



Power Systems and Grid Operations

DURATION

5 days

CONTACT HOURS

30

LEVEL

Intermediate

FEE PER DELEGATE

US\$1,500

How a power system stays stable, and what changes when generation becomes variable and distributed.

This programme covers the operation of a power system from generation through transmission to distribution, and then the specific stresses introduced by variable renewable generation and distributed resources: inertia, frequency response, curtailment and the flexibility needed to manage them.

Available as classroom, live online, in house.

Who it is for

Utility engineers and operators, regulators, and commercial staff working with power markets.

What you will be able to do

- Explain how supply and demand are balanced in real time.
- Identify the stability services a system depends on.
- Assess the operational effects of high variable generation.
- Evaluate flexibility options including storage and demand response.

The outline

Taught across 5 days. The sections below are the curriculum rather than a day by day timetable.

SECTION 1

System fundamentals

Real time balancing · Frequency and voltage control · Transmission constraints · Reserve and its classes

SECTION 2

Variable generation

Inertia and system strength · Forecasting error · Curtailment and its economics · Distributed resources

SECTION 3

Flexibility

Storage and its duty cycles · Demand response · Interconnection · Market arrangements for flexibility

What you leave with

- A system balancing explanation usable with non technical stakeholders.
- A stability services map.
- An assessment of variable generation effects on a given system.
- A flexibility option comparison.

Published dates

DATES	WHERE	FEE
23 to 27 November 2026	Port Louis, Mauritius	US\$1,500
30 November 2026 to 4 December 2026	Nairobi, Kenya	US\$1,500
7 to 11 December 2026	Dubai, United Arab Emirates	US\$1,500
14 to 18 December 2026	Maseru, Lesotho	R15,000

Fees are per delegate and cover all course materials. Registration fees are arranged by the delegate. Reg

Register or ask a question

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