

TEST FACILITY FOR NCSX FIELD COILS*

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The National Compact Stellarator Experiment (NCSX) is a medium scale stellarator/tokamak hybrid ($R = 1.4$ m) featuring modular, toroidal, and poloidal field coils. The NCSX program requires these coils to be operated at cryo-resistive temperatures with a pre-pulse temperature of 80°K . A cryogenic coil test facility (CTF) has been constructed that will allow the pulsing of individual field coils to full operating limits and demonstrate the single-phase liquid nitrogen heat removal technique planned for NCSX operations. The CTF subsystems will be described and initial operating experience shared.

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