



Jensen Ozone Generation System Rehabilitation

Engineering and Operations Committee

Item 7-2

November 8, 2021

Current Action

- Award a \$1,477,000 contract to Minako America Corporation (dba Minco Construction) to replace ozone power supply units at the Jensen plant
- Authorize an agreement with CDM Smith Inc. in amount not to exceed \$800,000 for engineering services to support the rehabilitation of the Jensen ozone generation system

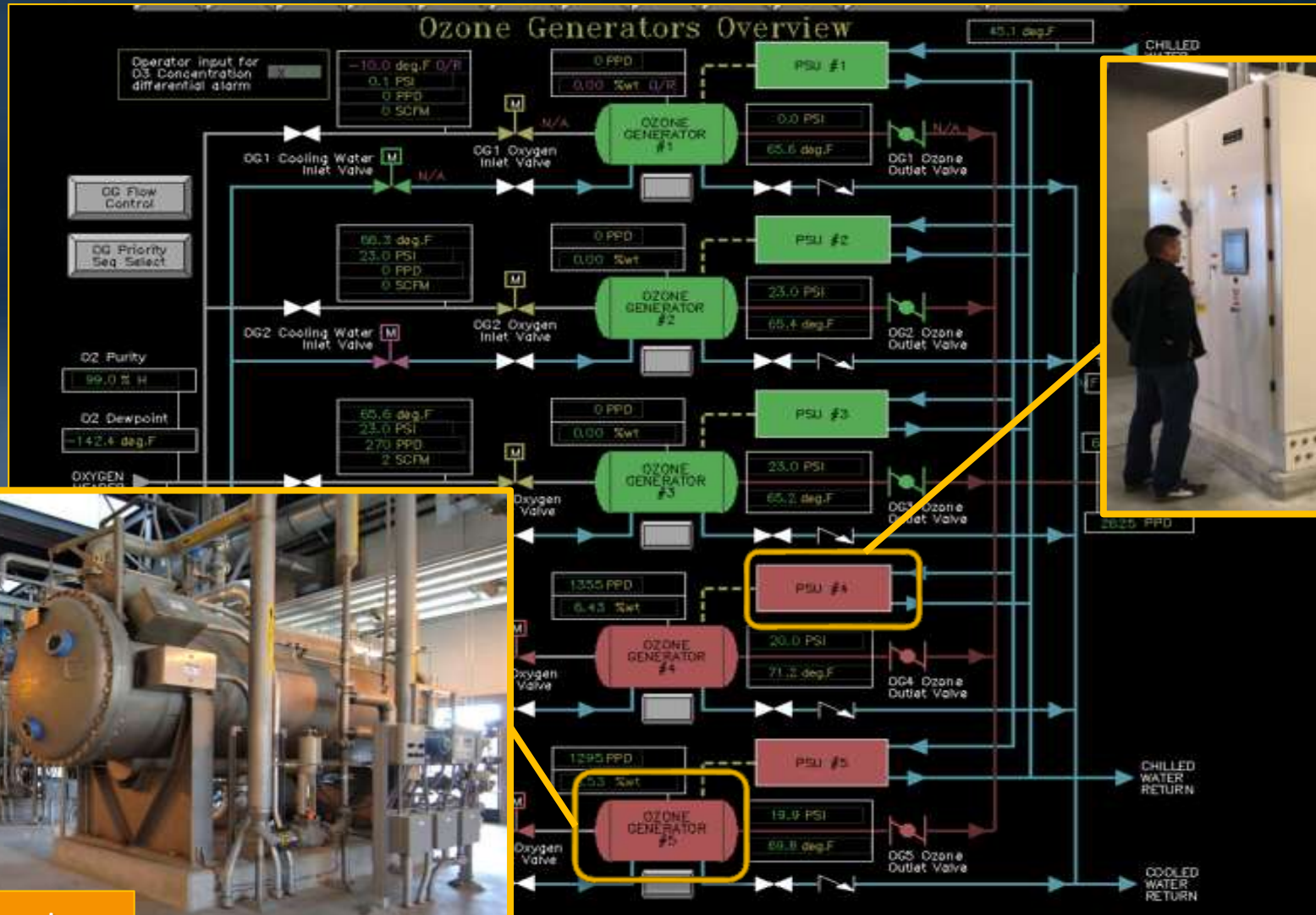
Distribution System



Jensen Plant



Jensen Ozone Generation System



Jensen Ozone Generation System



Ozone Destruct Units



Nitrogen Compressor



Liquid Oxygen Facility

Ozone System Rehabilitation

- Placed in operation in 2005
- Five ozone generators and power supply units (PSUs) originally installed for 750 mgd – units are obsolete
- PSU replacement
 - Feb. 2020 Board action awarded contract to procure new PSUs & generator dielectrics
 - Custom-designed PSUs
 - Equipment delivery: Dec. 2021



New Power Supply Unit

Jensen Ozone PSU – Components



Disconnect Switch with Fuses



Blowers

Cooling Water & Feed Section

Power Stage

Heat Exchangers



High Voltage Transformer

Alternatives Considered

- Metropolitan forces to replace the PSUs
 - Requires specialized crews & operating equipment
 - Install high-voltage equipment
 - Operate & manage Ozone PSU room's fire alarm & door system
 - Remove & reinstall Ozone building's custom-designed window system
- Selected option
 - Utilize contractor with necessary resources & licenses to perform specialty work

Scope of Work - Contractor

- Remove existing PSUs
- Install Metropolitan-furnished PSUs
- Install associated electrical, instrumentation & control, and communication equipment
- Modify the cooling water system
- Provide support for PSU start-up & testing

Scope of Work

- Metropolitan

- Install new fiber optic signal wiring and conduit to each PSU
- Modify plant's SCADA system
- Coordinate shutdown and tie-in
- Provide construction inspection & submittal review
- Provide project mgmt. & contract admin.

- Consultant/Vendor

- Suez Treatment Solutions (PSU Manufacturer) – Provide start-up, testing & field assistance under existing procurement contract
- CDM Smith Inc. – Provide support during construction & commissioning; & preparation of record drawings under new agreement

Bid Results

Specifications No. 2001

Bids Received	September 23, 2021
No. of Bidders	1
Sole Bidder	Minako America Corp. dba Minco Construction
Sole Bid	\$1,477,000
Engineer's estimate	\$2,160,000
SBE Participation*	100%

*SBE (Small Business Enterprise) participation level set at 25%

CDM Smith Inc.

New Agreement

- Prequalified through competitive process via RFQ No. 1215
- Engineer of Record – final design of Jensen Ozone PSU Replacement
- Scope of Work
 - Construction support for Jensen ozone PSU replacement
 - Submittal review & field test data; respond to RFIs; support equipment start-up, testing & commissioning; & prepare record drwgs.
 - Comprehensive assessment of the Jensen ozone system
- SBE participation level: 25%
- NTE amount: \$800,000

Allocation of Budgeted Funds

Contract

Minako America Corp. dba Minco Construction	\$1,477,000
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Metropolitan Labor

Studies & Investigations	80,000
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Program mgmt. & contract admin.	460,000
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Submittal review & record drwgs.	120,000
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Construction inspection	615,000
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Force construction	650,000
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Materials & Supplies	20,000
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Professional Services

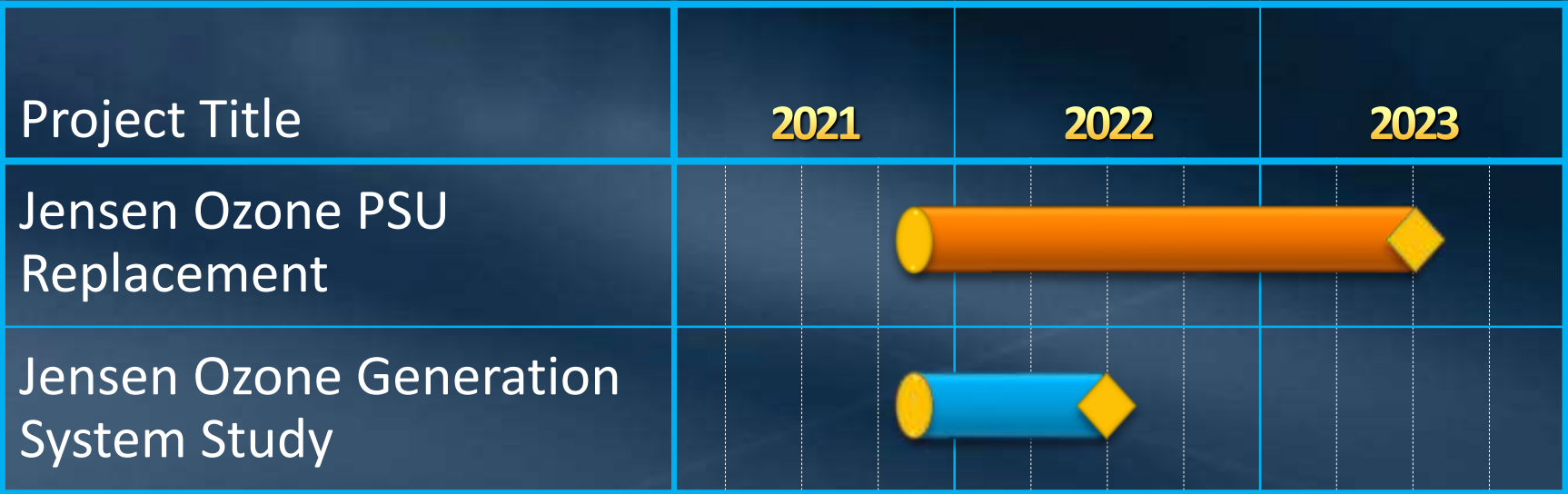
CDM Smith Inc.	800,000
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Remaining Budget	408,000
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Total	\$4,630,000
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Total Construction Cost: \$6.31 M

Project Schedule



-  Study
-  Construction

-  Board Action
-  Completion

Board Options

- Option #1

- a. Award a \$1,477,000 contract to Minako America Corporation (dba Minco Construction) for replacement of ozone power supply units at the Jensen plant.
- b. Authorize an agreement with CDM Smith Inc. in the amount not to exceed \$800,000 for engineering services to support Jensen ozone generation system rehabilitation.

- Option #2

- Do not proceed with the project at this time.

Staff Recommendation

- Option #1

