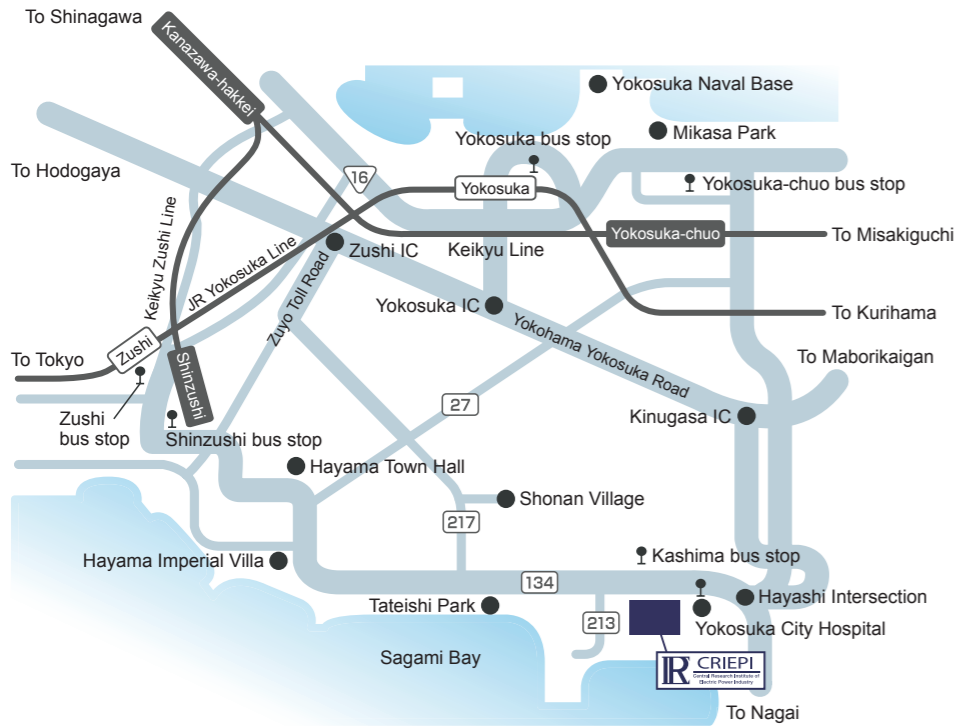




History

1963	Installed high-power test facilities in the High Voltage Power Laboratory
1977	Established the High Voltage Laboratory (currently the High Power Testing Laboratory) to take over projects from the High Voltage Power Laboratory
1994	Installed the indoor test cell and the DC short-circuit test facilities
2001	Founded the High Power Testing Laboratory. Accredited in accordance with ISO/IEC 17025 by JAB (Japan Accreditation Board for Conformity Assessment)

Access



From JR Zushi Station or Keikyu Shinzushi Station

【 By public bus 】

At JR Zushi Station bus stop No.2, or Keikyu Shinzushi Station southern bus stop No.1

- Get on the bus to Yokosuka Shimin Byoin (Yokosuka City Hospital) or Nagai. Get off at Kashima bus stop and walk 1 min.
- Get on the bus to Denryoku Chuo Kenkyujo (CRIEPI). Get off at Denryoku Chuo Kenkyujo Seimon (in front of the main building of CRIEPI).

【 By taxi 】

Approximately 30 min required from JR Zushi Station.

From JR Yokosuka Station or Keikyu Yokosuka-chuo Station

【 By public bus 】

At JR Yokosuka Station bus stop No.2, or Keikyu Yokosuka-chuo Station bus stop No.5 (across the pedestrian bridge)

- Get on the bus to Shonan Sajima Nagisanooka. Get off at Kashima bus stop and walk 1 min.
- Get on the bus to Yokosuka Shimin Byoin (Yokosuka City Hospital). Get off at Yokosuka Shimin Byoin bus stop and walk 7 min.

【 By taxi 】

Approximately 30 min required from JR Yokosuka Station and Keikyu Yokosuka-chuo Station.

Inquiry

October 2017

High Power Testing Laboratory Electric Power Engineering Research Laboratory

2-6-1 Nagasaka, Yokosuka-shi, Kanagawa 240-0196 Japan
TEL : +81-46-856-2121 FAX : +81-46-856-2531

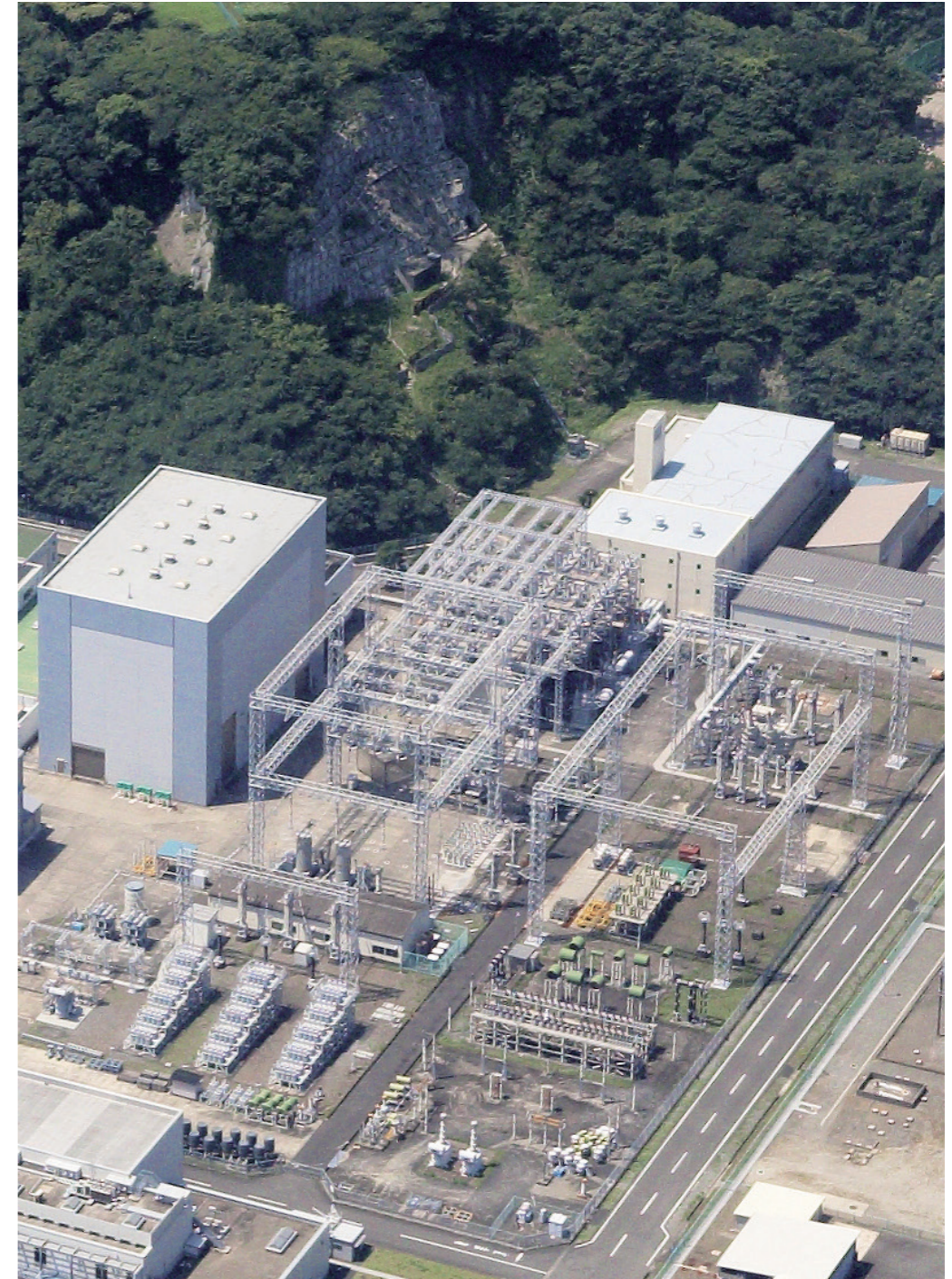
<http://criepi.denken.or.jp/en/>

Central Research Institute of Electric Power Industry



Electric Power Engineering Research Laboratory

High Power Testing Laboratory



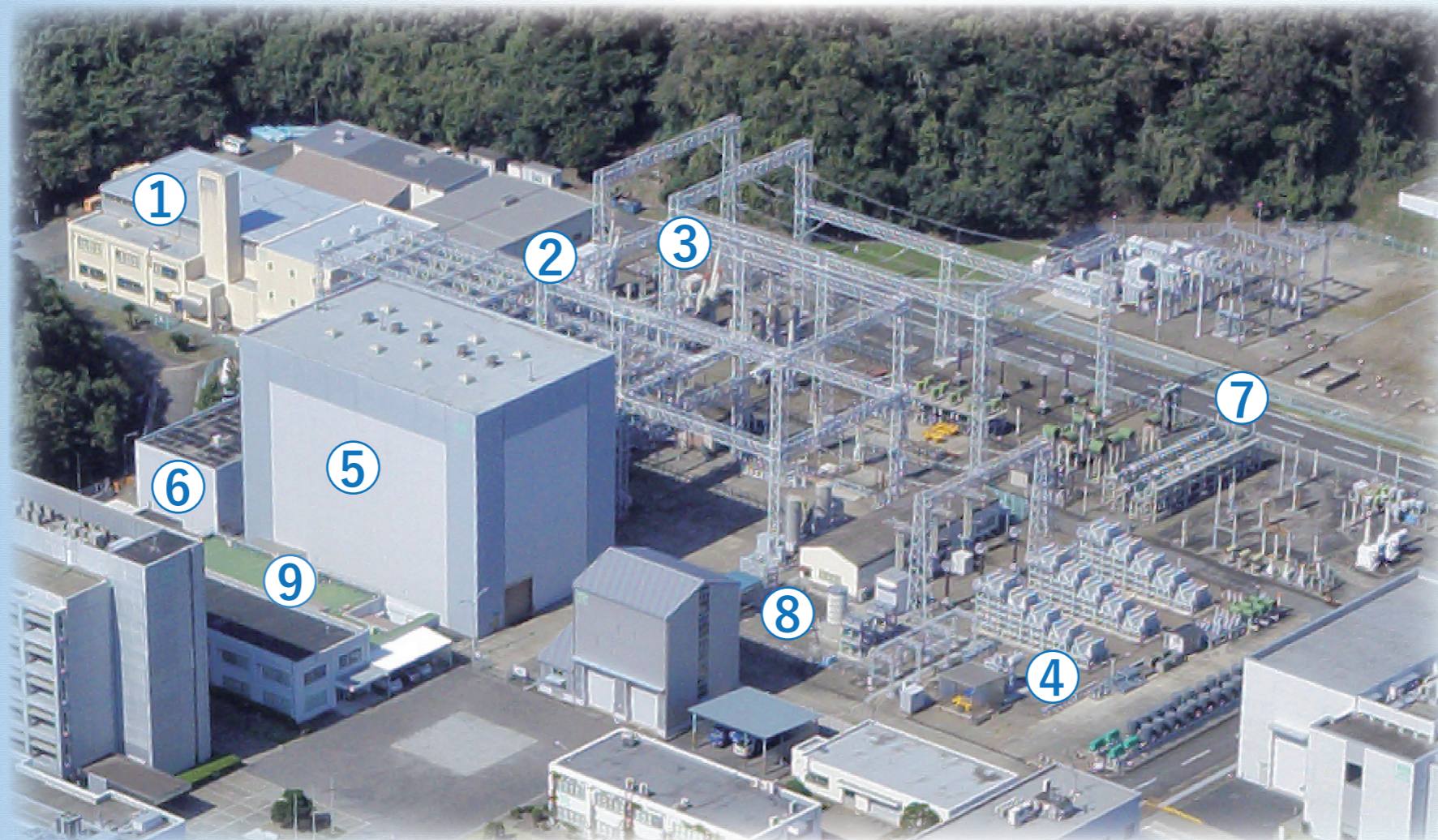
Since 1963, the Electric Power Engineering Research Laboratory of the CRIEPI has conducted research and tests on the short-circuit performance of power equipment and materials at its high-power test facilities, as well as at its previous organization, the High Voltage Power Laboratory.

When a short-circuit fault occurs in power systems, high current several to dozens of times as normal current flows to the fault point and power equipment may be damaged. Therefore, short-circuit testing is important to build safe power equipment. The research results are used to develop higher-performance power equipment that can withstand high currents, and eliminate fault currents quickly. We are currently developing an appropriate test method and a highly precise measuring technique for short-circuit performance evaluation.

The High Power Testing Laboratory was established in April 2001, and laboratory accreditation was granted by the Japan Accreditation Board for Conformity Assessment (JAB) in compliance with ISO/IEC 17025. As a laboratory that meets international standards, we are involved in a variety of test activities that include publishing test reports and issuing certificates.



High-Power Test Facilities



1 Short-circuit generator
15 kV 2500 MVA 50/60 Hz



2 High-voltage short-circuit transformer (3 units)
15 kV / 12, 24, 36, 48 kV
1000 MVA



3 Extra-high-voltage short-circuit transformer (1 unit)
15 kV / 100, 160, 220, 330 kV
850 MVA



5 Indoor test cell with soundproofing
Length 40 m
Width 25 m
Height 29 m



6 DC short-circuit test facilities
120 kV / 10 kA,
16 kV / 60 kA



7 Synthetic test facilities
300 kV
63 kA (equivalent)



8 Impulse generator
800 kV / 25 kA,
400 kV / 50 kA
Current 8/20 μs



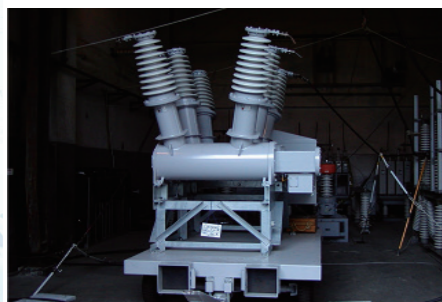
9 Automatic control system and computer measurement system for short-circuit test



4 Ultra-high-current transformer (3-phase, 1 unit)
12 kV / 600, 1200 V
210 MVA



Accreditation tests



Making and breaking tests for switchgear

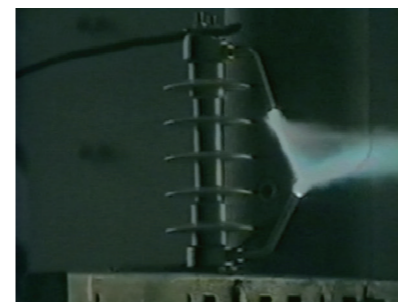
- Short-circuit tests and out-of-phase making and breaking tests for circuit breakers (up to rated voltage of 36 kV and rated short-circuit breaking current of 25 kA)

Other tests

- Short-time withstand current and peak withstand current tests for circuit breakers, disconnectors and earthing switches, load break switches, metal-enclosed switchgear and gas-insulated switchgear (current up to 150 kA, duration up to 1 s / current up to 60 kA, duration up to 2 s)
- Short-circuit tests for power transformers, surge arresters and power fuses (test capacity depends on item tested)

◀ Short-circuit tests for VCBs

General tests



High-power arc tests (AC/DC)

- Insulators
- Insulator assemblies
- Switchgear
- Cable
- Cable assemblies
- Transformers

Short-time current tests (AC/DC)

- Cable
- Transformers
- Other equipment

◀ High-power arc tests for polymer insulators

Synthetic and other tests

- Synthetic tests for circuit breakers
- Duty tests for surge arresters

The High Power Testing Laboratory is a member of JSTC (Japan Short-Circuit Testing Committee), which is a member of the international Short-Circuit Testing Liaison (STL)