- 2. The generator shall be a three phase, 60 hertz, single bearing, rotating field, synchronous type built to NEMA standards. A voltage regulator shall be provided to match the characteristics of the generator and engine. Voltage regulation shall be + 2% from no load to full rated load. Readily accessible voltage drop, voltage level and voltage gain controls shall be provided. Voltage level adjustments shall be a minimum of + 5%. Generator and exciter shall be inherently capable of parallel operation with other power sources of equivalent electrical characteristics, and stator shall include a twelve lead, re-connectable buss bar system for easy load connection.
- 3. Entire generator assembly shall be UL2200 listed.

C. Cooling System:

- 1. Radiator A radiator with blower type fan shall be sized to maintain safe operation 110 degrees F ambient temperature. Air flow restriction from the radiator shall not exceed 0.5" HO.
- 2. The engine cooling system shall be pre-treated by the system supplier for the inhibition of internal corrosion, and freezing.
- 3. Radiator exhaust shall be designed for direct updraft exhaust.

D. Fuel System:

- 1. An in-base fuel tank shall be supplied and installed by the manufacturer of the power system. The tank capacity shall be minimum 583 gallons. Tank shall be constructed of "I" beams with a 3/16" floor plates and 10 gauge tank bottom. Tank shall incorporate 1/2" drain plugs on each end, 2" fill cap with locking provisions, level indicator, supply pipe and return pipe. Tank shall have access plate for mounting of fuel level alarm and tank inspections. Tank shall be dual wall construction provided with leak detection. Leak detection alarm status shall be shown on remote annunciator. At job completion, fuel tank shall be topped off and left full
- 2. Tank shall be mounted to the skids of engine generator. Isolator pads shall be installed between pad and skid tank.
- 3. See drawings for existing power and controls conduit stub up location. Sub-base fuel tank shall take such location in consideration and accommodate such to allow existing conduit to serve generator.

E. Weather Proof Housing and Exhaust Muffler;

 Housing shall consist of a weather proof enclosure (sound attenuated not required) to completely enclose the engine generator and accessories. Housing shall protect the engine generator from the environment, yet be conductive to easy maintenance. Housing shall have removable swing out doors on each side and lockable rear door for access to meters and controls. Side doors shall have a means to pad lock. Construction of housing shall be of a minimum 14 gauge sheet steel and painted manufacturers standard color.

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