

IEEE Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV ac and $\pm$ 750 kV dc

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Abstract: Recommendations are provided for the in-service use, care, maintenance, and electrical testing of conductive clothing, including suits, gloves, socks, and boots, for use on voltages up to 765 kV ac and $\pm$ 750 kV dc.

Keywords: conductive clothing, nondestructive evaluation (NDE), nondestructive testing

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Introduction

(This introduction is not part of IEEE Std 1067-1996, IEEE Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV ac and ± 750 kV dc.)

Conductive clothing provides a shield around the worker's body that minimizes discomfort due to the electric field.

The original development and testing of conductive suits dates back to the early 1960s.

The success of these suits in relieving the worker from discomfort while working on lines up through 765 kV ac and ± 750 dc has played an important role in the successful operation, maintenance, and continuity of service of these extremely high voltage (EHV) lines.

A number of member companies within IEEE's Subcommittee on Engineering in the Safety, Maintenance, and Operation of Lines (ESMOL) made it known that an in-service guide was needed to inspect and test conductive suits before a worker went up to the energized conductor.

Prior to the drafting of this guide, a survey of the user community was conducted to determine if such a guide was needed, and also to solicit user procedures for the purpose of sharing information. It was evident that little technical information was available. It was also learned, however, that information was needed. ESMOL was encouraged to research the subject and to summarize its findings into a guide.

This guide was revised to reflect advancements in the manufacturing and testing of conductive clothing. It is intended that the contents of this guide will be modified as future needs dictate. Suggestions for improvements and additions are welcome.

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