

# Power Factor Tip-up Test

Conducted per API 541 4th edition Section 4.3.4.3

Recommended for stator voltages 6600 V and above for the completed stator. This test provides a "base line" for later maintenance tests to detect corona discharge within the insulation system. This test may also be specified on sacrificial coils for development testing, but acceptance criteria needs to be agreed upon between the user and supplier. The power factor tip up test is usually conducted at 10% and 110% or 20% and 120% of rated line-to-ground power voltage. The test results are plotted for each motor and percent deviation is calculated. When multiple motors of the same design are tested and compared, the test values should be similar. Any motor that deviates significantly from the others should be investigated further for any potential winding/insulation problem(s).