# Motor Monitoring System Guide Form Specification

Motor Monitoring System consisting of a predictive electrical motor failure detection solution that provides information on evolving motor faults before the motors are non-operational. The system must be able to alarm electrical and mechanical failures.

# Requirements:

1. The Motor Monitoring System must be centralized, covering from a single platform to the complete motor asset fleet.
2. The platform must support remote secured connectivity through web client to display individual asset or complete fleet health status dashboards.
3. The Motor Monitoring System must use existing information extracted from protection relays or meters in motor control center through IEC-61850. No additional sensors are to be installed in the motor or motor control center for this purpose.
4. Motor Monitoring System must detect at least the following failures:
   1. Outer Race Defect
   2. Inner Race Defect
   3. Stator Intern-turn short
   4. Broken Rotor Bar
   5. Mixed Eccentricity
   6. Bent Rotor Shaft
   7. Foundation Looseness
   8. Load Misalignment
5. The system must provide remote subject matter expert support on motor failure detection for the duration of the contract to interpret failures and provide recommendations to address them.
6. The Motor Monitoring System must cover induction and synchronous electrical motors of any voltage level (>1kV and <1kV)