### 1600kV Impulse Voltage Generator

**Purpose:** This equipment is used for power supply in the following kinds of research.
- Diagnosis technology for lifetime evaluation of electric power equipment
- Insulation technology for next-generation electric power equipment such as environmentally-friendly gas-insulated equipment
- Technology development for discharge guiding by laser
- Withstand voltage tests of electric power equipment

**Main Specifications:**
1. Maximum charging voltage: 1600kV
2. Charging energy: 80kJ
3. Generation waveform: Standard lightning impulse (1.2/50 μs), Standard switching impulse (250/2500 μs)
4. Voltage generation efficiency:
   - Standard lightning impulse = 85% or more
   - Standard switching impulse = 80% or more (the maximum voltage is 1000kV)
5. Charging time: 60 seconds or less (at the maximum charging voltage)
6. Generating repetition time: 1 shot/min (at the maximum charging voltage)

**Location and Date of Installation**
Electric Power Engineering Research Laboratory, May 2003

### 200kV Testing Transformer

**Purpose:** This equipment is used for power supply in the following kinds of research.
- Diagnosis technology for lifetime evaluation of electric power equipment
- Insulation technology for next-generation electric power equipment such as environmentally-friendly gas-insulated equipment

**Main Specifications:**
1. Voltage rating: 200kV (at series connection of two transformers).
2. Short time current rating (On: 15 min, Off: 60 min, 6 times a day): 0.25A
3. Continuous current rating: 0.16A
4. Partial discharge level: 2pC or less (at the rated voltage)
5. Transformer arrangement: Single transformer: 100kV, 0.25A
   - Series connection of two transformers: 200kV, 0.25A
   - Parallel connection of two transformers: 100kV, 0.5A

**Location and Date of Installation**
Electric Power Engineering Research Laboratory, May 2003

### High Speed Video Camera

**Purpose:** To apply to high speed recording of a short-circuit test for electric power equipment, and use for capturing the arc behavior on VHS videotape for a long time.

**Main Specifications:**
1. Number of pixels: 640x484 pixels
2. Frame rate: 500, 1000, 2000, 4000 frame/sec.
4. Recording method: S-VHS / VHS (NTSC)
5. Cable length: 80 m

**Location and Date of Installation**
Electric Power Engineering Research Laboratory, June 2003