

Application of the Superconducting Power Cables in the RHIC Project*, R.F. LAMBIASE, BNL - The RHIC Project, now in construction at Brookhaven National Laboratory, is being constructed with superconducting power cables, known as the Cold Crossing Buses (CCBs), to make most of the connections between the power supplies and their magnet loads. This flexible, one inch diameter cable is installed in helium transport pipes, and replaces much larger, more expensive, and less energy efficient conventional copper cable and tray systems. First, the final design of the CCB and it's application in RHIC is reviewed. Then, experience gained with the completion of manufacturing and installation of the CCB cables is presented. Finally, test results and the use of the CCB in the first sextant test of RHIC will be discussed.

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