





REGIONAL POWER TRADE PROGRAMME

Grid and Market Integration Hydropower and other Renewables



Application deadline – 20 July 2023

Course fee – €UROS 1000

*Fee includes course materials, accommodation, and meals

Supported by





Gaining through Training

Africa has vast renewable energy resources and can benefit greatly from grid and market integration of these renewables. To meet the continued growing electricity demand, Africa needs an evaluation of and evolution of existing power systems.

How can variable renewable energies be efficiently integrated into the grid in a costeffective way whilst maintaining grid stability and ensuring a reliable supply of electricity?

OVERVIEW

This program is designed to equip participants with the necessary knowledge and skills to effectively integrate hydropower and other renewable energy sources into the African power grid and optimize their market participation. The program aims to address the challenges and opportunities associated with grid integration and market operations, fostering sustainable and reliable energy systems in Africa.

The course will have an emphasis on national and regional conditions primarily in Southern and Eastern Africa in view of future interconnection enabling the coupling of Eastern and Southern Africa and the increased pace of introducing both RES and competitive markets in those regions.

There will be two main areas of focus;

- i the evolving future market frameworks both in a national and regional setting, and how these can be part of the solution towards integrating RES in a national and regional context.
- ii. modelling the effect of integration of RES in a power system.

Concentrating on the integration of RES in both the grid and different competitive markets, the course will provide an overview of both challenges, solutions, and practical modelling examples as to how these can be done.

In addition to the historical experience of RES integration, the course explores future challenges and placing emphasis on the transition towards a fossil-free future. Lecturers will inform, share, model, and deliberate with participants on the impending challenges and opportunities facing power producers and the electricity sector in this new setup with a higher penetration of RES in an increasingly more competitive power market.

At the core will be applicable practical modelling exercises and examples where participants will use publicly available tools to create models and take these back home.

Women are ^{enco}uraged to apply.



Power systems need to adapt to the seasonal variability of renewables

PROGRAM DELIVERY

This training program will be delivered through a combination of lectures, interactive discussions, case studies and practical modelling group exercises. Experienced industry professionals, academics, and policymakers will serve as trainers, providing participants with real-world insights and expertise.

OBJECTIVES

Using a hands-on approach, this course will;

- Address the challenges of integrating RESin a power system both from a grid and market perspective.
- Present the opportunities of how to manage these both in a central and competitive environment, demonstrating how these can be facilitated based on international best practices and concrete examples.
- Through interactive and practical learning, help participants understand how to model the integration.
- Use publicly available tools and allow participants to model a simple system where the main focus is on the integration of RES.

TARGET GROUP

- Local power producers
- · Energy policymakers and government officials
- Executives and Traders of power companies
- Lawyers
- Energy sector investors and developers.
- National system operator(s)
- Relevant private sector enterprises with management responsibility
- Other interested parties



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GENERAL

All lecturers and resource persons are well-known specialists within their field, and they have extensive international and regional experience. Attending the courses is an opportunity to discuss and learn about current issues related to power trading together with professionals from the continent and abroad. Participants are encouraged to bring along information that can be shared about pending energy and power market issues of your interest.

ADMISSION REQUIREMENTS

- A minimum of about 5 years of working experience is required.
- Applicants should hold an applicable degree or possess relevant background knowledge.
- Proficiency in English is compulsory for this course.

Notice of admission will be given shortly after the application closing date. ICH reserves the right to accept or reject any applicant based on their qualifications and experience.

SPECIFICS FOR THE COURSE

Information on travel, a detailed course program and other relevant information will be sent to all participants in due course. Participants are expected to arrive at the venue of the course the day prior to the course start and leave no earlier than the day after the end of the course.

Women are encouraged to apply.

COURSE FEE

The course fee includes lectures, materials, accommodation, some meals, and a social program if applicable. International travel expenses are not included. There is a reduced fee for ICH members. A limited number of sponsored seats are available for participants from countries prioritized by NORAD (Norwegian Agency for Development Cooperation).

Those who would like a guaranteed seat on the course should secure their own funding.

Accommodation will be provided for participants attending from outside the host country and paying €UROS 1000.

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