Experience in Maintaining and Operating Power Supplies used in Accelerators*, H. PFEFFER, D. WOLFF, Fermilab - The operation of power supplies providing power to magnets and other devices used to control charged particle beams in accelerators demand a somewhat unique approach to their design, specification, operation and maintenance. This paper presents several practical principles based on 20 years of operating experience at Fermilab. The principles are divided into two separate categories depending on the operating mode of the accelerator: a rapid cycling or "fixed target" mode and a continuous or "collider mode. These principles range from specific hardware suggestions to methods of managing the maintenance and repair process.

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