

John Duke – BP Cherry Point Refinery

November 15<sup>th</sup>, 2022

NWCCC



# REFORMER COMPRESSOR CONTROLS UPGRADE

# Project Summary



- Project Drivers
  - Improve safety and reliability of the Reformer area compressors and their auxiliary equipment with the use of improved instrumentation and trip logic
- Safety Performance
  - 23,524 Direct Field Hours - OSHA incidence Rate: ZERO - First Aid Cases: ZERO
- Schedule Performance
  - IFC issued July 30, 2020
  - Intended event window: April 13, 2021 – May 10, 2021
  - Actual event window: April 11, 2022 – May 6, 2022
- Budget Performance
  - Original budget: \$6,530,000
  - Final Installed Cost: \$5,370,000 (18% saving)

# Project Team



Owner:	BP Cherry Point - Small Projects Team (SPT)
Engineering Contractor:	Eichleay, Inc. , Ferndale WA
Mechanical Contractor:	Harris Pacific Northwest LLC, Bellingham WA
I&E Contractor:	Mills Electric, Bellingham WA
Heat Treating:	TEAM Inc., Ferndale WA
Scaffolding Contractor:	BrandSafway LLC, Anacortes WA
Industrial Services:	BAI Environmental Services, Lynden WA
Inspection Services:	Intertek, Ferndale WA
Insulation & Paint:	Performance Contracting Inc., Bellingham WA







REFORMER  
OPERATION

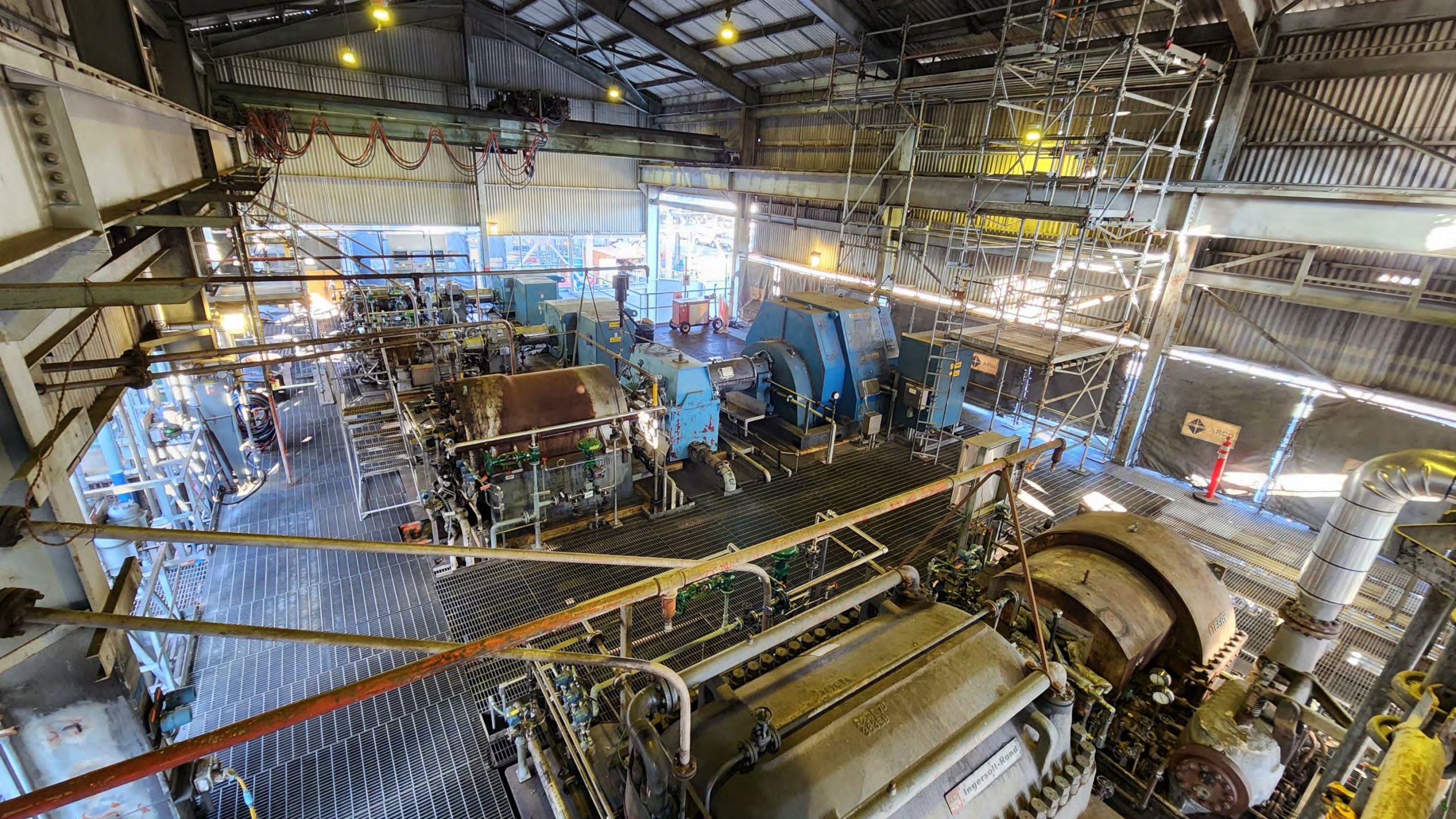
MAD

RED DRUM

WILSON















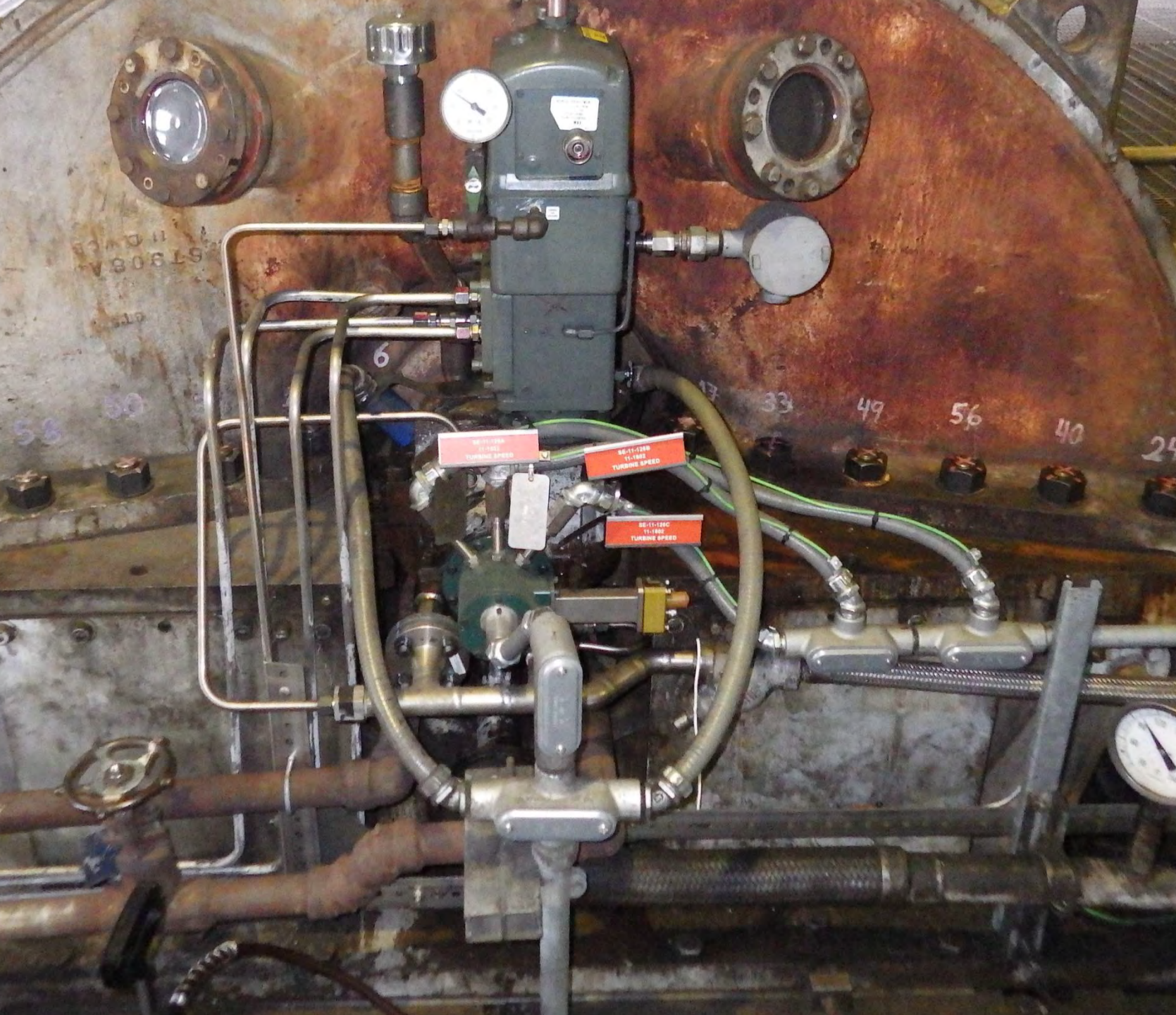




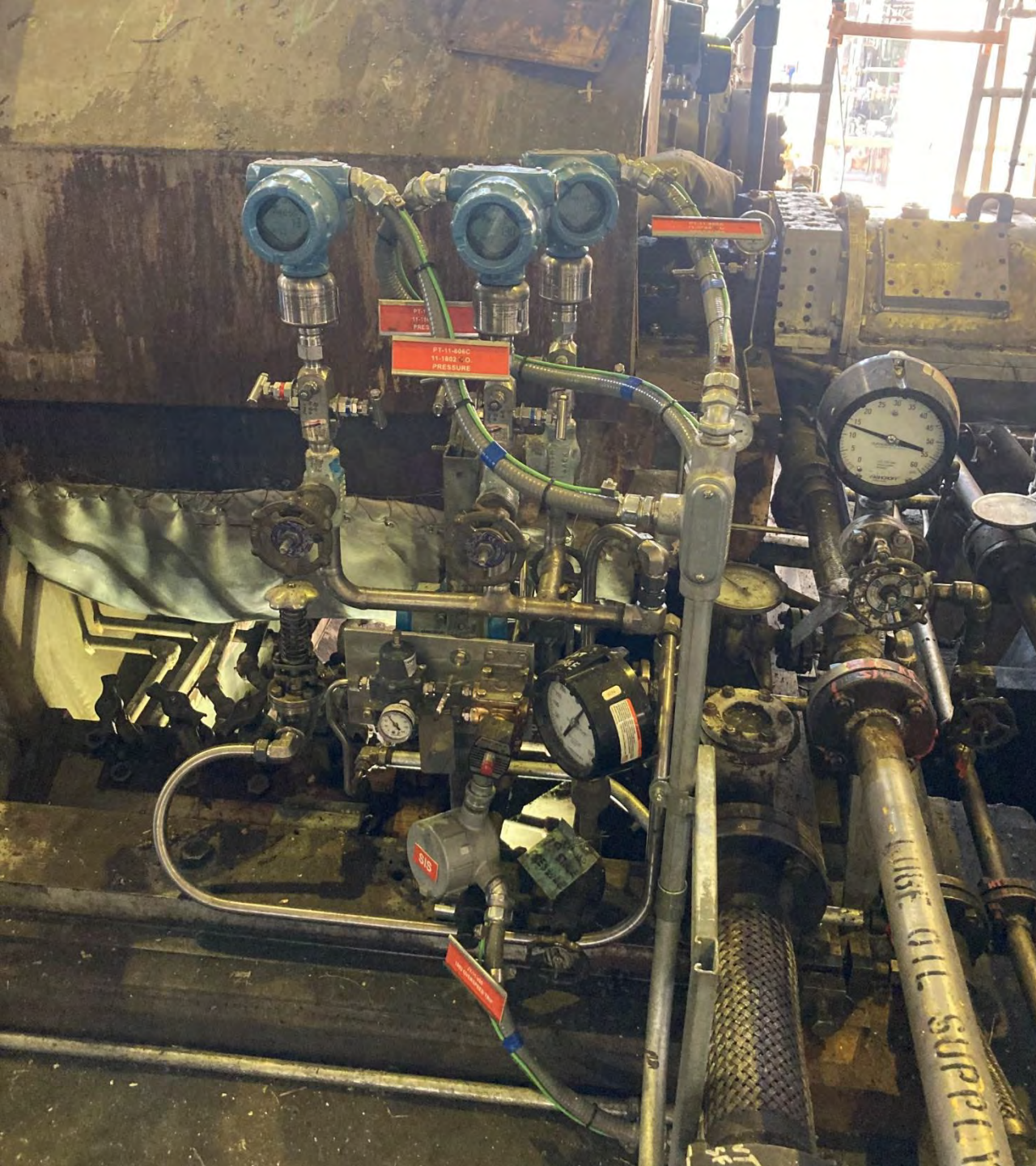












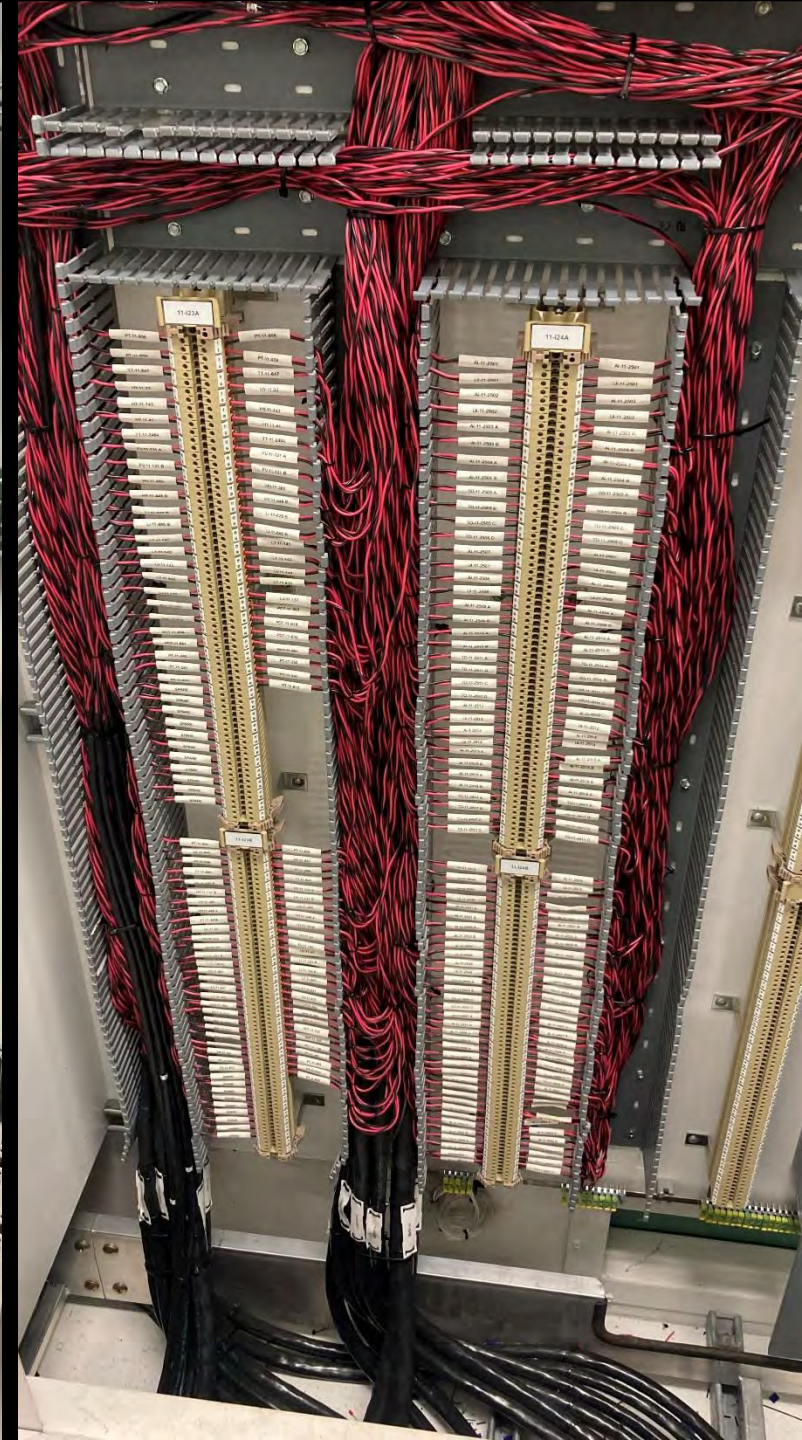




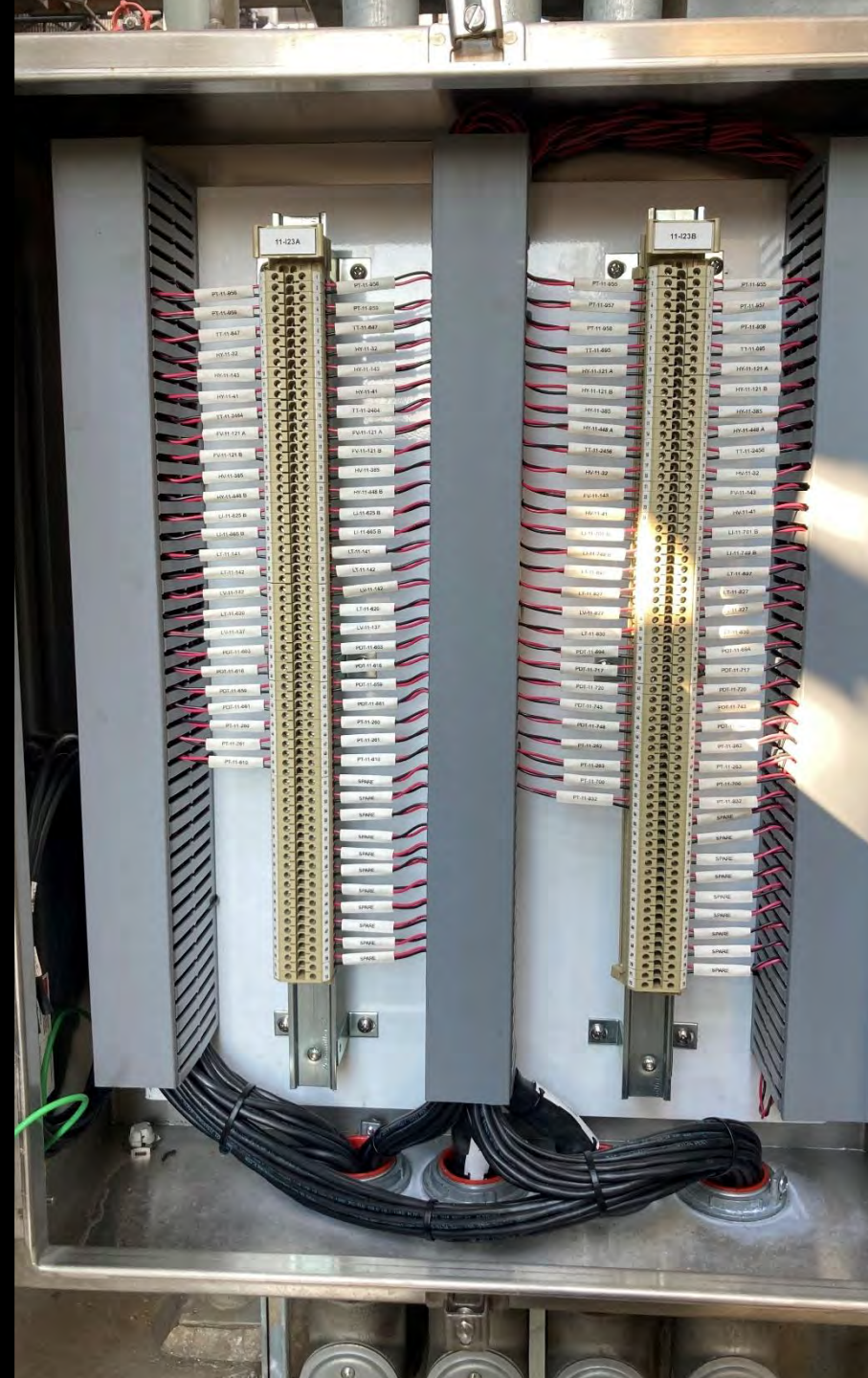
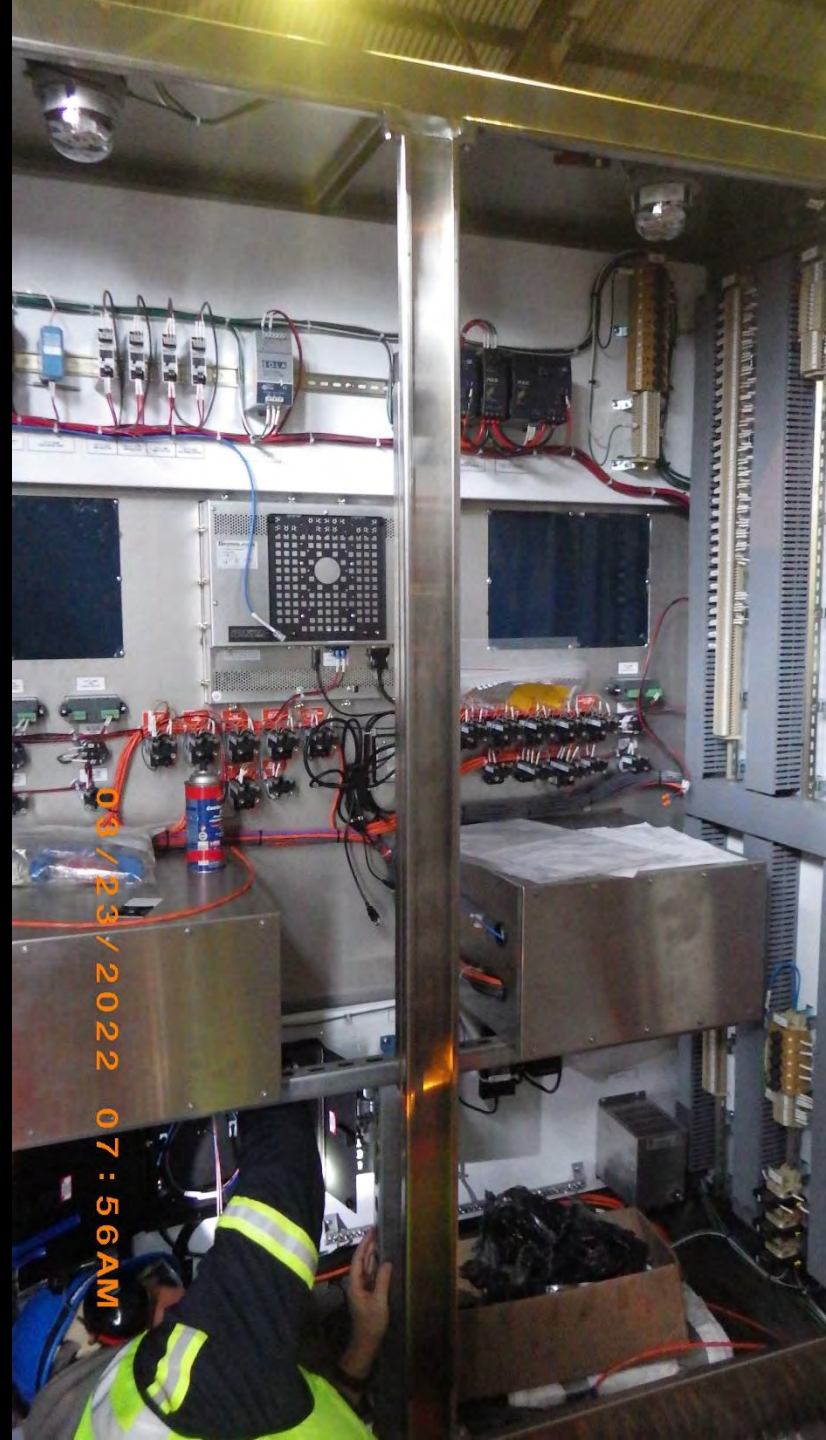


















Questions?



Thank You



# Scope Highlights



- 539 new or modified devices (ex. pressure transmitter, automated valve, hand switch, local indicator, etc.)
- 312 devices demolished
- 150 mechanical tie-in locations
- 18 new vessel nozzles (several shown in Figures 1 & 2)
- New compressor control panels with touch screen HMI and control switches
- All vibration monitoring equipment for compressors and drivers moved to new panels
- Woodward speed transmitters and speed probes added to turbine shaft.
- Added capacity to the DCS building Marshalling Cabinets and SIS expansion cabinet
- Seven pump auto-starts were added