

- **Description:** To upgrade the installed AVR (Automatic Voltage Regulator) system on 2 units (One of them is redundant and the other is simplex)from **EX2100** to **EX2100e** or replace it with a fully interchangeable AVR system for each.
- A site visit is mandatory to study and understand the site's technical requirements which is a part of this RFP.
- A reference list should be provided for the new devices.
- The excitation system is brushless.
- The new device shall be compatible and communicate with the installed unit controller which is GE-MVI.
- The new device shall be compatible with the existing system including the power supply, other hardware, settings, and parameters.
- Using the existing panel.
- The new AVR shall comply with the requirements of IEC and IEEE standards.
- The equipment shall be complete in every respect and designed for the highest degree of reliability and minimum maintenance requirements.
- **The following features shall be included:**
 - a) PSS (Power System Stabilizer) shall be included and activated.
 - b) Automatic follow-up device.
 - c) Stator current limiter.
 - d) Rotor current limiter.
 - e) Rotor angle limiter.
 - f) Soft start facility.
 - g) Under excitation limiter.
 - h) No load excitation limiter.
 - i) Over-excitation limiter.
 - j) Power factor / VAR controller.
 - k) Cross current compensation.
 - l) V / f limiter.
 - m) Line drop compensator.
 - n) Starting and stopping sequence controller.
 - o) Accuracy of excitation control is 0.5% overall.



- p) Local and remote points of control.
- q) Automatic and manual modes of operation
- r) The standby AVR channel shall be continuously monitored, and system operation and protection shall be unaffected by transfer of control from one channel to another.
- s) rapid de-excitation.
 - All tests shall be conducted by the Bidder, at his expense, to demonstrate the capability, guaranteed performance, and compliance with the specification.

