

# P2465

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**Submitter Email:** [wmmcdermid@hydro.mb.ca](mailto: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

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**1.1 Project Number:** P2465

**1.2 Type of Document:** Recommended Practice

**1.3 Life Cycle:** Trial Use

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

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**3.1 Working Group:** Materials SC - Pulse-type partial discharge measurements on individual stator coils and bars (PE/EM/Matl - WG2465/Pulse-type PD)

**Contact Information for Working Group Chair**

**Name:** William McDermid

**Email Address:** [wmmcdermid@hydro.mb.ca](mailto:wmmcdermid@hydro.mb.ca)

**Phone:** +1 204 360 3787

**Contact Information for Working Group Vice-Chair**

None

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**3.2 Sponsoring Society and Committee:** IEEE Power and Energy Society/Electric Machinery (PE/EM)

**Contact Information for Sponsor Chair**

**Name:** Kiruba Haran

**Email Address:** [kharan@illinois.edu](mailto:kharan@illinois.edu)

**Phone:** 1-217 244 1838

**Contact Information for Standards Representative**

**Name:** Innocent Kamwa

**Email Address:** [kamwa@ireq.ca](mailto:kamwa@ireq.ca)

**Phone:** 450-652-8122

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**3.3 Joint Sponsor:** IEEE Dielectrics and Electrical Insulation Society/Standards Committee (DEI/SC)

**Contact Information for Sponsor Chair**

**Name:** Sudhakar Cherukupalli

**Email Address:** [s.cherukupalli@ieee.org](mailto:s.cherukupalli@ieee.org)

**Phone:** 604-528-1609

**Contact Information for Standards Representative**

**Name:** Sudhakar Cherukupalli

**Email Address:** [s.cherukupalli@ieee.org](mailto:s.cherukupalli@ieee.org)

**Phone:** 604-528-1609

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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

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**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.

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### **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

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**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

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### **8.1 Additional Explanatory Notes:**