LONG-PULSE MODULATOR FOR THE SUPERCONDUCTING RF TEST FACILITY AT KEK

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Abstract
A long-pulse modulator for the Superconducting RF Test Facility (STF) at KEK is under development now. The modulator is a direct-switched type design with a bouncer circuit to compensate the output pulse droop, and operates the klystron up to 5 MW peak power, 1.5 ms rf pulse width and up to 5 pps repetition rate. The modulator is built by improving a klystron modulator system inherited from Power Reactor and Nuclear Fuel Corp. The design and specifications of the modulator as well as R&D status for ILC modulator are described.