L&S Electric Inc.
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INTEGRATED SOLUTIONS
LEGENDARY SERVICE

To:	Forest City Light Plant 306 East J Street Forest City, IA 50436	**Quote No:** **Terms:** **Delivery:**	030624(2)bg Net 30 NA
Attn:	Doug Price lightplant@forestcityia.com	**F.O.B.** **Cust #** **Prices:** **Date:**	NA 10103801 Firm For 2024 March 6th, 2024
Subject:	Forest City Diesel Power Plant Onsite *Generator Cleaning, Inspection and Testing*		

L&S Electric is pleased to quote the following:

Scope of Work:
Turnkey On site Test & inspect and dry ice clean one generator onsite at the Forest City Light Plant.

Test, Inspect, Clean and Reinsulate One Generator:

- Mobilize crew to job site
- Join Forest City, IA LOTO.
- Remove all coil covers from stator. *
- Perform a visual inspection on all stator and rotor components.
- Remove brushes, brush holders and all stator coil covers.
- Isolate all windings from line leads for testing.
- Perform initial as found and a final as completed electrical testing on the generator. Field insulation resistance, field circuit resistance. Stator insulation resistance, phase to phase resistance, Polarization index test the stator winding.
- Perform an AC volt drop on the rotor coils to determine if any of the rotor field coils have any turn-to-turn shorts.
- Inspect measure and document the air gaps prior to any movements.
- Remove all stator mounting bolts and taper pins and document stator axial position and all shims.
- Move the stator from the rotor to expose both components.
- Hang barrier tarps to contain debris as best as possible.
- Install blower with filtration to pull a slight vacuum on enclosure as applicable
- Vacuum any accessible debris present
- Dry ice clean the stator windings, interior and exterior of frame, rotor assembly and all vent ducts.
- Vacuum all debris from the stator pit.
- Take pictures before and after cleaning to document the effectiveness.
- Wipe down any oil residue on frame and shaft.

- Visually inspect all stator and rotor blocking, welds, connections, vent ducts, top sticks, leads and overall integrity of all the components.
- Lay down plastic in bottom of stator, under rotor.
- Coat the stator and rotor windings, vent ducts, and slot section with an air-dry ,wicking insulating varnish.
- Supply dry ice, air compressor, air filters, ladders, chiller, and manpower for all work needed.
- Move stator in to position and adjust air gap by using one pole and rotating pole at 0, 90, 180, & 270 degrees.**
- Document slip ring run out while turning the rotor.**
- Install brush holders, set to proper height, and seat brushes to match ring profile.
- Install all coil covers.
- Clean up surrounding area around generator.
- Supply a final report with all pictures, test data and inspection summary.
- Compliance with all OSHA safety rules and regulations.

* Some disassembly of the engine operating deck may be necessary to access / rig / suspend the inboard covers.

** Subject to practicality of turning entire rotating assembly, such as a lack of turning gear / inability to dump cylinder compression, etc.

Pricing for Generator # 2: .....$ 17,967.25
Lead time: .....3 technicians| 4 days onsite each + travel

Any unexpected repairs and parts not described in the above work scope are not included in this estimate. These items will be documented, and pictures will be taken for review before we proceed. Lead-time is based on the above work scope with no other additional repairs included.

Thank you for the opportunity to be of service to you. If you have any questions, comments, or concerns regarding this information, please do not hesitate to call. L&S Electric, Inc. standard terms and conditions apply.

Sincerely,

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