EMC Standards Status Report Nirmal Ghai Standards Coordinator Email: <u>nghai@austin.rr.com;</u> PH: 512-258-4710 June 1, 2005

1. Summary:

Our overall performance on standards and standards maintenance in the past year, in general, was much better than in the year before. One standard was reaffirmed, four are in the negative ballot or comments resolution stage, three are in ballot, two are being revised, PAR is being developed for one, one was converted to full-use status, , and Materials Subcommittee is reviewing six standards to decide what to do with them. However, no action is planned on two administratively withdrawn standards and one appears to be lost somewhere between the initial ballot and reaffirmation-ballot

It is recommended that the EMC reemphasise to its subcommittees to discontinue the practice of working on standards development and/or revision without approved PARs. IEEE does not permit this practice.

A list of IEEE/PES/EMC current standards is included in this report. Also listed are individual standards responsibilities for various EMC subcommittees.

2. The following standard was converted to a full-use standard 1434

3..The following standards have been reaffirmed 1310

4. The following standards are in ballot 1 434 1415

5. The following standards have been balloted and are in the negative-ballot or other comment resolution stage:

56 67 C50.12 C50.13

6. The following standards are being revised: 115

7.The following standard will not be maintained 432

8. The following standards **lapsed** in the pre 2002 period for lack of interest on our part: 17 58 85 86 113 114 116 334 421 792 1043

9. The responsible EMC Subcommittees for EMC standards are:

• Ir	nduction ma	ichir	nery:								
		•	112	252	620						
• S	ynchronous	ma	chinery:	:							
		•	67	115	492	1129	1255	C50			
• D	C & Perma	nent	t Magne	et:							
		 No current standards 									
• N	laterials:										
		•	43	56	62.2(?)	95	117	275	286	304	429
		•	432	433	434	522	1107	1310	1434	1553	

IEEE 11 – 2000	Current IEEE/PES/EMC Standards Standard for Rotating Machinery for Rail and Road Vehicles
IEEE 43 – 2000	Recommended Practice for Testing Insulation Resistance of Rotating Machinery
IEEE 67 – 1990	Guide for Operation and Maintenance of Turbine Generators
IEEE 95 – 1977(R1991)	Recommended Practice for Insulation Testing of Large AC Rotating Machinery with High Direct Voltage".
IEEE 112 – 2004	Test Procedure for Polyphase Induction Motors and Generators
IEEE 115 – 1995(R2002)	Test Procedures for Synchronous Machines Part I – Acceptance and Performance Testing Part II – Test Procedures and Parameter Determination for Dynamic Analysis
IEEE 252 – 1995	Standard Test Procedure for Polyphase Induction Motors having Liquid in the Magentic Gap
IEEE 286 – 2000	Recommended Practice for Measurement of Power-Factor Tip-Up of Rotating Machinery Stator Coil Insulation.
IEEE 434 – 1973(R1991)	Guide for Functional Evaluation of Insulation Systems for Large High Voltage Machines
IEEE 492 – 1999	Guide for Operation and Maintenance of Hydro-Generators
IEEE 522 - 2004 `	Guide for Testing Turn-to-Turn Insulation on Form-Wound Stator Coils for Alternating-Current Rotating Electric Machines
IEEE 620 – 1996(R2003)	Guide for the Presentation of Thermal Limit Curves for Squirrel Cage Induction Machines
IEEE 1129 – 1992	Recommended Practice for Monitoring and Instrumentation of Turbine Generators
IEEE 1255 – 2000	Guide for Evaluation of Torque Pulsations During Starting of Synchronous Motors
IEEE 1310 – 1996	Trial Use Recommended Practice for Thermal Cycle Testing of Form-Wound Stator Bars and Coils for Large Generators
IEEE 1434 – 2000	Trial Use Guide to Measurement of Partial Discharges in Rotating Machinery
IEEE 1553 – 2002	Trial Use Standard for Voltage Endurance Testing of Form Wound Coils and Bars for Hydrogenerators
Also: C50.12	Standard for salient pole 50 and 60 Hz synchronous generators and generators/motors for hydraulic turbine applications rated 5 MVA and above
C50.13	Standard for cylindrical rotor 50 and 60 Hz synchronous generators rated 10 MVA and above.