# **Oakton College District 535**

Procurement Department, Room 1240 1600 E. Golf Rd., Des Plaines, IL 60016 847-635-1635

Invitation to Bid # 0414-25-08 Addendum#1 Issue Date: Monday, April 14, 2025

Mandatory Pre-Bid Date: April 22, 2025

# Bids will be received in the Procurement Office at the above address until 10:00AM on May 7, 2025

Bids will be publicly opened at this time. Late bids will not be accepted.

# **Skokie Campus Backup Power Generator**

The project consists of the replacement of the campus generator and associated gas piping, trenching, and coring to complete the work.

#### This bid consists of 3 documents:

- 1) Business Specifications (this document)
- 2) 1484 SPECS Oakton College Skokie Generator Issued for Bid
- 3) 1484-Oakton College Gen -Dwgs

A mandatory pre-bid meeting will be held on April 22, 2025 starting at 10:00 am at the College's Skokie campus 7701 Lincoln Ave, Skokie, IL 60077, Facilities Office.

Only contractors who attend the pre-bid meeting will be allowed to submit a bid.

Any questions regarding this bid must be submitted in writing via email by 11:00 am on April 24, 2025. All questions will be answered through an addendum and must be submitted to the following individuals: Joe Scifo, Director of Facilities, jscifo@oakton.edu

Rich Schwass, Construction Manager at <a href="mailto:rschwass@oakton.edu">rschwass@oakton.edu</a>

Aaron Reinhart <u>areinhart@kluberinc.com</u>

Trinh Than, Purchasing Manager at tthan@oakton.edu

# Oakton College District 535 is exempt from all Federal, State, and Municipal Taxes. I have examined the specifications and instructions included herein and agree, provided I am awarded a contract within 60 days of the bid due date, to provide the specified items for the sum shown in accordance with the terms stated herein. All deviations from the specifications and terms are in writing and attached hereto. I offer the following discount terms Company Name: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_ Address: \_\_\_\_\_\_\_ City/St/Zip: \_\_\_\_\_\_ Name: \_\_\_\_\_\_ Title: \_\_\_\_\_\_\_ Phone #: \_\_\_\_\_\_\_ Fax #: \_\_\_\_\_\_\_

Signature: E-mail:

List of vendors who attended the mandatory pre-bid meeting:

ARC1 Electric Powerlink Electric Airport Electric

# SECTION 00 91 01 ADDENDUM NO. 1

DATE: APRIL 25, 2025

PROJECT: RAY HARTSTEIN CAMPUS GENERATOR REPLACEMENT

7701 N. LINCOLN AVENUE SKOKIE, ILLINOIS 60077

PROJECT NO: 23-315-1484

OWNER: OAKTON COLLEGE

1600 E. GOLF ROAD

**DES PLAINES, ILLINOIS 60016** 

TO: PROSPECTIVE BIDDERS / PLAN HOLDERS OF RECORD

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE BIDDING DOCUMENTS DATED APRIL 01, 2025, WITH AMENDMENTS AND ADDITIONS NOTED BELOW. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN THE BID FORM. FAILURE TO DO SO MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

1.01 THIS ADDENDUM TOTALS TWENTY-SEVEN (27) PAGES WHICH INCLUDES SPECIFICATION SECTIONS 26 32 13 AND 26 36 00 AND PRE-BID MEETING MINUTES DATED APRIL 22, 2025.

# **CHANGES TO SPECIFICATIONS**

# 2.01 DIVISION 26 -- ELECTRICAL

# A. SECTION 26 32 13 - ENGINE GENERATORS

- 1. Delete this Section in its entirety and replace with revised Section 26 32 16 Engine Generators (attached).
  - a. Note: Under Article 2.05 Generator Set Control System, add Subparagraph 2.05;D. Entire section is re-issued for project record.

#### B. SECTION 26 36 00 - TRANSFER SWITCHES

- 1. Delete this Section in its entirety and replace with revised Section 26 36 00 Transfer Switches (attached).
  - a. Note: Under Article 2.02 Transfer Switches, delete Subparagraph 2.02;M;2;f. Entire section is re-issued for project record.
  - b. Note: Under Article 2.05 Components, delete Subparagraph 2.05;K. Entire section is reissued for project record.

# **END OF DOCUMENT**

# SECTION 26 32 13 ENGINE GENERATORS

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Packaged engine generator system and associated components and accessories:
  - 1. Engine and engine accessory equipment.
  - 2. Alternator (generator).
  - 3. Generator set control system.
  - 4. Generator set enclosure.

# 1.02 RELATED REQUIREMENTS

A. Section 26 36 00 - Transfer Switches.

# 1.03 REFERENCE STANDARDS

- A. NECA 1 Standard for Good Workmanship in Electrical Construction; 2015.
- B. NECA/EGSA 404 Standard for Installing Generator Sets; 2014.
- C. NEMA MG 1 Motors and Generators; 2021.
- D. NFPA 30 Flammable and Combustible Liquids Code; 2021, with Amendment.
- E. NFPA 37 Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines; 2021.
- F. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. NFPA 110 Standard for Emergency and Standby Power Systems; 2022.
- H. UL 1236 Battery Chargers for Charging Engine-Starter Batteries; Current Edition, Including All Revisions.
- I. UL 2200 Stationary Engine Generator Assemblies; Current Edition, Including All Revisions.
- J. ANSI/NEMA Compliance: Comply with applicable requirements of ANSI/NEMA MG 1, "Motors and Generators", and MG 2, "Safety Standard for Construction and Guide for Selection, Installation and Use of Electric Motors and Generators". Transfer switches shall comply with ICS 2.
- K. IEEE Compliance: Comply with applicable portions of IEEE Std. 241, "IEEE Requirements Practice for Electric Power Systems in Commercial Buildings" pertaining to standby power.
- L. IEEE Compliance: Comply with applicable portions of IEEE Standard 241, "IEEE Recommended Practice for Electric Power Systems in Commercial Buildings" pertaining to standby power.

# 1.04 ADMINISTRATIVE REQUIREMENTS

# A. Coordination:

1. Coordinate compatibility of generator sets to be installed with work provided under other sections or by others.

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- a. Transfer Switches: See Section 26 36 00.
- 2. Coordinate the work with other trades to avoid placement of ductwork, piping, equipment or other potential obstructions within the spaces dedicated for engine generator system.
- 3. Coordinate arrangement of equipment with the dimensions and clearance requirements of the actual equipment to be installed.
- 4. Coordinate the work to provide electrical circuits suitable for the power requirements of the actual auxiliary equipment and accessories to be installed.
- 5. Notify Architect/Engineer of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.
- B. Preinstallation Meeting: Convene one week before starting work of this section; require attendance of all affected installers.

# 1.05 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product, including ratings, configurations, dimensions, finishes, weights, service condition requirements, and installed features. Include alternator starting capabilities, engine fuel consumption rates, and cooling, combustion air, and exhaust requirements.
  - 1. Include generator set sound level test data.
  - 2. Include characteristic trip curves for overcurrent protective devices upon request.
  - 3. Include alternator thermal damage curve upon request.
  - 4. Provide data showing internal wiring diagrams for engine, generator, control panel, battery, battery rack, battery charger, exhaust silencer, vibration isolators and remote radiator (if provided).
- C. Shop Drawings: Include dimensioned plan views and sections indicating locations of system components, required clearances, and field connection locations. Include system interconnection schematic diagrams showing all factory and field connections.
- D. Evidence of qualifications for installer.
- E. Evidence of qualifications for maintenance contractor (if different entity from installer).
- F. Manufacturer's factory emissions certification.
- G. Source quality control test reports.
- H. Provide NFPA 110 required documentation from manufacturer where requested by authorities having jurisdiction, including but not limited to:
  - 1. Certified prototype tests.
  - 2. Torsional vibration compatibility certification.
  - 3. NFPA 110 compliance certification.
  - 4. Certified rated load test at rated power factor.
- I. Manufacturer's detailed field testing procedures.
- J. Operation and Maintenance Data: Include detailed information on system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and

intervals.

- 1. Include contact information for entity that will be providing contract maintenance and trouble call-back service.
- K. Executed Warranty: Submit documentation of final executed warranty completed in Owner's name and registered with manufacturer.
- L. Maintenance contracts.
- M. Project Record Documents: Record actual locations of system components, installed circuiting arrangements and routing, and final equipment settings.
  - 1. Accurately record location of engine generator and mechanical and electrical connections.
- N. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 60 00 Product Requirements, for additional provisions.
  - 2. Furnish one set of tools required for preventative maintenance of the engine generator system. Package tools in adequately sized metal tool box.
  - 3. Provide two additional sets of each fuel, oil, and air filter element required for the engine generator system.
- O. Product Data: Provide data showing dimensions, weights, ratings, interconnection points, and internal wiring diagrams for engine, generator, control panel, battery, battery rack, battery charger, exhaust silencer, vibration isolators and remote radiator.
- P. Maintenance Data: Include instructions for routine maintenance requirements, service manuals for engine and, oil sampling and analysis for engine wear, and emergency maintenance procedures.

# 1.06 QUALITY ASSURANCE

- A. Comply with the following:
  - 1. NFPA 70 (National Electrical Code).
  - 2. NFPA 110 (Standard for Emergency and Standby Power Systems); meet requirements for Level 1 system.
  - 3. NFPA 37 (Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines).
  - 4. NFPA 30 (Flammable and Combustible Liquids Code).
- B. Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
  - 1. Authorized service facilities located within 50 miles of project site.
- D. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience with engine generator systems of similar size, type, and complexity; manufacturer's authorized installer.
- E. Maintenance Contractor Qualifications: Same entity as installer or different entity with specified qualifications.
  - 1. Contract maintenance office located within 200 miles of project site.

F. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

# 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store generator sets in accordance with manufacturer's instructions and NECA/EGSA 404.
- B. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- C. Handle carefully in accordance with manufacturer's instructions to avoid damage to generator set components, enclosure, and finish.
- D. Accept packaged engine generator set and accessories on site in crates and verify damage.
- E. Protect equipment from dirt and moisture by securely wrapping in heavy plastic.

# 1.08 WARRANTY

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. Provide minimum one year manufacturer warranty covering repair or replacement due to defective materials or workmanship.

#### 1.09 MAINTENANCE SERVICE

A. Furnish service and maintenance of packaged engine generator system for one year from Date of Substantial Completion.

# PART 2 PRODUCTS

# 2.01 MANUFACTURERS

- A. Packaged Engine Generator Set:
  - 1. Caterpillar Inc: www.cat.com/#sle.
  - 2. Cummins Power Generation Inc: www.cumminspower.com/#sle.
  - 3. Generac Power Systems: www.generac.com/industrial/#sle.
  - 4. Kohler Co: www.kohlerpower.com/#sle.
- B. Substitutions: See Section 01 60 00 Product Requirements.
- C. Basis of Design: Cummins Model C250N6 Series.

# 2.02 PACKAGED ENGINE GENERATOR SYSTEM

- A. Provide new engine generator system consisting of all required equipment, sensors, conduit, boxes, wiring, piping, supports, accessories, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. System Description:
  - 1. Application: Emergency/standby. Optional.

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- 2. Configuration: Single packaged engine generator set operated independently (not in parallel).
- D. Packaged Engine Generator Set:
  - 1. Type: Gaseous (spark ignition).
  - 2. Power Rating: 250 kW, standby.
  - 3. Voltage: As indicated on drawings.
  - 4. Main Line Circuit Breaker:
    - a. Type: Thermal magnetic.
    - b. Trip Rating: Select according to generator set rating.
- E. Generator Set General Requirements:
  - 1. Prototype tested in accordance with NFPA 110 for Level 1 systems.
  - 2. Factory-assembled, with components mounted on suitable base.
  - 3. List and label engine generator assembly as complying with UL 2200.
  - 4. Power Factor: Unless otherwise indicated, specified power ratings are at 0.8 power factor for three phase voltages and 1.0 power factor for single phase voltages.
  - 5. Provide suitable guards to protect personnel from accidental contact with rotating parts, hot piping, and other potential sources of injury.
  - 6. Main Line Circuit Breakers: Provide factory-installed line side connections with suitable lugs for load side connections.
    - a. NEMA AB 1 molded case circuit breaker on generator output with integral thermal and instantaneous magnetic trip in each pole; sized in accordance with ANSI/NFPA 70. Include battery-voltage operated shunt trip, connection to open circuit breaker on engine failure. Mount unit in enclosure to meet ANSI/NEMA 250 requirements.
- F. Service Conditions: Provide engine generator system and associated components suitable for operation under the service conditions at the installed location.
- G. Starting and Load Acceptance Requirements:
  - Cranking Method: Cycle cranking complying with NFPA 110 (15 second crank period, followed by 15 second rest period, with cranking limiter time-out after 3 cycles), unless otherwise required.
  - 2. Cranking Limiter Time-Out: If generator set fails to start after specified cranking period, indicate overcrank alarm condition and lock-out generator set from further cranking until manually reset.
  - 3. Start Time: Capable of starting and achieving conditions necessary for load acceptance within 10 seconds (NFPA 110, Type 10).
  - 4. Maximum Load Step: Supports 100 percent of rated load in one step.
- H. Exhaust Emissions Requirements:
  - 1. Comply with federal (EPA), state, and local regulations applicable at the time of commissioning; include factory emissions certification with submittals.
  - 2. Do not make modifications affecting generator set factory emissions certification without approval of manufacturer and Engineer. Where such modifications are made, provide field emissions testing as necessary for certification.
- I. Sound Level Requirements:
  - 1. Do not exceed 76 dBA when measured at 23 feet from generator set in free field (no sound barriers) while operating at full load; include manufacturer's sound data with submittals.

- J. System Capacity: As noted on drawings at elevation of 700 feet above sea level, continuous rating using engine-mounted radiator.
- K. Engine Accessories: Lube oil filter, intake air filter, lube oil cooler, gear-driven water pump. Include fuel pressure gage, water temperature gage, and lube oil pressure gage on engine-generator control panel.
- L. Coolant heater: Engine mounted, thermostatically controlled, water jacket heater. The heater shall be sized as recommended by the equipment supplier. Heater voltage shall be as required.
- M. Mounting: Provide unit with suitable spring-type vibration isolators and mount on structural steel base and concrete pad.
- N. Exerciser Clock: Provide solid state exerciser clock to set the day, time, and duration of generator set exercise/test period. Provide without load selector switch for the exercise period.

# 2.03 ENGINE AND ENGINE ACCESSORY EQUIPMENT

- A. Provide engine with adequate horsepower to achieve specified power output at rated speed, accounting for alternator efficiency and parasitic loads.
- B. Engine Fuel System Gaseous (Spark Ignition):
  - 1. Fuel Source: Natural gas.
  - 2. Engine Fuel Connections: Provide suitable, approved flexible fuel lines for coupling engine to fuel source.
  - 3. Provide components/features indicated and as necessary for operation and/or required by applicable codes, including but not limited to:
    - a. Carburetor.
    - b. Gas pressure regulators.
    - c. Fuel shutoff control valves.
    - d. Low gas pressure switches.

# C. Engine Starting System:

- 1. System Type: Electric, with DC solenoid-activated starting motor(s).
- 2. Battery(s):
  - a. Battery Type: Lead-acid.
  - b. Battery Capacity: Size according to manufacturer's recommendations for achieving starting and load acceptance requirements under worst case ambient temperature; capable of providing cranking through two complete periods of cranking limiter time-outs without recharging.
  - c. Provide battery rack, cables, and connectors suitable for the supplied battery(s); size battery cables according to manufacturer's recommendations for cable length to be installed.
- 3. Battery-Charging Alternator: Engine-driven, with integral solid-state voltage regulation.
- 4. Battery Charger:
  - a. Provide dual rate battery charger with automatic float and equalize charging modes and minimum rating of 10 amps; suitable for maintaining the supplied battery(s) at full charge without manual intervention.

- b. Capable of returning supplied battery(s) from fully discharged to fully charged condition within 24 hours, as required by NFPA 110 for Level 1 applications while carrying normal loads.
- c. Recognized as complying with UL 1236.
- d. Furnished with integral overcurrent protection; current limited to protect charger during engine cranking; reverse polarity protection.
- e. Provide integral DC output ammeter and voltmeter with five percent accuracy.
- f. Provide alarm output contacts as necessary for alarm indications.
- g. Trickle type.
- Battery Heater: Provide thermostatically controlled battery heater to improve starting under cold ambient conditions.
- 6. Include remote starting control circuit, with MANUAL-OFF-REMOTE selector switch on engine-generator control panel.

# D. Engine Speed Control System (Governor):

- 1. Single Engine Generator Sets (Not Operated in Parallel): Provide electronic isochronous governor for controlling engine speed/alternator frequency.
- 2. Electronic, mechanical adjustable to maintain engine speed within 0.5 percent, steady state, and 5 percent, no load to full load, with recovery to steady state within 2 seconds following sudden load changes.

# E. Engine Lubrication System:

1. System Type: Full pressure, with engine-driven, positive displacement lubrication oil pump, replaceable full-flow oil filter(s), and dip-stick for oil level indication. Provide oil cooler where recommended by manufacturer.

# F. Engine Cooling System:

- 1. System Type: Closed-loop, liquid-cooled, with unit-mounted radiator/fan and engine-driven coolant pump; suitable for providing adequate cooling while operating at full load under worst case ambient temperature.
- 2. Fan Guard: Provide suitable guard to protect personnel from accidental contact with fan.
- 3. Radiator: Radiator using glycol coolant, with blower type fan, sized to maintain safe engine temperature in ambient temperature of 110 degrees F (43 degrees C). Radiator Air Flow Restriction: 0.5 inches of water, maximum.

# G. Engine Air Intake and Exhaust System:

- 1. Air Intake Filtration: Provide engine-mounted, replaceable, dry element filter.
- 2. Engine Exhaust Connection: Provide suitable, approved flexible connector for coupling engine to exhaust system.
- 3. Exhaust Silencer: Provide critical grade or better exhaust silencer with sound attenuation not less than basis of design; select according to manufacturer's recommendations to meet sound performance requirements, where specified.
- H. Engine speed: 1800 rpm.
- I. Safety Devices: Engine shutdown on high water temperature, low oil pressure, overspeed, and engine overcrank. Limits as selected by manufacturer.

# 2.04 ALTERNATOR (GENERATOR)

A. Alternator: 4-pole, 1800 rpm (60 Hz output) revolving field, synchronous generator complying with NEMA MG 1; connected to engine with flexible coupling; voltage output configuration as indicated, with reconnectable leads for 3 phase alternators.

#### B. Exciter:

- 1. Exciter Type: Brushless; provide permanent magnet generator (PMG) excitation system; self-excited (shunt) systems are not permitted.
- 2. PMG Excitation Short-Circuit Current Support: Capable of sustaining 300 percent of rated output current for 10 seconds.
- 3. Voltage Regulation (with PMG excitation): Plus/minus 0.5 percent for any constant load from no load to full load.
- C. Temperature Rise: Comply with UL 2200.
- D. Insulation System: NEMA MG 1, Class H; suitable for alternator temperature rise.
- E. Enclosure: NEMA MG 1, drip-proof.
- F. Total Harmonic Distortion: Not greater than five percent.
- G. Voltage Regulation: Include generator-mounted volts per Hertz exciter-regulator to match engine and generator characteristics, with voltage regulation +/- one percent from no load to full load. Include manual controls to adjust voltage drop +/- 5 percent voltage level, and voltage gain.

# 2.05 GENERATOR SET CONTROL SYSTEM

A. Provide microprocessor-based control system for automatic control, monitoring, and protection of generator set. Include sensors, wiring, and connections necessary for functions/indications specified.

# B. Control Panel:

- 1. Control Panel Mounting: Unit-mounted unless otherwise indicated; vibration isolated.
- 2. Generator Set Control Functions:
  - a. Automatic Mode: Initiates generator set start/shutdown upon receiving corresponding signal from remote device (e.g. automatic transfer switch).
  - b. Manual Mode: Initiates generator set start/shutdown upon direction from operator.
  - c. Reset Mode: Clears all faults, allowing generator set restart after a shutdown.
  - d. Emergency Stop: Immediately shuts down generator set (without time delay) and prevents automatic restarting until manually reset.
  - e. Cycle Cranking: Programmable crank time, rest time, and number of cycles.
  - f. Time Delay: Programmable for shutdown (engine cooldown) and start (engine warmup).
  - g. Voltage Adjustment: Adjustable through range of plus/minus 5 percent.
  - h. Push-to-test indicator lamps, one each for low oil pressure, high water temperature, overspeed, and overcrank.
- 3. Generator Set Status Indications:
  - a. Voltage (Volts AC): Line-to-line, line-to-neutral for each phase.
    - 1) 3-1/2 inch dial, 2 percent accuracy, with phase selector switch.

- b. Current (Amps): For each phase.
  - 1) 3-1/2 inch dial, 2 percent accuracy, with phase selector switch.
- c. Frequency (Hz).
  - 1) 45-65 Hz range, 3-1/2 inch dial.
- d. Real power (W/kW).
- e. Reactive power (VAR/kVAR).
- f. Apparent power (VA/kVA).
- g. Power factor.
- h. Duty Level: Actual load as percentage of rated power.
- i. Engine speed (RPM).
- j. Battery voltage (Volts DC).
- k. Engine oil pressure.
- I. Engine coolant temperature.
- m. Engine run time.
- n. Generator powering load (position signal from transfer switch).
- o. Engine running time meter.
- p. Auxiliary Relay: 3PDT, operates when engine runs, with contact terminals prewired to terminal strip.
- 4. Generator Set Protection and Warning/Shutdown Indications:
  - a. Comply with NFPA 110; configurable for NFPA 110 Level 1 or Level 2, or NFPA 99 systems including but not limited to the following protections/indications:
    - 1) Overcrank (shutdown).
    - 2) Low coolant temperature (warning).
    - 3) High coolant temperature (warning).
    - 4) High coolant temperature (shutdown).
    - 5) Low oil pressure (shutdown).
    - 6) Overspeed (shutdown).
    - 7) Low fuel level (warning).
    - 8) Low coolant level (warning/shutdown).
    - 9) Generator control not in automatic mode (warning).
    - 10) High battery voltage (warning).
    - 11)Low cranking voltage (warning).
    - 12)Low battery voltage (warning).
    - 13) Battery charger failure (warning).
  - b. In addition to NFPA 110 requirements, provide the following protections/indications:
    - 1) High AC voltage (shutdown).
    - 2) Low AC voltage (shutdown).
    - 3) High frequency (shutdown).
    - 4) Low frequency (shutdown).
    - 5) Overcurrent (shutdown).
  - c. Provide contacts for local and remote common alarm.
  - d. Provide lamp test function that illuminates all indicator lamps.
- 5. Other Control Panel Features:
  - a. Event log.
  - b. Remote monitoring capability via PC.

- C. Remote Annunciator:
  - Remote Annunciator Mounting: Wall-mounted; Provide flush mounted at existing annunciator location.
  - 2. Generator Set Status Indications:
    - a. Generator powering load (via position signal from transfer switch).
    - b. Communication functional.
  - 3. Generator Set Warning/Shutdown Indications:
    - a. Comply with NFPA 110; configurable for NFPA 110 Level 1 or Level 2, or NFPA 99 systems including but not limited to the following indications:
      - 1) Overcrank (shutdown).
      - 2) Low coolant temperature (warning).
      - 3) High coolant temperature (warning).
      - 4) High coolant temperature (shutdown).
      - 5) Low oil pressure (shutdown).
      - 6) Overspeed (shutdown).
      - 7) Low fuel level (warning).
      - 8) Low coolant level (warning/shutdown).
      - 9) Generator control not in automatic mode (warning).
      - 10) High battery voltage (warning).
      - 11)Low cranking voltage (warning).
      - 12)Low battery voltage (warning).
      - 13) Battery charger failure (warning).
    - b. Provide audible alarm with silence function.
    - c. Provide lamp test function that illuminates all indicator lamps.
- D. Remote Emergency Stop: Provide approved red, mushroom style remote emergency stop button located adjacent Solar PV Disconnect Switch at exterior entrance. NEMA 3R. [ADDENDUM NO. 1]

#### 2.06 GENERATOR SET ENCLOSURE

- A. Enclosure Type: Sound attenuating, weather protective.
- B. Enclosure Material: Steel or aluminum.
  - 1. All sheet metal shall be primed for corrosion protection and finish painted with the manufacturers standard color.
- C. Hardware Material: Stainless steel.
- D. Color: Manufacturer's standard.
- E. Access Doors: Lockable, with all locks keyed alike.
- F. Openings: Designed to prevent bird/rodent entry.
  - 1. Housing shall provide ample airflow for generator set operation. the housing shall have hinged side-access doors and rear control door.

- G. External Drains: Extend oil and coolant drain lines to exterior of enclosure for maintenance service.
- H. Sound Attenuating Enclosures: Line enclosure with non-hydroscopic, self-extinguishing sound-attenuating material.
- I. Exhaust Silencers: Where exhaust silencers are mounted within enclosure in main engine compartment, insulate silencer to minimize heat dissipation as necessary for operation at rated load under worst case ambient temperature.

# 2.07 SOURCE QUALITY CONTROL

- A. See Section 01 40 00 Quality Requirements, for additional requirements.
- B. Perform production tests on generator sets at factory to verify operation and performance characteristics prior to shipment. Include certified test report with submittals.
- C. Generator Set production testing to include, at a minimum:
  - 1. Operation at rated load and rated power factor.
  - 2. Single step load pick-up.
  - 3. Transient and steady state voltage and frequency performance.
  - 4. Operation of safety shutdowns.
- D. Rating: Capacity as indicated, standby service, voltage as indicated, 60Hz at 1800 rpm.
- E. Batteries: Heavy duty, lead-acid storage batteries, 170 ampere-hours minimum capacity. Match battery voltage to starting system. Include necessary cables and clamps.

# PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that the ratings and configurations of generator sets and auxiliary equipment are consistent with the indicated requirements.
- C. Verify that rough-ins for field connections are in the proper locations.
- D. Verify that mounting surfaces are ready to receive equipment.
- E. Verify that conditions are satisfactory for installation prior to starting work.
- F. Verify that required utilities are available in proper location and ready for use.
- G. Beginning of installation means installer accepts existing conditions.

# 3.02 INSTALLATION

- A. Perform work in accordance with NECA 1 (general workmanship).
- B. Install products in accordance with manufacturer's instructions.
- C. Install generator sets and associated accessories in accordance with NECA/EGSA 404.

- D. Arrange equipment to provide minimum clearances and required maintenance access.
- E. Use manufacturer's recommended oil and coolant, suitable for the worst case ambient temperatures.

# 3.03 FIELD QUALITY CONTROL

- A. See Section 01 40 00 Quality Requirements, for additional requirements.
- B. Notify Owner and Architect/Engineer at least two weeks prior to scheduled inspections and tests.
- C. Notify authorities having jurisdiction and comply with their requirements for scheduling inspections and tests and for observation by their personnel.
- D. Provide all equipment, tools, and supplies required to accomplish inspection and testing, including load bank and fuel.
- E. Preliminary inspection and testing to include, at a minimum:
  - 1. Inspect each system component for damage and defects.
  - 2. Verify tightness of mechanical and electrical connections are according to manufacturer's recommended torque settings.
  - 3. Check for proper oil and coolant levels.
- F. Prepare and start system in accordance with manufacturer's instructions.
- G. Perform acceptance test in accordance with NFPA 110.
- H. Inspection and testing to include, at a minimum:
  - 1. Verify compliance with starting and load acceptance requirements.
  - 2. Verify voltage and frequency; make required adjustments as necessary.
  - 3. Verify phase sequence.
  - 4. Verify control system operation, including safety shutdowns.
  - 5. Verify operation of auxiliary equipment and accessories (e.g. battery charger, heaters, etc.).
  - 6. Perform load tests in accordance with NFPA 110 (1.5 hour building load test followed by 2 hour full load test).
    - a. During test, record the following at 20 minute intervals:
      - 1) Kilowatts.
      - 2) Amperes.
      - 3) Voltage.
      - 4) Coolant temperature.
      - 5) Room temperature.
      - 6) Frequency.
      - 7) Oil pressure.
    - b. Test alarm and shutdown circuits by simulating conditions.
- I. Provide field emissions testing where necessary for certification.
- J. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.

# 3.04 MANUFACTURER'S FIELD SERVICES

A. Provide the services of manufacturer's representative to prepare and start system.

#### 3.05 CLEANING

A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

# 3.06 CLOSEOUT ACTIVITIES

- A. See Section 01 78 00 Closeout Submittals, for closeout submittals.
- B. See Section 01 79 00 Demonstration and Training, for additional requirements.
- C. Demonstration: Demonstrate proper operation of system to Owner, and correct deficiencies or make adjustments as directed.
- D. Training: Train Owner's personnel on operation, adjustment, and maintenance of system.
  - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
  - 2. Provide minimum of two hours of training.
  - 3. Instructor: Manufacturer's authorized representative.
  - 4. Location: At project site.
  - 5. Describe loads connected to standby system and restrictions for future load additions.
  - 6. Simulate power outage by interrupting normal source, and demonstrate that system operates to provide standby power.
- E. After successful acceptance test and just prior to Substantial Completion, replace air, oil, and fuel filters and fill fuel storage tank.

#### 3.07 PROTECTION

A. Protect installed engine generator system from subsequent construction operations.

# 3.08 MAINTENANCE

- A. See Section 01 70 00 Execution and Closeout Requirements, for additional requirements relating to maintenance service.
- B. Provide to Owner a proposal as an alternate to the base bid, a separate maintenance contract for the service and maintenance of engine generator system for two years from date of Substantial Completion; Include a complete description of preventive maintenance, systematic examination, adjustment, inspection, and testing, with a detailed schedule.
- C. Conduct site visit at least once every three months to perform inspection, testing, and preventive maintenance. Submit report to Owner indicating maintenance performed along with evaluations and recommendations.
- D. Provide trouble call-back service upon notification by Owner:
  - 1. Provide on-site response within 4 hours of notification.
  - 2. Include allowance for call-back service during normal working hours at no extra cost to Owner.

- 3. Owner will pay for call-back service outside of normal working hours on an hourly basis, based on actual time spent at site and not including travel time; include hourly rate and definition of normal working hours in maintenance contract.
- E. Maintain an on-site log listing the date and time of each inspection and call-back visit, the condition of the system, nature of the trouble, correction performed, and parts replaced.

# **END OF SECTION**

# SECTION 26 36 00 TRANSFER SWITCHES

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Transfer switches for low-voltage (600 V and less) applications and associated accessories:
  - Automatic transfer switches.
- B. Automatic Transfer Switch.

# 1.02 RELATED REQUIREMENTS

A. Section 26 32 12 - Packaged Engine Generator Systems

#### 1.03 REFERENCE STANDARDS

- A. NECA 1 Standard for Good Workmanship in Electrical Construction; 2015.
- B. NEMA 250 Enclosures for Electrical Equipment (1000 Volts Maximum); 2020.
- C. NEMA ICS 10 Part 1 Industrial Control and Systems Part 1: Electromechanical AC Transfer Switch Equipment; 2020.
- D. NETA ATS Standard For Acceptance Testing Specifications For Electrical Power Equipment And Systems; 2021.
- E. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- F. UL 1008 Transfer Switch Equipment; Current Edition, Including All Revisions.

#### 1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide catalog sheets showing voltage, switch size, ratings and size of switching and overcurrent protective devices, operating logic, short circuit ratings, dimensions, and enclosure details.
- C. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.
- D. Operation Data: Instructions for operating equipment under emergency conditions when engine generator is running.
- E. Maintenance Data: Routine preventative maintenance and lubrication schedule. List special tools, maintenance materials, and replacement parts.

# 1.05 QUALITY ASSURANCE

- A. Comply with the following:
  - 1. NFPA 70 (National Electrical Code).

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- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.
- C. Conform to requirements of NFPA 70.
- D. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience and with service facilities within 100 miles of Project.
- E. Supplier Qualifications: Authorized distributor of specified manufacturer with minimum three years documented experience.
- F. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.
  - 1. UL Compliance: Comply with applicable requirements of UL 1008, "Automatic Transfer Switches".

#### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

- A. ASCO Power Technologies, LP: www.asco.com.
- B. Eaton Corporation; Cutler-Hammer Products: www.eaton.com.
- C. Kohler: www.kohlerpowersystems.com.
- D. Cummins.
- E. Substitutions: See Section 01 60 00 Product Requirements.

#### 2.02 TRANSFER SWITCHES

- A. Provide complete power transfer system consisting of all required equipment, conduit, boxes, wiring, supports, accessories, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Applications:
- D. Construction Type: Only "contactor type" (open contact) transfer switches are acceptable. Do not use "breaker type" (enclosed contact) transfer switches.
- E. Automatic Transfer Switch:
  - 1. Transfer Switch Type: Automatic transfer switch.
  - 2. Transition Configuration: As indicated on the drawings.
  - 3. Voltage: 277/480 volt, 3 phase, 4 wire wye, 60 HZ...
  - 4. Ampere Rating: 400 Ampere..
  - 5. Neutral Configuration: Switched Neutral 4 pole (BATS-1). Unswitched Neutral, 3 pole (BATS-2)..

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- F. Comply with NEMA ICS 10 Part 1, and list and label as complying with UL 1008 for the classification of the intended application (e.g. emergency, optional standby).
- G. Do not use double throw safety switches or other equipment not specifically designed for power transfer applications and listed as transfer switch equipment.
- H. Load Classification: Classified for total system load (any combination of motor, electric discharge lamp, resistive, and tungsten lamp loads with tungsten lamp loads not exceeding 30 percent of the continuous current rating) unless otherwise indicated or required.
- I. Switching Methods:
  - 1. Open Transition:
    - a. Provide break-before-make transfer without a neutral position that is not connected to either source, and with interlocks to prevent simultaneous connection of the load to both sources.
  - 2. Obtain control power for transfer operation from line side of source to which the load is to be transferred.
- J. Service Conditions: Provide transfer switches suitable for continuous operation at indicated ratings under the service conditions at the installed location.

#### K. Enclosures:

- 1. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:
  - a. Indoor Clean, Dry Locations: Type 1 or Type 12.
- 2. Finish: Manufacturer's standard unless otherwise indicated.

# L. Short Circuit Current Rating:

1. Withstand and Closing Rating: Provide transfer switches, when protected by the supply side overcurrent protective devices to be installed, with listed withstand and closing rating not less than 42,000 rms symmetrical amperes.

# M. Automatic Transfer Switches:

- 1. Description: Transfer switches with automatically initiated transfer between sources; electrically operated and mechanically held.
- 2. Control Functions:
  - a. Automatic mode.
  - b. Test Mode: Simulates failure of primary/normal source.
  - c. Voltage and Frequency Sensing:
    - 1) Undervoltage sensing for each phase of primary/normal source; adjustable dropout/pickup settings.
    - 2) Undervoltage sensing for alternate/emergency source; adjustable dropout/pickup settings.
    - 3) Underfrequency sensing for alternate/emergency source; adjustable dropout/pickup settings.
  - d. Outputs:
    - 1) Contacts for engine start/shutdown (except where direct generator communication interface is provided).
    - 2) Auxiliary contacts; one set(s) for each switch position.

- e. Adjustable Time Delays:
  - 1) Engine generator start time delay; delays engine start signal to override momentary primary/normal source failures.
  - 2) Transfer to alternate/emergency source time delay.
  - 3) Retransfer to primary/normal source time delay.
  - 4) Engine generator cooldown time delay; delays engine shutdown following retransfer to primary/normal source to permit generator to run unloaded for cooldown period.
- f. In-Phase Monitor (Open Transition Transfer Switches): Monitors phase angle difference between sources for initiating in-phase transfer. [ADDENDUM NO. 1]
- g. Engine Exerciser: Provides programmable scheduled exercising of engine generator selectable with or without transfer to load; provides memory retention during power outage.
- Status Indications:
  - a. Connected to alternate/emergency source.
  - b. Connected to primary/normal source.
  - c. Alternate/emergency source available.
- 4. Automatic Sequence of Operations:
  - a. Upon failure of primary/normal source for a programmable time period (engine generator start time delay), initiate starting of engine generator where applicable.
  - b. When alternate/emergency source is available, transfer load to alternate/emergency source after programmable time delay.
  - c. When primary/normal source has been restored, retransfer to primary/normal source after a programmable time delay. Bypass time delay if alternate/emergency source fails and primary/normal source is available.
  - d. Where applicable, initiate shutdown of engine generator after programmable engine cooldown time delay.

# 2.03 AUTOMATIC TRANSFER SWITCH

- A. Description: NEMA ICS 10, automatic transfer switch suitable for use as service equipment.
- B. Configuration: Electrically operated, mechanically held transfer switch.
- C. Testing: Certified laboratory test data on a switch of the same design and rating shall be provided.
- D. Withstand Current Rating: rms symmetrical short circuit current available at the automatic transfer switch terminals, with the type of overcurrent protection, voltage and X/R ratio.
- E. Overload and endurance power Tables 21.2 and 23.2 of UL-1008 when enclosed according to Paragraph 1.6.
- F. Temperature rise tests after the overload and endurance tests to confirm the ability of the transfer switches to carry their rated current within the allowable temperature limits of the insulation in contact with current carrying parts.
- G. No welding of contacts. Transfer switch must be operable to alternate source after the withstand current tests.
- H. Dialelectric test at 1960 volts, rms, minimum after the withstand current test.

- The complete automatic transfer switch shall be tested to ensure proper operation of the individual components and correct overall sequence of operation and to ensure that the operating transfer time, voltage, frequency and time delay settings are in compliance with the specification requirements.
- J. The complete automatic transfer switch shall be subject to a dielectric strength test per NEMA Standard ICS 1-109.05.
- K. The control panel shall meet or exceed the voltage surge withstand capability in accordance with IEEE Standard 472-1974 (ANSI C37.90a) and the impulse withstand voltage test in accordance with NEMA Standard ICS 1-109.
- L. The automatic transfer switch shall be rated to withstand the rms symmetrical short circuit current available at the automatic transfer switch terminals, with the type of overcurrent protection, voltage and X/R ratio.
- M. The automatic transfer switch shall consist of a power transfer module and a control module, interconnected to provide complete automatic operation. The automatic transfer switch shall be mechanically held and electrically operated by a single-solenoid mechanism energized from the source to which the load is to e transferred. The switch shall be rated for continuous duty and inherently double throw. The switch shall be mechanically interlocked to ensure only one of two possible positions normal or emergency. The automatic transfer switch shall be suitable for use with emergency sources such as engine generator source or another utility source.
- N. The control module shall be supplied with a protective cover and be mounted separately from the transfer switch for ease of maintenance. Sensing and control logic shall be solid state and mounted on plug-in printed circuit boards. Printed circuit boards shall be keyed to prevent incorrect installation. Interfacing relays shall be industrial control grade, plug-in type with dust covers and locking clips. The following shall also be provided for the control module.
- O. All phases of the normal shall be monitored line-to-line. Close differential voltage sensing shall be provide don all phases. The pickup voltage shall be adjustable from 72 percent to 100 percent of nominal and the dropout voltage shall be adjustable from 72 percent to 98 percent of the pickup value. The transfer to emergency will be initiated upon reduction of normal source to 85 percent of nominal voltage and retransfer to normal shall occur when normal source restores to 95 percent of nominal.
- P. All movable parts of the operating mechanism shall remain in positive mechanical contact with the main contacts during the transfer operation without the use of separate mechanical interlocks.

  Automatic operation of the switch shall not require power from any source other than the line-to-line voltage of the source to which the switch is transferring.

# 2.04 SERVICE CONDITIONS

A. Service Conditions: NEMA ICS 10.

# 2.05 COMPONENTS

A. Indicating Lights: Mount in cover of enclosure to indicate NORMAL SOURCE AVAILABLE and ALTERNATE SOURCE AVAILABLE.

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- 1. Green lamp to indicate switch in normal position and normal power is supplying loads.
- 2. Red lamp to indicate switch in emergency position and emergency power is supplying loads.
- B. Test Switch: Mount in cover of enclosure to simulate failure of normal source.
- C. Three position selector switch with white light. Permits three modes of switch operation -- TEST, AUTO, OFF.
- D. Frequency/voltage relay for emergency source.
- E. Disconnect plug on wiring harness to disconnect switch control logic.
- F. Main shaft auxiliary contact rated ten (10) ampere at 240V (one closed on normal and one closed on emergency).
- G. Return to Normal Switch: Mount in cover of enclosure to initiate manual transfer from alternate source to normal source.
- H. Transfer Switch Auxiliary Contacts: 1 normally open; 1 normally closed.
- Normal Source Monitor: Monitor each line of normal source voltage and frequency; initiate transfer when voltage drops below 85 percent or frequency varies more than 3 percent from rated nominal value.
- J. Alternate Source Monitor: Monitor alternate source voltage and frequency; inhibit transfer when voltage is below 85 percent or frequency varies more than 3 percent from rated nominal value.
- K. Inphase Monitor: Monitors normal and emergency sources and permits transfer when phase voltages are 15 degrees and two (2) cycles. If the source supplying the load fails or drops below 70 percent, the monitor will permit immediate transfer. [ADDENDUM NO. 1]
- L. Enclosure: ICS 10, Type 1, finished with manufacturer's standard gray enamel.

# 2.06 AUTOMATIC SEQUENCE OF OPERATION

- A. Initiate Time Delay to Start Alternate Source Engine Generator: Upon initiation by normal source monitor.
- B. Time Delay To Start Alternate Source Engine Generator: 0 to 10 seconds, adjustable.
  - 1. ATS1 (Service #1/Servicer #2): 0 seconds
  - 2. ATS2 (Normal/Generator): 0 seconds
- C. Initiate Transfer Load to Alternate Source: Upon initiation by normal source monitor and permission by alternate source monitor.
- D. Time Delay Before Transfer to Alternate Power Source: 0 to 60 seconds, adjustable.
  - 1. ATS1 (Service #1/Service #2): 0 seconds
  - 2. ATS2 (Normal/Generator): 5 seconds
- E. Initiate Retransfer Load to Normal Source: Upon permission by normal source monitor.

- F. Time Delay Before Transfer to Normal Power: 0 to 30 minutes, adjustable; bypass time delay in event of alternate source failure.
- G. Time Delay Before Engine Shut Down: 0 to 30 minutes, adjustable, of unloaded operation.
- H. Engine Exerciser: Start engine every 7 days; run for 30 minutes before shutting down. Bypass exerciser control if normal source fails during exercising period.

# PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that the ratings and configurations of transfer switches are consistent with the indicated requirements.
- C. Verify that rough-ins for field connections are in the proper locations.
- D. Verify that mounting surfaces are ready to receive transfer switches.
- E. Verify that conditions are satisfactory for installation prior to starting work.

# 3.02 INSTALLATION

- A. Perform work in accordance with NECA 1 (general workmanship).
- B. Install products in accordance with manufacturer's instructions.
- C. Arrange equipment to provide minimum clearances and required maintenance access.
- D. Provide required support and attachment.
- E. Install transfer switches plumb and level.
- F. Unless otherwise indicated, mount floor-mounted transfer switches on properly sized 3 inch high concrete pad constructed.
- G. Provide grounding and bonding.
- H. Identify transfer switches and associated system wiring.

# 3.03 FIELD QUALITY CONTROL

- A. See Section 01 40 00 Quality Requirements, for additional requirements.
- B. Prepare and start system in accordance with manufacturer's instructions.
- C. Automatic Transfer Switches:
  - 1. Inspect and test in accordance with NETA ATS, except Section 4.
  - 2. Perform inspections and tests listed in NETA ATS, Section 7.22.3. The insulation-resistance tests listed as optional are not required.
- D. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.

- E. Provide the services of the manufacturer's technical representative to check out transfer switch connections and operation and place in service.
- F. Perform field inspection and testing in accordance with Section 01 40 00.
- G. Inspect and test in accordance with NETA STD ATS, except Section 4.
- H. Perform inspections and tests listed in NETA STD ATS, Section 7.22.3.

# 3.04 MANUFACTURER'S FIELD SERVICES

A. Provide the services of the manufacturer's technical representative to check out transfer switch connections and operations and place in service.

# 3.05 CLOSEOUT ACTIVITIES

A. Demonstrate operation of transfer switch in bypass, normal, and emergency modes.

# 3.06 MAINTENANCE

- A. See Section 01 70 00 Execution and Closeout Requirements, for additional requirements relating to maintenance service.
- B. Provide service and maintenance of transfer switches for one year from Date of Substantial Completion.

**END OF SECTION** 



#### PRE-BID MEETING MINUTES

**Project Number:** 23-315-1484

**Project**: 1484 – Oakton College – Ray Hartstein Campus Generator Replacement

**Meeting Number:** 1484 – 001

**Date:** 04/22/2025 **Time:** 10:00 a.m.

Prepared by: Lauren Ruhl Location: Skokie Campus – Facilities

Conference Room

Items in Blue text below are meeting minutes from the meeting. Items in Red text require action by the indicated party.

**Item Number:** 1484 – 001 - 1.

Topic: TEAM MEMBERS AND INTRODUCTIONS

- 1. The Owner started the meeting promptly at 10:00 a.m. with introductions.
  - a. The deadline for all questions via email is 11:00 a.m. on April 24, 2025.
- 2. General Information
  - a. Owner: Oakton College
  - b. Address: 1600 East Golf Road, Des Plaines, Illinois, 60016
  - c. Kluber Project No. 23-315-1484
- 3. Oakton College
  - a. Rich Schwass, Senior Manager of Campus Facilities and Construction
    - i. Rich will be the primary contact and authorized to act on behalf of Oakton College.
    - ii. Phone: (815) 635-1783 (office), (815) 661-1012 (cell)
    - iii. Email: rschwass@oakton.edu
- Kluber, Inc.
  - a. Mike Kluber, Project Manager, (630) 406-1213; mkluber@kluberinc.com
    - i. Mike will be the primary contact and authorized to act on behalf of Kluber, Inc.

**Item Number:** 1484 – 001 - 2.

Topic: ADVERTISEMENT FOR BIDS – Section 00 11 13

- 1. The Project consists of the construction of replacement of the campus generator and associated gas piping, trenching and coring to complete the Work.
- 2. Sealed bids for all Contracts will be received by the Owner in a sealed envelope addressed with the name of the Bidder, Owner, name and number of Contact, and the date and time of the Bid. Deliver to Rich Schwass, the Senior Manager of Campus Facilities and Construction, 1600 East Golf Road, Des Plaines, Illinois, 60016. Bids will be publicly opened at that time. Late bids will not be considered. Bids will be opened and reviewed by Owner and Architect. Bidders will be notified of any questions and of the final selection (award) via email.
- 3. Bidding Documents consist of:
  - a. Project Manual
  - b. One full set of Drawings

**Item Number:** 1484 – 001 - 3.

Topic: SUPPLEMENTARY INSTRUCTIONS TO BIDDERS – Section 00 21 13

- 1. Questions regarding the bids are to be sent to all individuals listed in the Invitation to Bid #0414-25-08: Joe Scifo, Rich Schwass, Aaron Reinhart and Trinh Than via email as indicated.
  - a. Joe Scifo: joe.scifo@oakton.edu
  - b. Rich Schwass: rschwass@oakton.edu
  - c. Aaron Reinhart: areinhart@kluberinc.com
  - d. Trinh Than: tthan@oakton.edu

**Item Number:** 1484 – 001 - 4.

Topic: PRELIMINARY SCHEDULE – Section 00 31 13

- 1. Award of Contract: June 24, 2025.
- 2. Commencement of Construction: June 25, 2025.
- 3. Substantial Completion: December 31, 2025.
- 4. Certificate of Occupancy: January 31, 2026.

**Item Number:** 1484 – 001 - 5.

Topic: BID FORM AND SUPPLEMENTS

- 1. Section 00 41 13 Bid Form Stipulated Sum
- 2. Section 01 21 00 Allowances
  - a. None. There are no Allowances on this bid.
- 3. Section 01 23 00 Alternates
  - a. None. There are no Alternates on this bid.

**Item Number:** 1484 – 001 - 6.

Topic: AGREEMENT FORM – Section 00 52 00

- 1. AIA Document A101-2017 "Standard Abbreviated Form of Agreement Between Owner and Contractor".
- 2. Certificate of Insurance Information is provided.
  - a. Certificate Holder: Oakton College.
  - b. Additional Insured: Kluber, Inc.

**Item Number:** 1484 – 001 - 7.

Topic: SUPPLEMENTARY CONDITIONS – Section 00 73 00

- 1. Insurance and Bonds
  - a. Contractor's Liability Insurance: Contractor is required to carry liability insurance for the limits indicated.
  - b. Contractor shall purchase and maintain insurance covering Owner's contingent liability for claims arising from operation under the Contract, including claims arising from the Work of Subcontracts.
  - c. Property Insurance: By Owner.
  - d. Performance and Payment Bond: Contractor to furnish a Performance and Payment Bond and a Labor and Material Bond equal to 100% of the full amount of the contract.
  - e. Additional Insured: Owner, Architect.

**Item Number:** 1484 – 001 - 8.

Topic: LABOR AND WAGE REQUIREMENTS - Section 00 73 40

1. Wage Determination Schedule: Contact Illinois Department of Labor for the most recent prevailing rate of wages.

2. Certified Payroll Requirements: Contractor, its subcontractors and sub-subcontractors shall submit monthly certified payroll records.

**Item Number:** 1484 – 001 - 9.

SUMMARY - Section 01 10 00 Topic:

- 1. Description of Work
  - a. The Project consists of the construction of replacement of the campus generator and associated gas piping, trenching and coring to complete the Work.
- 2. Work by Owner
  - a. Owner intends to continue to occupy adjacent portions of the existing building during the entire
  - b. construction period.
  - c. Owner intends to occupy the Project upon Substantial Completion.
  - d. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
  - e. Schedule the Work to accommodate Owner occupancy.
- 3. Owner Occupancy
  - a. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
  - b. Schedule the Work to accommodate Owner occupancy.
- 4. Contractor use of Site and Premises
  - a. Arrange use of site and premises to allow:
    - i. Owner occupancy.
    - ii. Use of site and premises by the public.
  - b. Provide access to and from site as required by law and by Owner:
    - i. Emergency Building Exists During Construction: Keep all exits required by code open during construction period; provide temporary signs if exit routes are temporarily altered.

**Item Number:** 1484 – 001 - 10.

ADMINISTRATIVE REQUIREMENTS - Section 01 30 00 Topic:

1. Contractor to schedule, administer and prepare minutes for progress meetings and pre-installation meetings.

**Item Number:** 1484 – 001 - 11.

Topic: PRICE AND PAYMENT PROCEDURES - Section 01 20 00

- 1. Pay applications will be processed through Kluber, Inc.
- 2. Certified Payroll Requirements: Contractor, its subcontractors and sub-subcontractors shall submit monthly certified payroll records.
  - a. Any contractor or subcontractor subject to this Act and any officer, employee, or agent of such contractor or subcontractor whose duty as such officer, employee, or agent it is to file such certified payroll who willfully fails to file such a certified payroll on or before the date such certified payroll is required by this paragraph to be filed and any person who willfully files a false certified payroll that is false as to any material fact is in violation of this Act and guilty of a Class A misdemeanor. (820 ILCS 130/5(2)).
  - b. A contractor or subcontractor convicted or found guilty under Section 5 or 6 of this Act shall be subject to an automatic and immediate debarment, thereafter prohibited from participating in any public works project for 4 years, with no right to a hearing (820 ILCS 130/11a).

04/22/2025 1484 - 001 Page 3 of 4 Kluber Architects + Engineers 3. Submit Schedule of Values to Architect/Engineer at earliest possible date, but no later than 14 days prior to first Pay Request.

Item Number: 1484 – 001 - 12.
Topic: SITE WALK THROUGH

- 1. The site walk through started at the exterior generator location and the generator enclosure was opened for internal inspection of the existing unit. The trenching route was indicated.
- 2. The site walk through continued to the lower-level boiler room to locate and confirm the existing conditions of the natural gas line.
- 3. The site walk through continued to the lower-level electrical room to locate and confirm the existing conditions of the automatic transfer switches.
- 4. The site walk concluded at the first-floor maintenance corridor to locate and confirm the existing conditions of the remote annunciator panel.

**Item Number:** 1484 – 001 - 13.

Topic: COMMENTS/QUESTIONS

- 1. Question: Is an EPO switch required?
  - a. Answer: Yes, an EPO switch will be located at the exterior entrance adjacent to the solar PV array disconnect. Refer to Addendum No. 1.
- 2. Comment: In-phase monitors as listed in the specifications section 26 36 00 are not required. Refer to Addendum No. 1.
- 3. Question: Is the existing generator pad to be re-used?
  - a. Answer: Yes, the basis of design is the Cummins Model C250N6 Series. Other manufacturers are acceptable; however, Contractor shall be responsible for pad modifications if required by other manufacturers at no cost to Owner.

All information reported in this document is assumed to be accurate and correct. The information on the document will remain on record unless changes are reported in writing within seven (7) days of this report to the Kluber, Inc. office.