HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

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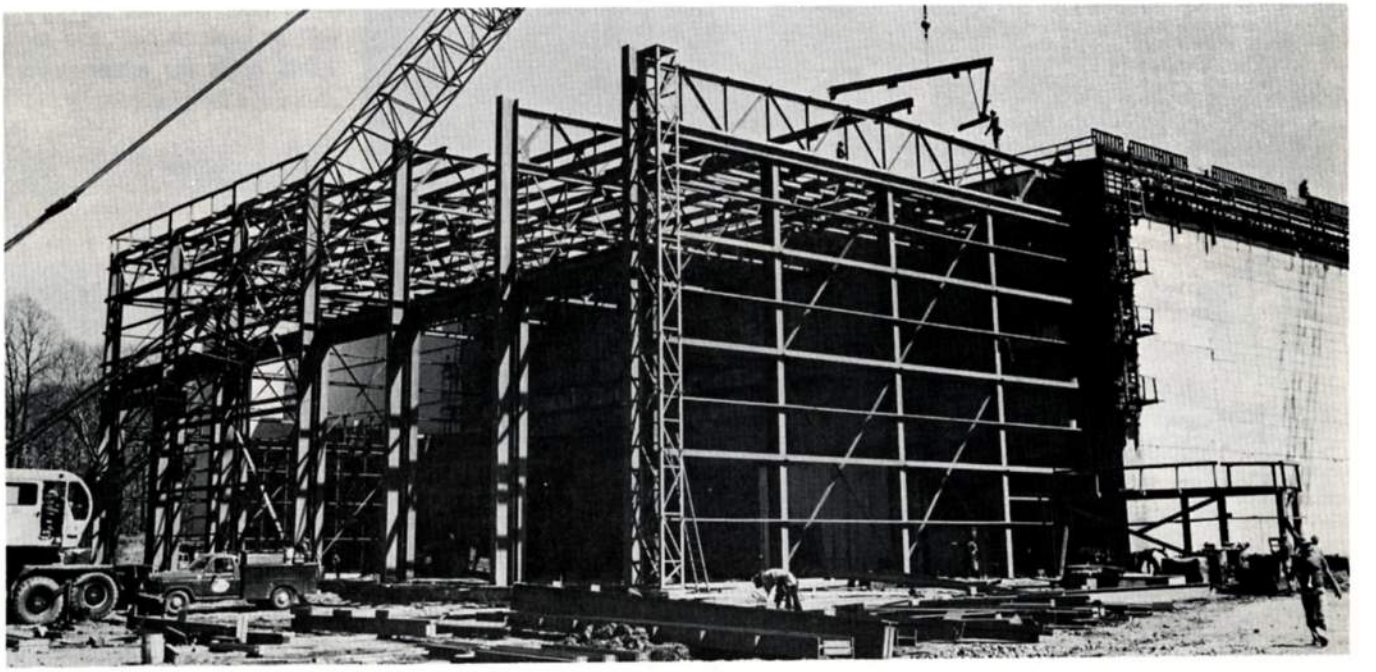
TFTR FACILITIES

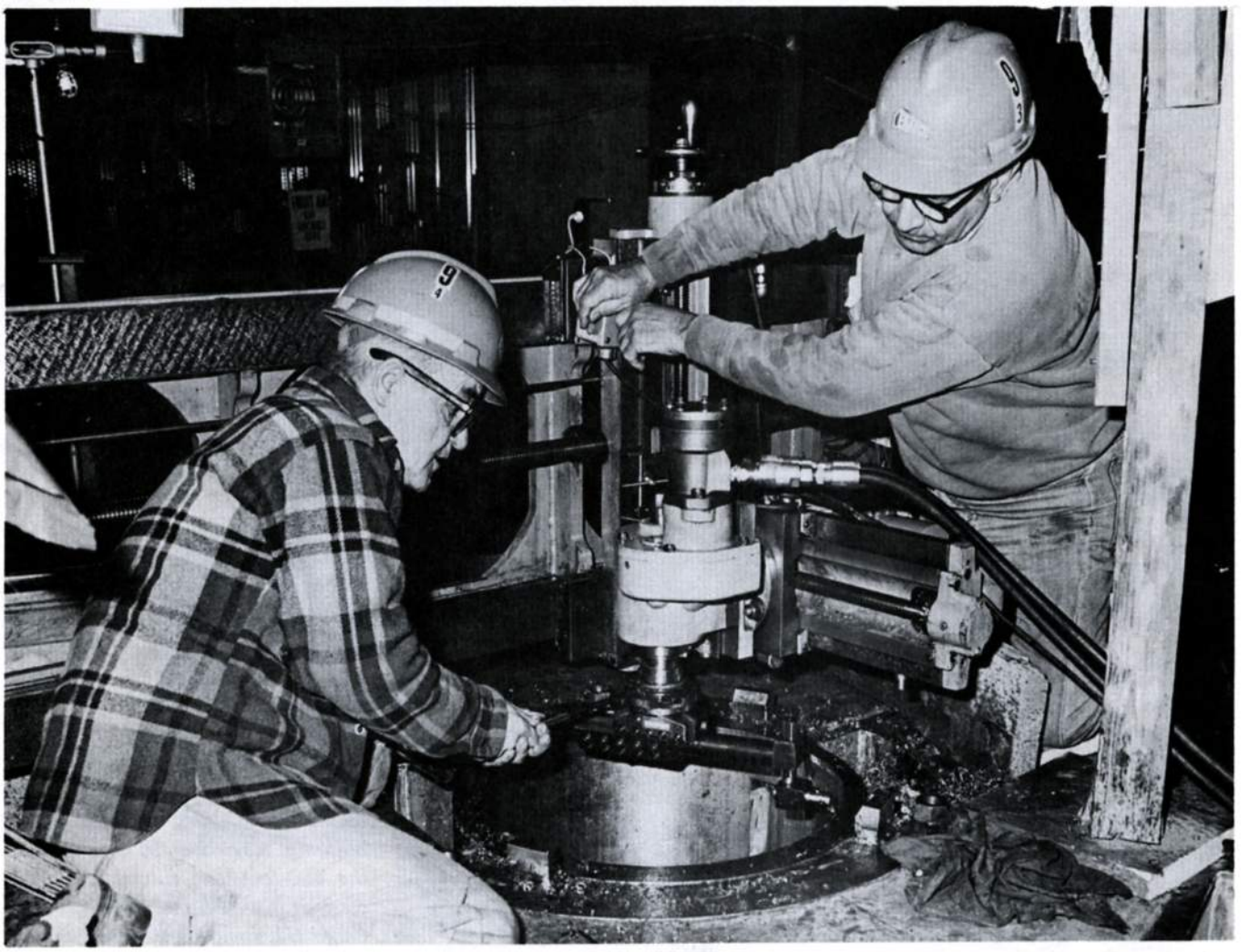
Rapid progress continues on the facilities for TFTR. Given the continuation of good weather, outside work is expected to be completed on schedule for the arrival of machine components.



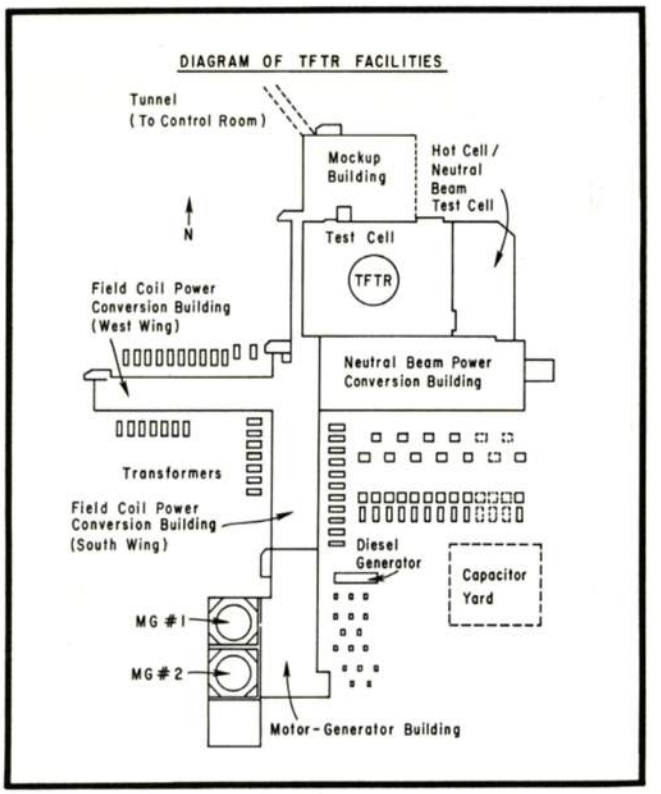
Framing of the Mock-up Building is shown above with the Test Cell in the background. The building will house the M-3 mock-up, now at A-Site, which will be used for remote handling and assembly testing. The floors in the building are finished, and siding is being installed on the east wall. Completion will be early this summer.

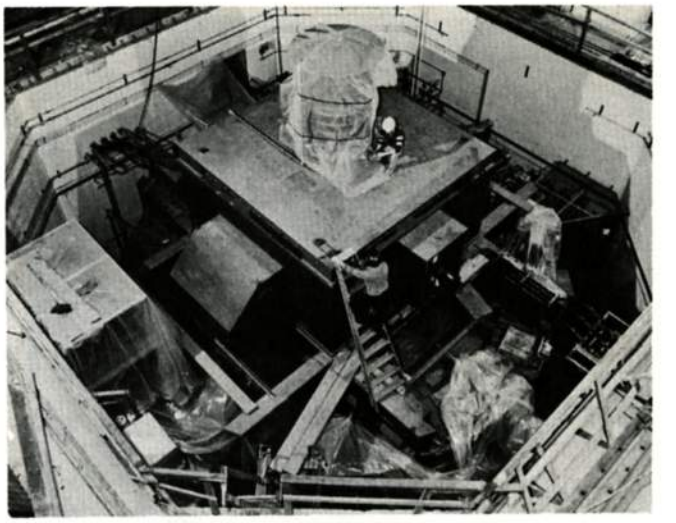
The photo at left, taken in February, shows work on the tunnel that connects the TFTR control room in the Lab/Office Building to the Mock-up Building. Now over 95% complete, the 600-foot-long tunnel has been covered over and the area regraded. Cable trays and permanent lighting are now being installed.

Inside the Test Cell. The TFTR substructure is shown covered with temporary wooden platforms. Machining of the substructure is now going on. There are 181 separate areas to be milled to tolerances of 0.030-inch. The pin shown protruding from the center of the substructure will serve as a pivot point for a drilling jig that will be used to drill and tap 1,096 holes for attachments above the substructure.

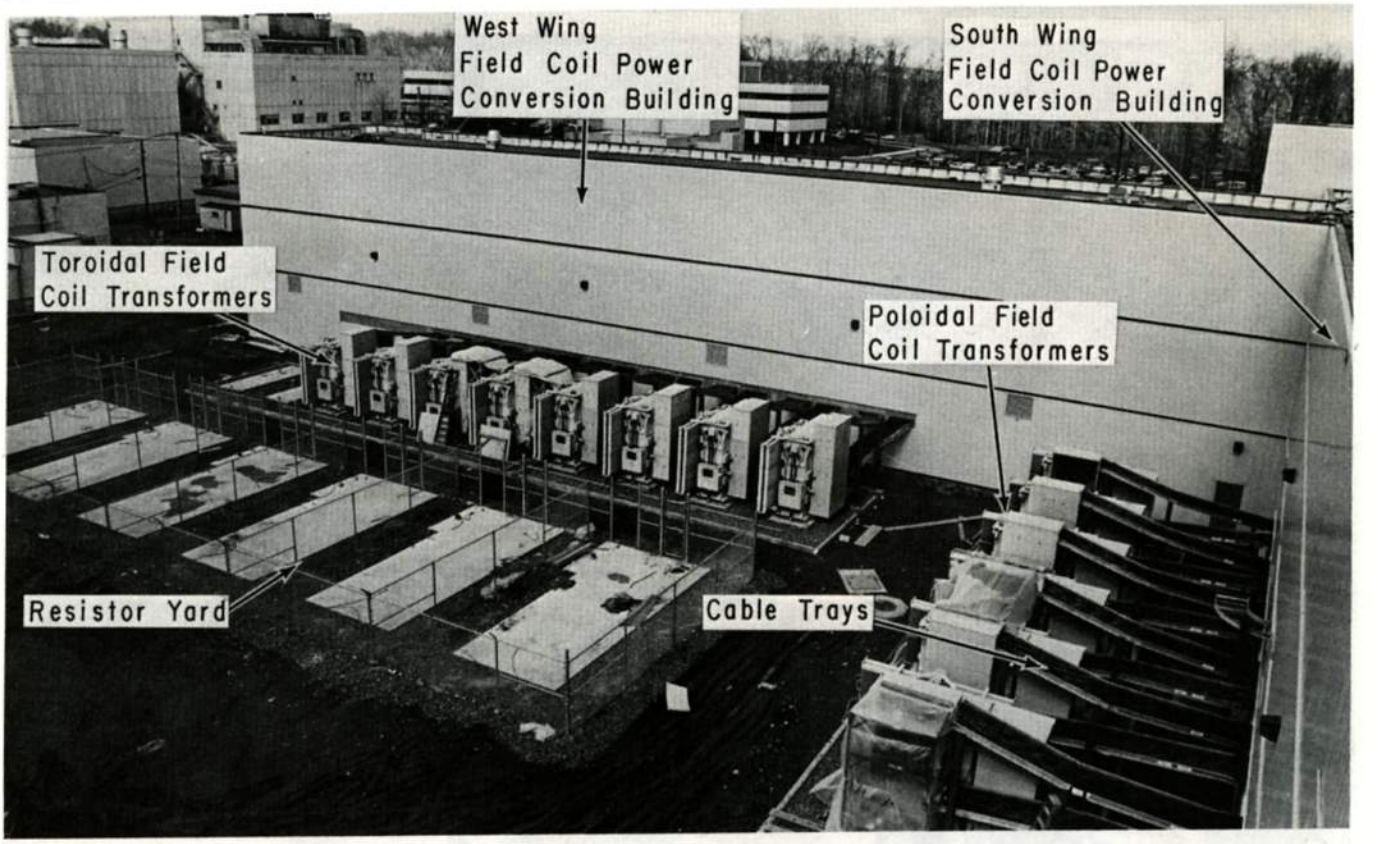


Workmen are machining the central plug that will serve as a base for the TFTR central column.

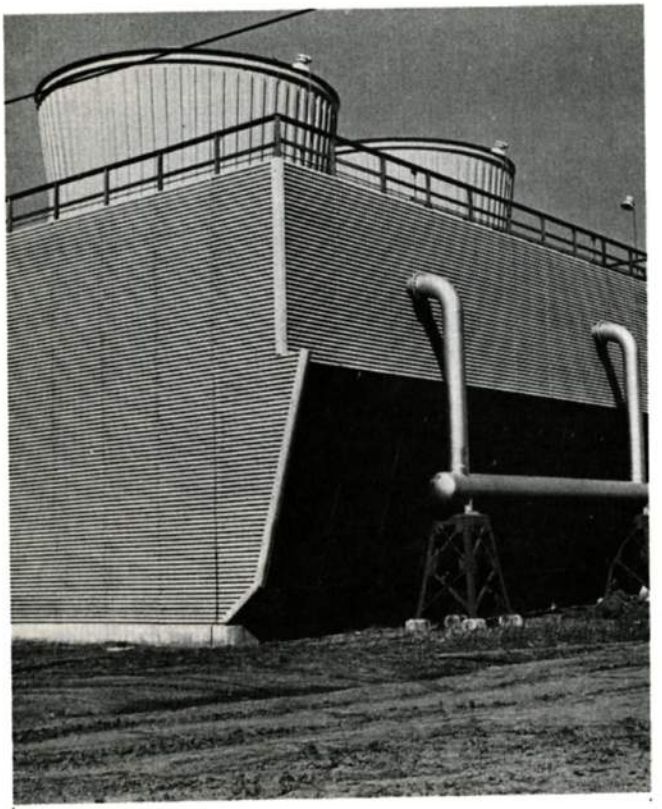




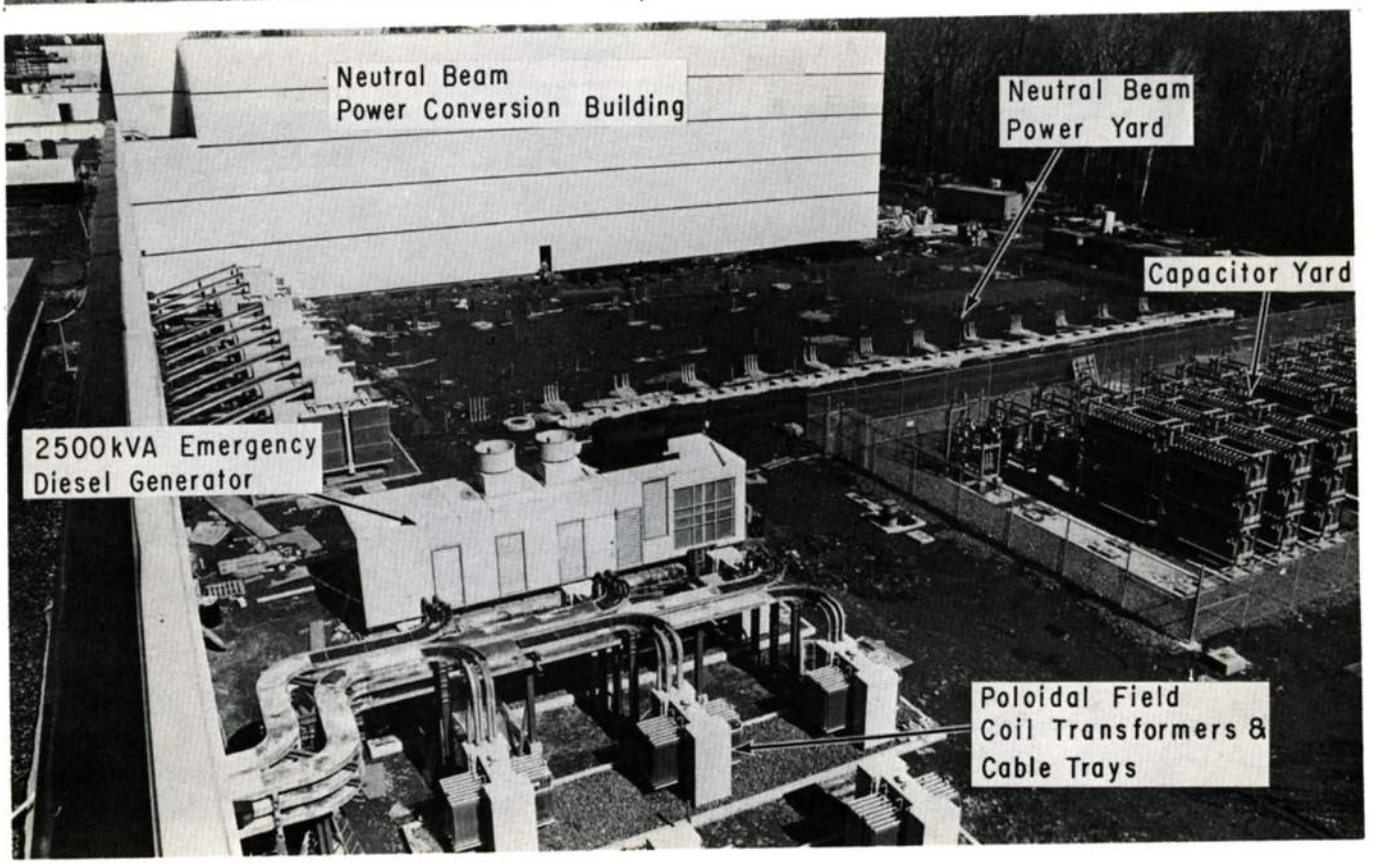
Motor/Generator Set No. 1. The box-like structure in the center is a 15,000-hp induction motor that will drive the 600-ton rotor, which is directly below it. On top of the induction motor is an exciter that will be used for testing. Since this photo was taken, floor plates have been installed over the unit. Damage evaluation is continuing on the other MG set, which was involved in last December's construction accident.



This view of the electrical equipment yard between the two wings of the Field Coil Power Conversion Building shows the toroidal and the poloidal field coil transformers. The west wing of the building will house the rectifiers for the toroidal field coils. Rectifiers for the poloidal field coils will be in the building's south wing. Resistors will be installed within the fenced area.



The cooling towers are complete and have been turned over to PPPL from the Department of Energy. The TFTR cooling towers will circulate up to 13,520 gallons per minute. They will be used to cool water from the bearing oil coolers and the air coolers for the motor-generator sets; the field coil cooling water chillers; the component cooling water chillers that are used to cool diagnostics and other equipment; the neutral beam power supply heat exchangers; the cryogenic compressors for the neutral beam lines; and the facility air conditioning chillers.



On the south side of the Neutral Beam Power Conversion Building, the 2500-kVA emergency diesel generator is in place, as are additional poloidal field coil power transformers. Capacitors are in the yard at right. Since this photo was taken, concrete pads have been installed within the Neutral Beam Power Yard for the 15-kV switch gear, tap changers, and transformers/rectifiers.