Fill in this form and send or fax a copy before November 1st 2007 to:

Ms. Cristina Ruiz
Email: cristina@upcomillas.es
Instituto de Investigación Tecnológica
Universidad Pontificia Comillas
Alberto Aguilera, 23 E-28015 Madrid, Spain
Phone: (+34) 915 40 61 07 Fax: (+34) 915 42 31 76

Registration Form VAT Registration number: Company main profile: Position: Address: E-mail:

COURSE FEES

The course fees include lectures, documentation, coffee breaks and lunches according to the registration option.

Members of the EES - UETP: 525 € University non members of the EES - UETP: 900 € Industry non members of the EES - UETP: 1500 €

Please make a bank transfer to the following bank account:

Bank: BBVA

Address: C/ Alcalá 16, 28014 Madrid

Account number: 0182-2370-45-0201510629 IBAN: ES18-0182-2370-4502-0151-0629

SWIFT: BBVAESMMXXX

and please send or fax a copy of the bank transfer to

Ms. Cristina Ruiz

Email: cristina@upcomillas.es

Phone: (+34) 915 40 61 07 Fax: (+34) 915 42 31 76

Courses' Cancellation Policy: notifications should be sent in writing to the course Coordinators. Cancellations received one week before the course will not be refunded

ACCOMMODATION

Special rates have been arranged at the following hotels (please refer to Universidad Pontificia Comillas when booking)

Tirol	NH Alb. Aguilera
c/ Marqués de Urquijo, 4	c/ Alberto Aguilera, 18
P. (+34) 915481900	P. (+34) 914460900
F. (+34) 915413958	F. (+34) 914460904
100€+IVA (breakfast inc.)	140€+IVA (breakfast inc.)

INFORMATION & REGISTRATION

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Deadline for inscriptions: November 1st 2007



Electric Energy Systems University Enterprise Training Partnership

2007 Course Program

New challenges to ancillary services regulation and operation

November 14th-16th, 2007

Universidad Pontificia Comillas de Madrid Alberto Aguilera 23 E-28015, Madrid -Spain

SPONSORS:







Objectives

Competitive mechanisms have been introduced during the last years in the planning, management, and operation of Electric Power Systems, also including regulation and procurement of ancillary services. This fact, together with the introduction of new generation technologies such as wind or combined cycle power plants, and the need for increased participation in the markets of active demands, make necessary a deep review of the current situation and prospective evolution of ancillary services management methods.

This course aims at providing a forum to discuss issues related with the new challenges in ancillary services regulation an operation. The main topics that will be addressed in the course are:

- Current regulation and procurement of ancillary services, specifically load frequency control and voltage control. International experiences will be presented.
- System security and emergency operation. Current practices.
- Prospective of generation ancillary services from the supply side. Changes in current structure and new proposals (pumping units, wind generators, etc.).
- Integration of active participation of the demand side. Ancillary services supplied by demands. Possibilities, procurement mechanisms and limitations. Load shedding and financial agreements keeping quality of supply requirements.

Intended audience

This course is intended for professionals from transmission system operators, regulators, generation companies, customers (industrial facilities), consultants and post-graduate students.

Duration & Location

November 14th-16th 2007. Universidad Pontificia Comillas de Madrid Alberto Aguilera 23, 28015. Madrid – Spain

Program

Wednesday November 14th

8:30 to 9:00 - Course registration

9:00 to 10:00 – Dr. I. Egido and Dr. F.M. Echavarren Presentation and Technical Backgroud

10:00 to 11:30 – *Ms. Maria Luisa Llorens*Present and future of ancillary services in Spain

11:30 to 12:00 - Coffee break

12:00 to 13:30 – *Mr. K. Uhlen*Present and future of ancillary services in Norway

13:30 to 15:30 - Lunch

15:30 to 17:00 – Mr. P. Bertolini and Mr. F. Guy Present and future of ancillary services in France

Thursday November 15th

8:30 to 10:00 – *Mr. R. Martinez Campillo*New ancillary services provided by generators

10:00 to 11:30 – *Dr. J. Peças*Distributed generation challenges in ancillary services

11:30 to 12:00 - Coffee break

12:00 to 13:30 – Dr. T. van Cutsem
Ancillary services and voltage stability control

13:30 to 15:30 - Lunch

15:30 to 17:00 – *Dr. L. Meeus*Design and development of ancillary services markets

Friday November 16th

8:30 to 9:30 – Mr. J. M. Rodríguez
Ancillary services role in UCTE power system security

9:30 to 10:30 – *Ms. E. Giraut*Wind power participation in ancillary services

10:30 to 11:30 – *Mr. J. V. Ordóñez* New traders in ancillary services markets

11:30 to 12:00 - Coffee break

12:00 to 13:30 - Round table

Instructors

- Ms. Maria Luisa Llorens, REE, Spain.
- Mr. Kjetil Uhlen, SINTEF Energy Research, Norway
- Mr. Pascal Bertolini, RTE, France.
- Mr. Fabrice Guy, RTE, France.
- Mr. Rodolfo Martínez Campillo, Iberdrola, Spain
- Dr. João Peças, INESC Porto, Portugal
- Dr. Thierry Van Cutsem, University of Liège, Belgium
- Dr. Leonardo Meeus, Katholieke Universiteit Leuven, Belgium
- Mr. Juan Manuel Rodríguez, REE, Spain
- Ms. Elizabeth Giraut, Acciona Energía, Spain
- Mr. José V. Ordóñez, Global 3 Energía, Spain
- Dr. Ignacio Egido, Universidad Pontificia Comillas, Spain
- Dr. F. M. Echavarren, Universidad Pontificia Comillas, Spain

Course Coordinators

Dr. Ignacio Egido

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Dr. F. M. Echavarren

email: francisco.echa varren@iit.upcomillas.es

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Course information at http://www.eesuetp.unibo.it