

PowerDiag2026

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International Workshop on Diagnostics, Testing, Monitoring and Maintenance of Power Equipment

AMADRIA Park, Opatija, Croatia
24–26 June 2026

INTRODUCTION

PowerDiag 2026 (Days of Diagnostics) is an international professional event dedicated to the diagnostics, testing, monitoring, and maintenance of power system equipment. The objective of the conference/workshop is to bring together industry, electric utilities, research institutions, and the academic community through the exchange of knowledge, practical experience, and modern solutions for power system asset management.

The workshop and technical session program is structured according to the technical scope of the Study Committees of HRO CIGRE: **A1 – Power Generation and Electromechanical Energy Conversion, A2 – Power Transformers and Reactors, A3 – Transmission and Distribution Equipment, D1 – Materials and Emerging Testing Techniques.**

The venue will take place in Opatija, a magnificent coastal town on the Adriatic Sea and a well-known 19th-century health resort, is today a popular holiday destination for tourists from all over the world. A mild and pleasant climate makes Opatija a perfect destination all year long.



DAY 1 – ELECTRICAL MACHINES AND TRANSFORMERS

WS-A1.1 – Diagnostics and Condition Assessment of Turbine–Generator Systems (CIGRE SC A1)

Topic: Mechanical–Electrical Interaction, Monitoring and Reliability

WS-A2.1 – Advanced Transformer Diagnostics and Condition Assessment (CIGRE SC A2)

This workshop covers dissolved gas analysis (DGA), insulation system testing, assessment of transformer aging mechanisms, and estimation of remaining transformer lifetime, including practical operational case studies.

Topic: DGA, Insulation Systems, Aging Mechanisms and Lifetime Evaluation

WS-A1.2 – Advanced Diagnostics and Online Monitoring of Power Generators (CIGRE SC A1)

Topic: Partial Discharge, Insulation Systems and Condition-Based Maintenance

Special Scientific Lecture

Based on scientific publications and doctoral dissertations: Air-Gap Monitoring and Electromagnetic Diagnostics of Large Electrical Machines.

Topic: Eccentricity Detection, Magnetic Field Analysis and Fault Prevention

DAY 2 – TRANSFORMER MONITORING AND SWITCHGEAR

WS-A2.2 – Online Monitoring Systems for Power Transformers (CIGRE SC A2)

From sensors and data acquisition to integration into SCADA/BMS systems and maintenance decision-making.

Topic: From Sensors and Data Acquisition to Asset Management Decisions.

WS-A3.1 – Diagnostics and Condition Monitoring of High-Voltage Switchgear (CIGRE SC A3)

Contact resistance measurements, mechanical diagnostics, and thermographic inspections aimed at improving equipment reliability.

Topic: IEEE standards, manufacturing and applications.

WS-A3.2 – SF6 Alternatives and Diagnostics of Modern Switchgear (CIGRE SC A3)

New insulation media, regulatory requirements, and diagnostic challenges of modern switchgear solutions.

Topic: Environmental Regulations, New Insulation Media and Condition Monitoring

Technical Panel – Digital Twins & Predictive Maintenance

DAY 3 – FINAL WORKSHOP

WS-D1 – Integrated Diagnostics of Power Equipment (CIGRE SC D1)

Integrated approach to diagnostics of electrical machines, transformers, and switchgear within a unified asset management system.

WS-D1-BESS – Diagnostics and Reliability of Battery Energy Storage Systems

CIGRE D1 Perspective on BESS Integration, Monitoring and Lifecycle Management.

More details are given on the following link: <https://icpgeec.org/>

INDUSTRY PARTNERS AND EXHIBITORS

Exhibition area – Opportunity for exhibitors to showcase innovative products and solutions for diagnostics and monitoring of power system equipment.

Exhibitor Case Study Presentation Opportunity - Dedicated presentation time slot