

高电压技术

±800 kV直流输电线路带电作业的屏蔽防护

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摘要:

±800 kV直流输电线路即将在我国建成投运, 其空间场强要高于500 kV及以下电压等级的输电线路。为保证±800 kV直流输电线路带电作业的安全可靠进行, 首先分析了带电作业屏蔽防护应达到的安全控制水平, 然后对±800 kV直流输电线路带电作业人员的安全防护措施进行了试验研究, 试验内容包括屏蔽服内外电场强度的测量、流过屏蔽服和人体的电流的测量。试验结果表明, 穿戴全套屏蔽用具进行±800 kV直流输电线路带电作业是安全可行的。

关键词: ±800 kV直流线路 特高压输电 屏蔽服 带电作业

Shielding Protection for Live Working on ±800 kV DC Transmission Line

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Abstract:

In the context of the fact that ±800 kV DC transmission line will be built and put into operation in China soon, and the electric field intensity in the surrounding space of ±800 kV DC line is stronger than that of 500 kV and lower voltage level line. To ensure the safety of live working on ±800 kV DC line, the levels which safety protection should meet were analyzed firstly, then the security measures with which people conduct live working on ±800 kV DC line were tested and studied, including measurements of the electrical field intensity inside and outside of screening clothes, the current flowing through both screening clothes and human body. Test results show that screening clothes are safe and feasible, which should be applied during live working on ±800 kV DC transmission lines.

Keywords: ±800 kV DC transmission line ultra high voltage power transmission screening clothes live working

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