authority

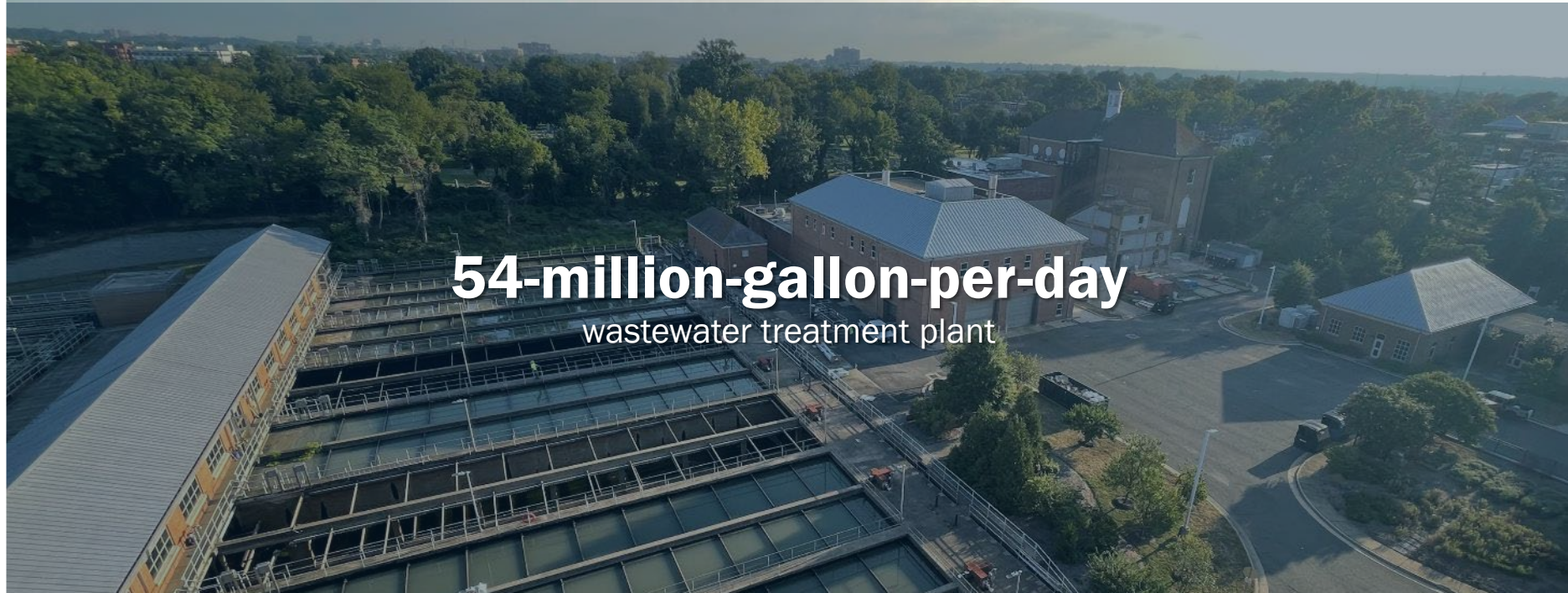
Governed by a 5-member citizen Board



AlexRenew Organizational Chart



ALEXRENEW'S \$1.0 BILLION OF ASSETS



54-million-gallon-per-day
wastewater treatment plant



20-miles
of intercepting sewers



2.2-mile
combined sewer tunnel
and associated
infrastructure



Five
sewage pumping
stations



LEGEND



Low-Pressure Steam
Project Work Areas

Nutrient
Reduction
Project

Building 28:
3 Boilers

ALEXRENEW

MAJOR CURRENT AND UPCOMING PROJECTS

Process
Optimization
Project

RiverRenew

Headworks
Renewal Project

Building A:
2 Boilers

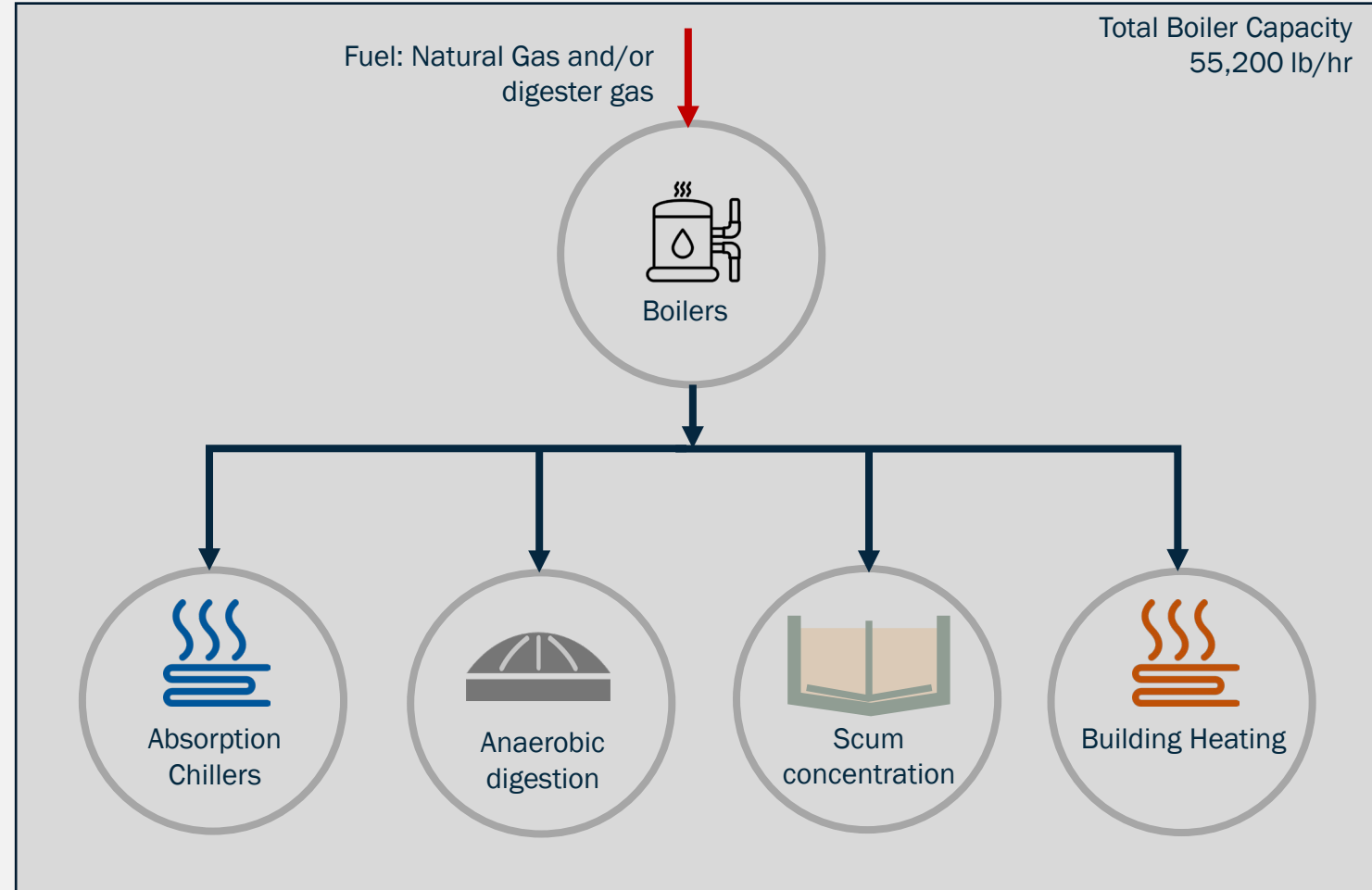
Job Order
Contracts
(20 Active
Task
Orders)

Biosolids
Diversification
Project

LPS Distribution
System

Low-Pressure Steam System Overview

AlexRenew's low-pressure steam (LPS) system serves multiple processes within the WRRF including heating for anaerobic digestion, scum concentration, buildings, and chilled water for air conditioning.





PROPOSED LOW-PRESSURE STEAM IMPROVEMENTS

Building 28

- Equipment installed in 2008
- New boiler feedwater, chemical feed system, piping

Galleries and other building areas

- Equipment installed between 1999-2005
- New piping, condensate return units (CRU), surge tanks, pumps, valves, steam traps and appurtenances

Building L

- Equipment installed between 1999-2005
- New CRU, steam traps and associated piping

Building K

- Equipment installed between 1998-2002
- New CRU, steam traps and associated piping

Building A

- Equipment installed between 1999-2005
- New boiler, CRU, steam traps and associated piping

Building 20

- Equipment installed between 1999-2005
- New CRU, steam traps and associated piping

AlexRenew's low-pressure steam (LPS) system is nearing the end of its useful life and requires upgrades to address ongoing maintenance and operational challenges. Originally installed in 1956, with subsequent updates in 1980 and the early 2000s, improvements are required to significantly enhance reliability, efficiency, and overall performance.

Low-Pressure Steam System Improvements Project Scope

The LPS project will upgrade the plant-wide boiler system to simplify operability and maintenance. The anticipated overall project scope includes the following major items.

- **Demolish existing equipment.** Demolish one boiler and all associated equipment and piping in Building A. Building 28 boilers will remain, with demolition limited to chemical feed systems, boiler feed units, and associated piping. Demolition includes removal of condensate return systems and distribution piping systems within the galleries and throughout the plant to accommodate the proposed improvements.
- **New boilers systems.** Furnish and install a new dual feed boiler in Building A and new boiler support systems in Building 28 including control panels, chemical feed systems, pumps, piping, boiler feedwater units, condensate systems, accessories, and ancillary connections.
- **Condensate system.** Within the galleries and throughout the plant, replace condensate return units, surge tanks, and return pumps, including all associated accessories, connections and control panels. Condensate system returns hot water back to the boilers improving energy efficiency and supporting reliable, continuous operation.
- **Piping systems.** Replace and upgrade LPS, CRT, CRP, and CRG piping, including all associated accessories and ancillary connections. Work includes steam traps, expansion joints, valves, and pipe connections to ensure reliable and efficient steam distribution.



AlexRenew's Boiler Feed Water Unit

LPS Improvements in Building A



AlexRenew's Boilers in Building A

- Replace Boiler 1
- Allen-Bradley PLC controls
- Deaerator (boiler feed unit with 3 pumps) and with Allen-Bradley PLC controls
- Blowdown tank
- Boiler room floor drains
- Chemical feed tank and pump
- Supply fan and heating piping and accessories
- LPS, CRT, CRP, CRG piping, accessories and ancillary connections associated with the above.
- Boiler room painting and coating of interior walls, ceiling

LPS Improvements in Building 28

- Deaerator (boiler feed unit with 3 pumps) with Allen-Bradley PLC controls
- Chemical feed tank and pump
- Boiler room painting and coating of interior walls, ceiling



AlexRenew's Boilers in Building 28

LPS Improvements within Galleries and Plantwide



AlexRenew's Gallery 8

- Four (4) condensate surge tanks
- Three (3) condensate return transfer pumps and associated accessories
- Field panel to control pumps and make-up softened water flow with Allen-Bradley PLC controls
- Selected steam traps
- Selected condensate return units
- All CRT, CRP, CRG piping, accessories and ancillary connections
- New LPS sections (bridges) at Buildings E, F and C
- Seven (7) LPS mechanical expansion joints
- Fifteen LPS isolation valves and associated piping connections
- Other LPS pipe repair and replacement identified as Unit-Price work



LOW-PRESSURE STEAM PIPE SHUTDOWN CONSTRAINTS

LPS Supply to G/1

- Maximum 16 days
- June 1 through Aug 31

Lines in Galleries 5A, 7, 8, 9

- Maximum 100 days
- June 1 through Nov 30
- Galleries 1-7 remains in service during this time

Overall LPS Supply

- Maximum 48 hours
- July 1 through Aug 31

Lines in Galleries 1,2,4,5

- Maximum 80 days
- June 1 through Nov 30
- Galleries 5A-9 remain in service during this time

Note:

- LPS sections are shown schematically and do not represent exact isolation points.



Building 28 Boiler Plant

- Maximum of 60 days
- Prerequisite: Building A Boiler Plant completed
- Maintain LPS service to the two (2) heat exchangers in building G/1

BOILER SHUTDOWN CONSTRAINTS

Building A and 28 boilers shall not be shutdown at the same time

Building A Boiler Plant

- Maximum of 140 days



ELECTRICAL SHUTDOWN CONSTRAINTS

MCC-G1-1A/B

- Max of 2 hours per day, limited to 2 non-consecutive days

CRU power supply panels

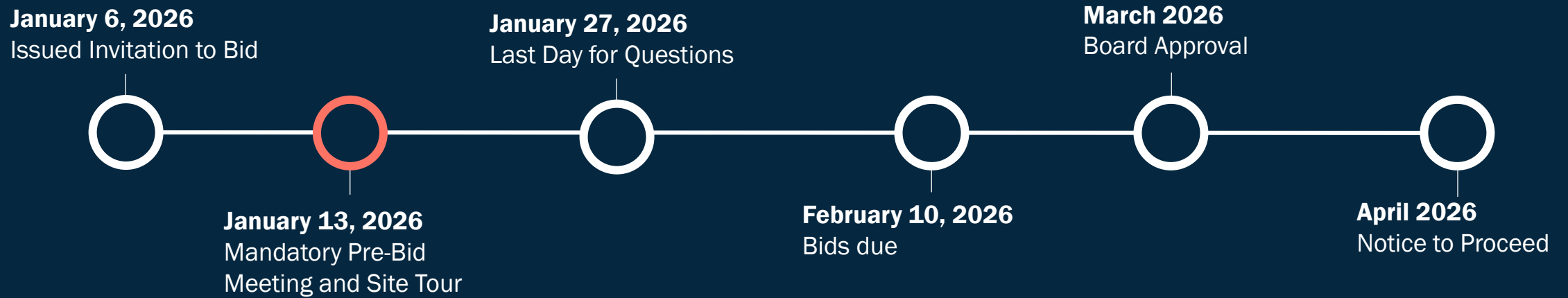
- Max of 1 hour/day for two (2) days per CRU

MCC outages confined to 12:00 AM – 4:00 AM and alternative bus shall remain in service

MCC-A-1A/B

- Max of 2 hours per day, limited to 2 non-consecutive days

ITB 26-005 Procurement Timeline



LPS Project Schedule

Timing of the project, highlighting procurement milestones, contractor services, and contractual durations and liquidated damages.

■ Contractor Services ◆ Procurement Milestone

Activity	2026												2027											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	JU	A	S	O	N	D
Procurement	◆ ITB		◆ NTP																					
Construction																								

Time is of the essence:

- Substantial Completion: 518 day from NTP
- Final Completion: 580 days from NTP
- Liquidated Damages: \$9,000/day for both substantial and final completion



AlexRenew’s Condensate Surge Tanks in Gallery 8

Next Steps

- Presentation available on Project SharePoint site
- Submit questions via LPS-26-005@alexrenew.com
- Last day for questions January 27, 2026
- Submit bids February 10, 2026 by 2:00 PM
- Award Contract and Issue Notice-to-Proceed by April 2026



AlexRenew's Natural Gas Boilers in Building 28





PreBid Sign-In

ITB 26-005: LPS Improvements
Date: January 13, 2026, 10:00AM

No.	Name	Company	Phone	E-mail
1	RAY MENDOR	American Combustion Ind.	240-375-2232	rmendor@ACIindustries.com
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9	Brian Simonson	1177 SCHLOSSER	301-773-1300	BAS@WMSCHLOSSER.
10	Kevin P. Long	Maxxener	—	Kevin.P.Long@alexrenew.com
11	Tare Scherbakov	Alex Renew	—	—
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