

## MCE Case Study

Customer: Southport Capital Power Station

Asset: 125 HP AC Induction Motor (Critical Fan Application)

Scope: Critical motor evaluated with PdMA MCE Tester during spring outage

Findings: Test data recoded 5/14/13 indicated low insulation resistance & significant change to resistive & inductance values from previous test data.

Investigation of motor connections in motor connection box revealed failed connection.

Test data recorded 5/15/13 (post repairs) confirm successful repair and motor safe for operation.

Test Date	10/20/2011	5/14/2013	5/15/2013
Test Time	1:12:09 PM	5:27:01 PM	1:22:21 PM
Test Location	T-Leads	T-Leads	T-Leads
	Baseline		
Measured Mohm	6835	0.14	481.1
Corrected Mohm	3200	0.1	224
pF Ph 1 to Ground	32000	33750	32250
ohm Ph 1 to 2	0.04700	0.06750	0.04750
ohm Ph 1 to 3	0.04650	0.06500	0.04750
ohm Ph 2 to 3	0.04750	0.12150	0.04650
mH Ph 1 to 2	5.78500	7.46000	6.11500
mH Ph 1 to 3	4.990	7.285	5.900
mH Ph 2 to 3	5.440	9.855	5.490
Average Inductance	5.405	8.200	5.835
% Res. Imbalance	1.06	43.5	1.41
% Ind. Imbalance	7.68	20.18	5.91

