P2465

Submitter Email: wmmcdermid@hydro.mb.ca
Type of Project: New IEEE Standard
PAR Request Date: 03-Jul-2017
PAR Approval Date: 28-Sep-2017
PAR Expiration Date: 31-Dec-2021
Status: PAR for a New IEEE Standard

1.1 Project Number: P2465
1.2 Type of Document: Recommended Practice
1.3 Life Cycle: Trial Use

2.1 Title: Recommended Practice for Pulse-Type Partial Discharge Measurements on Individual Stator Coils and Bars

3.1 Working Group: Materials SC - Pulse-type partial discharge measurements on individual stator coils and bars (PE/EM/Matl - WG2465/Pulse-type PD)
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3.2 Sponsoring Society and Committee: IEEE Power and Energy Society/Electric Machinery (PE/EM)
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3.3 Joint Sponsor: IEEE Dielectrics and Electrical Insulation Society/Standards Committee (DEI/SC)
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 01/2020
4.3 Projected Completion Date for Submittal to RevCom
Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 08/2020

5.1 Approximate number of people expected to be actively involved in the development of this project: 20
5.2 Scope: This document describes pulse-type partial discharge (PD) test methods for individual form-wound stator coils and bars that are equipped with PD suppression coatings and energized using a sinusoidal voltage source. It includes a procedure for measurement in terms of apparent charge at frequencies below 1 MHz. It also includes a procedure for measurements in millivolts at higher frequencies up to 100 MHz. This document does not provide pass/fail criteria.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: The purposes of this recommended practice are as follows:
   a) To provide a uniform procedure for pulse-type partial discharge measurements on the groundwall insulation system of individual
form-wound stator coils and bars in order to obtain consistent results.
b) To describe the measurement circuits.
c) To describe the simulated slot and external factors affecting the measurements.
d) To recommend a method for calibration or normalization.
e) To recommend appropriate test voltage levels.
f) To determine the need and parameters for conditioning.
g) To provide guidelines for the interpretation of test results.

5.5 Need for the Project: There can be great variation in the measurement of partial discharge on coils and bars which can reduce the usefulness of the data obtained.

5.6 Stakeholders for the Standard: Manufacturers and users of stator coils and bars.

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
   Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes: