

HTS DC Cable Line Project: On-going Activities in Russia.

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Abstract - Previous research has shown that implementing HTS DC power cables in electrical grids of large metropolitan areas will have major positive impacts on power system operation and control. Current activities in Russia comprise developing a 2.5 km HTS DC cable and its installation in St. Petersburg electrical grid. This work includes five major parts: installation site selection, cable calculation, development and manufacturing, cryogenic equipment development, AC/DC converter development and testing of all DC line elements. As of today, the list of subcontractors has been approved. The purpose of this report is to summarize current results and future work.

Keywords - HTS DC cable, electrical grid, AC/DC converters, cryogenic equipment.

IEEE/CSC & ESAS European Superconductivity News Forum (ESNF) No. 23 January 2013; Category 6.

The published version of this preprint appeared in *IEEE Transactions on Applied Superconductivity* 23, 5401904 (June 2013).