

IEC 61850标准一致性仿真测试系统

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摘要

在研究IEC 61850标准体系结构的基础上提出了遵循该标准的一致性测试实施方案, 应用自主研发的IEC 61850客户端、智能电子设备模拟器(服务器端)、配置工具等应用软件构建了仿真测试系统, 并对2个典型变电站进行了现场测试。测试结果表明, 不同的自动化设备厂商对IEC 61850标准在工程实践中的应用方面存在差异。测试过程也证明该仿真系统运行稳定、结论可靠, 具有良好的互操作性。

关键词 [IEC 61850](#); [一致性测试](#); [变电站自动化系统](#); [配置工具](#); [抽象通信服务](#)

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Research on Conformance Simulation Testing System Based on IEC 61850

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Abstract

On the basis of researching the architecture of IEC 61850 standard, a conformance-testing scheme that follows this standard is proposed. By use of self-developed application software such as client monitoring software, intelligent electronic device (IED) simulator at server side as well as system configuration tool, a simulation testing system is constructed and applied to the on-site testing for two typical substations. Testing results show that there are differences among different automation device manufacturers in application of IEC 61850 standard to practical engineering. Meanwhile, it is also proved by the testing process that the proposed simulation testing system possesses good interoperability, its operation is stable and the conclusion of the tests are reliable.

Key words [IEC 61850](#); [conformance test](#); [substation automation system](#); [configuration tool](#); [abstract communication service](#)

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