# Online Course

| 2024 No. 13 | Electrical Facilities 1<br>Basic Course | Power Supply Maintenance |
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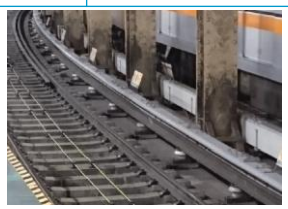
Substation



Contact Lines

Power transmission and distribution

## KEY POINT

By learning the maintenance details of electric power supply equipment in urban railways, you will be able to use them as a reference when considering the formulation and review of the maintenance contents.

## OVERVIEW

Tokyo Metro maintains 62 substations, three types of contact lines, and transmission and distribution lines in terms of power supply, which is one of the elements necessary for safe and stable operations of trains.

We will introduce the facility overview, maintenance contents, and efforts to improve safety of power supply facilities for substations, contact lines, and transmission and distribution lines in urban railways.

## LECTURE CONTENTS

### 1) Overview of power supply facilities

- Overview of power supply facilities in urban railways

### 2) Maintenance basics

- Types, cycles, and organizational structure of periodic inspections

### 3) Maintenance details of substation, contact lines, power transmission, and distribution lines

- Maintenance details of substations, contact lines (overhead catenary system, overhead rigid conductor system, third rail system/ DC 1,500V, 600V), and power transmission and distribution (AC 22kV, 6.6kV, 3.3kV)

### 4) Initiatives of safety improvements

- Date recording analysis/monitoring
- Review of inspection and maintenance contents based on accidents, and breakdowns.

## KEY DETAILS

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| **Dates and Times** | **October 29 and 31, 2024 (The same content will be presented on each day.)**<br>-October 29, 2024, 5:00 p.m. JST / 9:00 a.m. CET / 4:00 a.m. EDT <Duration: 2 hours><br>-October 31, 2024, 9:00 a.m. JST / 1:00 a.m. CET / 8:00 p.m. (30th) EDT <Duration: 2 hours> |
| **Targets** | Basic Course: for those who have less than 3 years experience in the railway industry |
| **Location** | Online (Microsoft Teams) |
| **Language** | English |
| **Lecture Fee** | 20,000 JPY (per day) Note: Applications within Japan are subject to the tax separately.<br>＊Cut-off date: Please apply at least one business day before each lecture in order to receive related-materials by email in advance. |
| **Certificate** | Attendance Certificate (digital) will be issued. |

## LECTURER

**YOSHIKI SHIMIZU**
Joined 2006. Engaged in planning, design, and maintenance of railway facilities, introduction of new technologies, and international procurement of goods. He acted as the test manager for the field test for the introduction of the stationary energy storage system for emergency driving.

## More Info and application

https://sites.google.com/tokyometroacademy.com/index
You can apply regardless of your field.