

# Follow-on MERIT Testing at ORNL



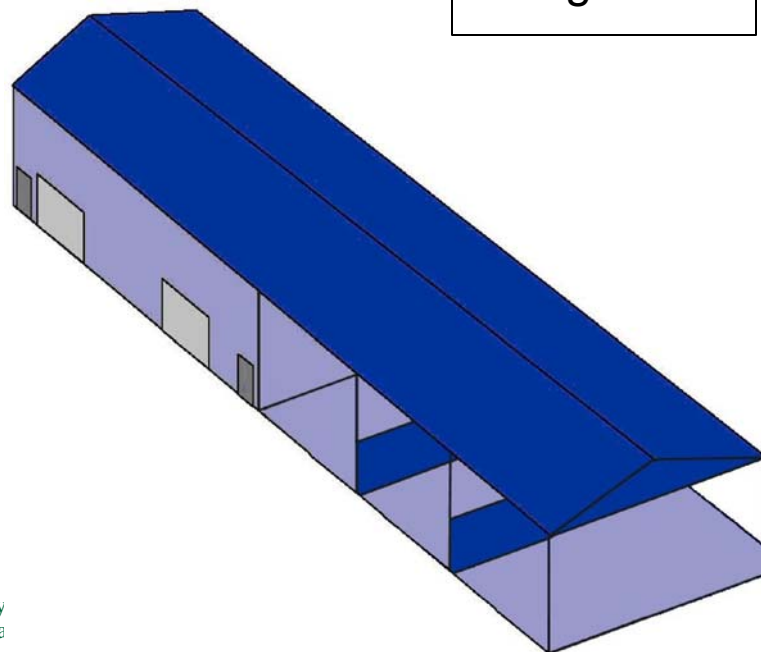
**Van Graves**

# New Capabilities at ORNL

- **Discussions with Tim Bigelow, ORNL Fusion Energy Division, indicate some existing experimental power supplies will be moved from Y-12 to ORNL**
- **Some of the power supplies will have capability to power MERIT solenoid**
  - 650V peak
  - 15,000A pulsed > 5sec
  - Voltage and/or current can be controlled by SCR gate waveform control

# 7627 Power Supply Building

- **New building**
- **Final design complete**
- **Located behind 7625**



Bldg 7627



Bldg 7625

Schedule completion:  
Sept 2008

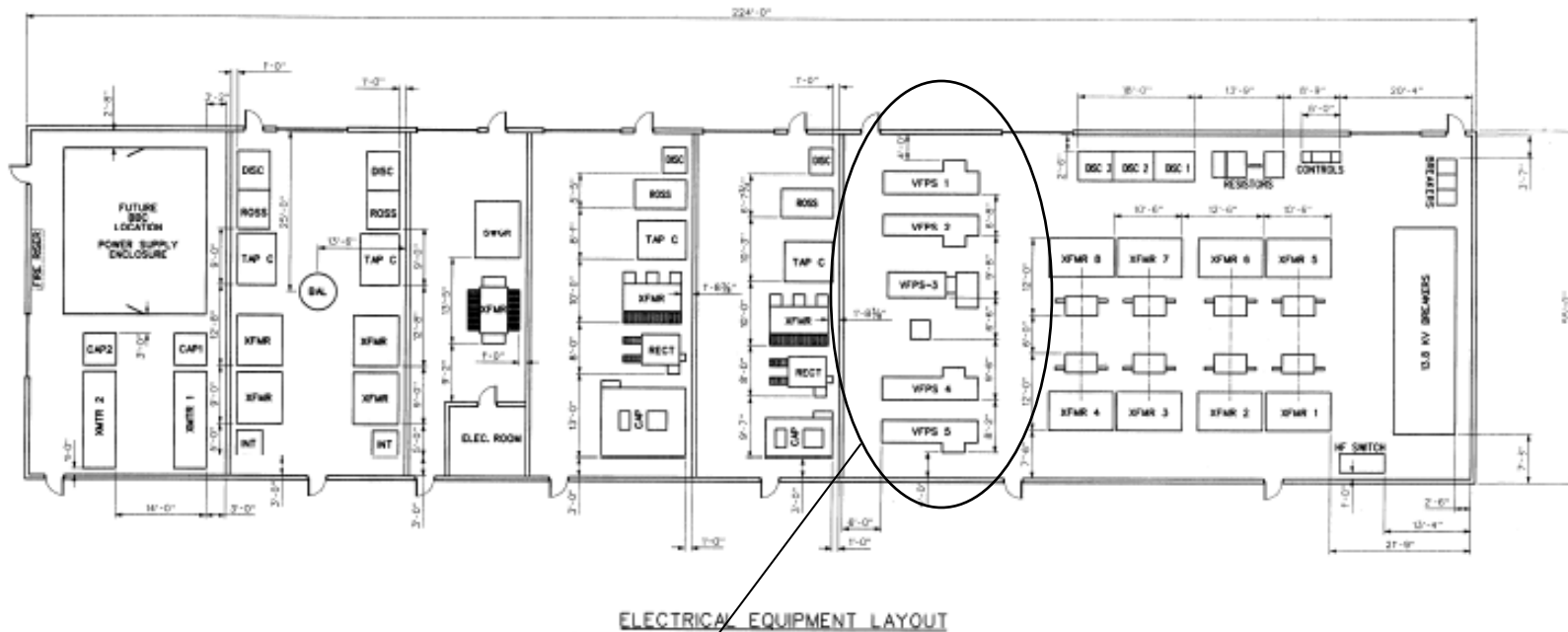
Several power supplies  
will be installed

# Bldg 7625

- Pit capable of housing MERIT experimental equipment
- LN2 dewar in place
- 20T overhead crane



# Equipment Layout 7627



Vertical field power supplies  
650V peak  
15,000 A pulsed > 5 sec  
Voltage and/or current can be controlled by  
SCR gate waveform control

# Comments

- **Major infrastructure should be available in late 2008, but connection costs may be incurred**
- **Hazard analysis (radiation, Hg, LBE) will have to be performed, but no major obstacles envisioned**
- **Other power supplies will be available (capabilities unknown at this time) that might be useful for other HEP experiments in the future**