

# 1992 IAEA INTERNATIONAL TRAINING COURSES HELD IN SPAIN

Within the frame of the Technical Assistance Programme of the International Atomic Energy Agency, the Government of Spain sponsors, jointly with the Agency and under Cooperation Agreements, training courses on subjects related to the production of electricity in nuclear plants.

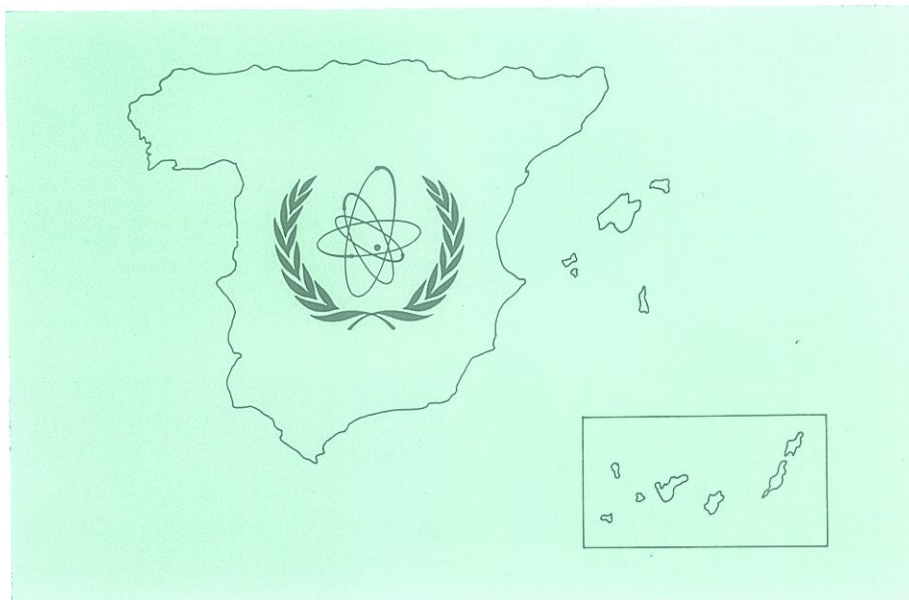
In 1992 two international courses were held in Spain in the said frame, one of them on "Bidding, Bid Evaluation, Contracting and Financing NPP's", from October 26 to November 13 1992, and the other on "Fire Protection and Prevention in NPP's", from November 16 to December 3.

The host organization was, as usual, CIEMAT and Lucila Izquierdo was the General Director in both cases.

The organization of the courses was assigned to two Committees constituted by the IAEA technical assistant and representatives from CIEMAT and the Spanish nuclear industry. Special acknowledgement is due to the efforts made by *Empresarios Agrupados* and INITEC in supporting the organization and development of both courses.

In fact, and given their extrabudgetary nature, the courses were sponsored by the Spanish nuclear industry and a very

important level of cooperation was obtained from a large number of companies. Sponsoring companies provided high



*For the Organization and Performance of this course the support and cooperation of the Spanish Permanent Mission in front of the IAEA has constituted a key element.*

*Participants in the course on "Bidding, Bid Evaluation Contracting and Financing NPP's", as well as members of the Organization Committee and some lecturers.*



*From left to right and from top to bottom: Pastor Gato (Energoimport, Cuba); Pavel Cech (CEZ, CSFR); Jan Coufal (CEZ, CSFR); Jozsef Sandor (Hungarian Power Company); Jiri Borovicka (CEZ, CSFR); Gheorghe Taranu (Institute of Power Studies and Design, Romania); Georg Woite (IAEA); Peter Skytta (IVO, Finland); Florian Glodeanu (RENEL, Romania); Dragor Popescu (RENEL, Romania); A. Lajevedic (Atomic Energy Organism, Iran); Marius Condu (Institute of Power Studies and Design, Romania); Lumir Nemecek (CEZ, CSFR); Hilario Hinzaga (Energoimport, Cuba); Peimin Huang (CZEC, China); M. Sadigh (Atomic Energy Organization, Iran); Arif Mumtaz-Ud-Din (Chashma project, Pakistan Atomic Energy Commission); Lucila Izquierdo (CIEMAT, Spain); Miloslav Ruman (Slovak Power Board, CSFR); Saeed Siddiqi (Chashma project, Pakistan Energy Commission); Mauritz Lumban (CAES-BATAN, Indonesia); Luis Ferrara (CIEMAT, Spain); Francisco Alvarez (CIEMAT, Spain); Arturo Velasco (CNEA, Argentina); Mohammad Saleh (PPEN-BATAN, Indonesia); Silvia Alamo (INITEC, Spain), and Félix Alonso (EE.AA., Spain).*

level experts as lecturers and members of technical panels. Technical visits were also sponsored by the host organizations, providing the cost of transportation, hotel accommodation and lavish hospitality to participants. Sponsors of the courses are listed below:

INI Group      ENDESA  
 EQUIPOS NUCLEARES  
 ENUSA  
 INITEC  
 EMPRESARIOS AGRUPADOS  
 IBERDROLA  
 TECNATOM  
 ENRESA  
 SENER  
 SEVILLANA DE ELECTRICIDAD  
 WORLD BANK  
 VANDELLOS II NPP  
 ALMARAZ NPP  
 TRILLO NPP  
 Consejo de Seguridad Nuclear  
 ITSEMAP - Fuego  
 VIMPEX  
 UNESA-AMYS  
 UNION FENOSA  
 INYPSA  
 SIEMENS  
 POOL Atómico Español  
 BERTINITEC  
 S.C.I.  
 PACISA



During the closing session, Mr. Glodeanu, from RENEL, Romania, receives his participation certificate in the course on "Bidding, Bid Evaluation, Contracting and Financing NPP's", with Bela Csik (IAEA). Lucila Izquierdo (CIEMAT), Vicente Sidro (INI Group), Silvia Alamo (INITEC), and Francisco Alvarez (CIEMAT).

Participants in the course on "Fire Protection and Prevention in NPP's" as well as members of the Organization Committee and some lecturers, during final reception.

From left to right and from top to bottom: Francisco Alvarez and Luis Ferrara (CIEMAT); Dimitru Sfarlos (Fire Corps GHQ, Romania); Nils G. Johansson (IAEA); Ivo Masarik (Fire Technical Institute CSFR); Vasile Simionov (FCNE Cernavoda, Romania); Peter Brocko (Mochovce NPP, CSFR); Miroslav Boleman (Bohunice NPP, CSFR); Felipe Albuquerque (INYPISA, Spain); Javier Blasco (CSN, Spain); Mohamed Taghi Shabestari (Bushehr NPP, Iran); Gustavo Rodríguez (EE.AA., Spain); Valentina Covalachi (RENEL, Romania); Silvia Alamo (INITEC, Spain); Valentina Yemets (Nuclear and Radiation Safety Committee, Ukraine); Lucila Izquierdo (CIEMAT, Spain); Krasin Mitov Rashkov (Kozloduy NPP, Bulgaria); Constantine Rudy (Nuclear and Radiation Safety Committee, Ukraine); Viorica Paunescu (Institute for Nuclear Power Reactors, Romania); Maria Goded (CIEMAT, Spain); Francisco Alomar (INYPISA, Spain); Tibor Cserhati (Fire Protection Research Institute, Hungary); Thomas Riekert (GRS, Germany); Frank Joppen (SCK/CEN, Belgium), and Ivor Manchev (Kozloduy NPP, Bulgaria).

The opening and closing sessions were chaired by the Director of the Institute of Energy Studies, Ms. Lucila Izquierdo, the IAEA representatives, lecturing the introductory sessions in both courses, and members of the organization Committees.

The closing lecture in the Course on "Bidding, Bid Evaluation, Contracting and Financing NPP's" was given by Mr. Sidro, Deputy Director in the INI Group, on the Spanish participation in evolutionary and passive reactors development programmes, from the perspective of the public industrial group.

In the Course on "Fire Protection and Prevention in NPP's" closing lecture was given by Ms. Silvia Alamo, from INITEC, on future trends of the issue, focusing on utilities requirements for the next generation of NPP's.

Participants in both courses were highly specialized engineers and represented 15 nationalities. In fact their high professional level enabled lively and enriching discussions and panels which contributed significantly to the success of the courses.

The overall evaluation of both courses



was highly positive: over 90% of participants judged their organization, technical content and development from good to excellent, as well as applicable and profitable from the professional standpoint.

Full coincidence on the excellence of technical visits can be pointed out, and the good contacts established with the Spanish Nuclear Industry were also highly valued.

There are certainly lessons to be learned for the future, and with respect to the

significance given by CIEMAT and the IAEA to the opinion of participants, a quotation of one of Baltasar Gracian masterpieces, "Oráculo Manual y Arte de Prudencia" can be made: "Lo que todos dicen, o es, o quiere ser", which translated into poor English could mean: what everybody says either it is so, or it is about to be so. Baltasar Gracian lived in the XVII century, and by the way, has been a best seller in the USA in 1992, but this idea appears specially applicable to modern times.