Addendum 1 to Request for Proposal (RFP)

Southeast Island School District (SISD) Procurement of Seven (7) 25kVA Generator Complete Sets

The following changes are made to Section III. Specifications.

- → Items shown in strikethrough text are removed from the RFP.
- → Items shown in <u>underline text</u> are added to the RFP.

III. Specifications

1. Generator

- → Rated Power Output: 25kVA
- → Fuel Type: Diesel
- · Weatherproof housing for outdoor use.
- · Compliance with applicable emissions standards.

2. Trailer

- Durable and road-ready. Must be able to withstand gravel roads and uneven roads.
- Equipped with safety features, including reflectors and brake lights.
- Enclosed trailer option must include ventilation and weather-resistant construction to protect the generator.

3. Accessories

- Block heater to operate in temperatures as low as -20°F.
- Battery charger compatible with the generator battery system.
- Shore power connection setup must include all necessary cabling and connectors.

1. **Generator Specifications**

- Power Output: 25kVA (20kW)
- Voltage Options:
 - o Single Phase: 120/240V
 - o Three Phase: 208V or 240V
 - Equipped with a phase selector switch for easy transition between single-phase and three-phase power.
- Frequency: 60 Hz (standard for North America) or 50 Hz (optional for international use).
- Fuel Type: Diesel

- Alternator Type: Brushless, synchronous alternator with automatic voltage regulation (AVR).
- Cooling System: Liquid-cooled with radiator and thermostat.
- Sound Attenuation: Weatherproof, soundproof canopy to reduce noise levels (65–75 dBA at 7 meters).
- Control Panel:
 - Digital display for monitoring key parameters:
 - Voltage
 - Frequency
 - Current
 - Power output (kW/kVA)
 - Fuel level
 - Runtime
 - Error codes
 - Analog gauges:
 - Oil pressure
 - Water temperature
 - Battery voltage
 - Emergency stop button.
- Engine Specifications
 - **Engine Type:** Industrial-grade diesel engine, liquid-cooled.
 - Fuel Tank Capacity: 100–120 liters (26–32 gallons) for extended run time (approximately 12–14 hours at 75% load).
 - **Fuel Consumption:** Approx. 2–3 gallons/hour at 75% load.
 - **Starting System:** Electric start with key or push-button.
 - Starter Battery:
 - Battery Type: Heavy-duty sealed lead-acid or AGM battery.
 - **Voltage:** 12V or 24V (depending on engine specifications).
 - Capacity: 80–100Ah for reliable cold-start performance.
 - Mounting: Secured in a weatherproof and vibration-resistant battery box.
 - Charger: Integrated trickle charger to maintain battery charge during downtime.
 - **Emission Compliance:** Tier 4 Final (or regional equivalent).
- Safety Features
 - o Automatic Shutoff for:
 - Low oil pressure
 - High water temperature
 - Overload or short circuit.
 - o Circuit Breaker: Integrated to prevent overloads.
 - Water and Oil Pressure Gauges: Real-time readings to monitor performance.
- 2. Cord and Connection Specifications

- Cord Type: Heavy-duty Arctic Flex flexible power cord, rated for extreme cold-weather use.
- Length: 50 feet.
- Amperage Rating: 100 amps.
- Voltage Rating: Up to 600 volts.
- Cable Material:
 - Outer Jacket: Arctic Flex thermoplastic elastomer (TPE), resistant to UV, oil, abrasion, and extreme cold (operating temperature: -50°C to +90°C / -58°F to +194°F).
 - **Conductors:** Multi-stranded copper for superior flexibility and conductivity in freezing temperatures.
 - **Insulation:** Low-temperature thermoplastic for durability and performance in cold climates.

• Plug and Connector:

- Generator End: Compatible 100-amp pin and sleeve or cam-lock connectors (based on generator output panel configuration).
- Load End: NEMA 3R weatherproof inlet or user-specified connection (e.g., bare leads, Hubbell plug, or distribution box-compatible connectors).
- Standards Compliance: UL-listed, CSA-certified, and OSHA-approved.

3. Phase Selector Switch Specifications

- **Switch Type:** Heavy-duty rotary switch for phase selection.
- Transition Modes:
 - Single Phase: 120/240V (L-N or L-L)
 - o Three Phase: 208V/240V (L-L-L)
- **Switch Location:** Mounted on the control panel with a secure locking mechanism to prevent accidental switching.

4. Trailer Specifications

- Mounting: Heavy-duty trailer with reinforced frame, off-road-rated tires, and stabilizing jacks.
- Chassis Material: Heavy-duty steel with anti-corrosion coating.
- **Tires:** Dual-axle trailer with off-road tires.
- Hitch: Adjustable pintle hitch or ball hitch for towing.
- **Stabilizers:** Manual or hydraulic jacks for leveling.
- Lighting: LED lighting for road compliance.
- Fuel Tank Integration: Tank secured beneath or within the trailer frame with anti-splash design.

5. Additional Features

- Starter Battery Maintenance:
 - Integrated battery disconnect switch to prevent parasitic drain.
 - Easy access for replacement or maintenance.
- Optional Accessories:
 - Remote monitoring and control via mobile app.

- o <u>Block heater for cold-weather starting.</u>
- External battery charger connection.
- Spare tire mount.

• Battery Charger Specifications:

- o Compatibility with 12V or 24V generator batteries.
- o <u>Multi-stage charging capability for efficient battery management.</u>
- Output current: 10-20% of battery capacity (e.g., 10-20A for a 100Ah battery).
- Reverse polarity protection.
- o Automatic voltage detection.
- Weatherproof and durable design for outdoor use.
- o <u>Direct AC input compatibility from the generator's output (120V/240V).</u>
- o Support for lead-acid (flooded, AGM, gel) and lithium-ion batteries.