



International Conference on Storage of Spent Fuel from Power Reactors

**Vienna, Austria
2–6 June 2003**

Organized by the
International Atomic Energy Agency (IAEA)

in co-operation with the
OECD Nuclear Energy Agency (NEA)

ANNOUNCEMENT AND CALL FOR PAPERS

1. BACKGROUND

The management of spent nuclear fuel is a key aspect characterizing the use of nuclear power around the world. At the international level, there is an ongoing debate focused on this issue. At the national level, spent fuel management often provokes public concern.

Three options for the management of spent fuel are currently under consideration:

- the open once-through cycle, with direct disposal of spent fuel;
- the closed cycle, with reprocessing of spent fuel, recycling of plutonium and uranium and disposal of the remaining waste; and
- the ‘wait and see’ approach, where countries continue to evaluate their fuel cycle back end strategy, while taking ‘intermediate’ steps.

The open once-through cycle has not yet been demonstrated in practice. The first final disposal site is not expected to be operational before 2010. The closed cycle is only being used by a very limited number of Member States. Moreover, many countries are deferring a decision. This has led to an increasing amount of spent fuel that needs to be stored, and to longer than expected storage periods.

Continuous attention is being given by the IAEA to the collection, analysis and exchange of information on spent fuel storage. Its role in this area is to: provide a forum for exchanging information; identify the key issues for long term storage; and co-ordinate and encourage closer co-operation among Member States in certain research and development activities that are of common interest. Meetings on this topic have been organized about once every four years since 1987.

2. OBJECTIVES

The objectives of the Conference are to:

- review recent advances in spent fuel storage technology;
- exchange information on the state of the art of and prospects for spent fuel storage;
- review and discuss the worldwide situation and the major factors influencing national policies in this field;
- exchange information on operating experience with wet and dry storage facilities;
- identify the most important directions for future national efforts and international co-operation in this area.

3. AUDIENCE

The Conference aims to bring together scientists, designers, operators and regulators to: exchange information on the storage technologies available and envisaged; discuss issues of long term storage to support the licensing of present and future technologies, including license extension; identify available information on the requirements for spent fuel storage with relation to fuel cycle options; and exchange operating experience in spent fuel storage.

4. PROGRAMME STRUCTURE

The **opening session** will include welcoming addresses by representatives of the IAEA and the OECD NEA, as well as keynote lectures on the spent fuel storage situation worldwide.

A series of **topical sessions** will then cover the topics relating to the national programmes in spent fuel management, wet and dry storage technologies, licensing, quality assurance, design control, operating experience, R&D, and special aspects of spent fuel storage. The chairpersons will summarize the sessions and the related **poster sessions**. They will also prepare recommendations for the concluding session.

At the **concluding session**, the topical session chairpersons will present their summaries, which should lead to the formulation of recommendations for the scientific community.

5. SCOPE OF THE TOPICAL SESSIONS

The following subjects will be covered in the topical sessions:

- **National Programmes:** the status and trends of spent fuel storage in Member States, spent fuel arising, amount of spent fuel stored, wet and dry storage capacities, storage facilities under construction and in planning and the national policy for the back end of the fuel cycle.
- **Technologies:** technological approaches for long term storage, new storage concepts, re-racking of fuel pools, spent fuel and material behaviour in long term storage.
- **Experience and Licensing:** experience in wet and dry storage, problems with materials in fuel pools, licensing practices for spent fuel storage facilities, license extension and re-licensing of existing facilities.
- **R&D and Special Aspects:** highly enriched fuel, high burnup fuel, radiation and heat load of high burnup and MOX fuel, advanced materials for storage racks and baskets, quality and maintenance of records.

A **Poster Session** will also be held covering topics from the topical sessions.

6. PAPERS/POSTERS AND CONFERENCE PROCEEDINGS

Concise papers on issues falling within the topics outlined in Section 5 may be submitted as contributions to the Conference. All papers, apart from invited review papers, must present original work; they should not have been published elsewhere.

(a) Submission of Synopses

Persons who wish to present a paper or poster for the Conference must submit an extended synopsis (in English), together with the completed Form for Submission of a Paper (**Form B**), and the Participation Form (**Form A**) to the competent national authority for official transmission to the IAEA in time for them to be received by the IAEA by **31 December 2002**. In addition, the synopsis should be sent electronically to the IAEA Scientific Secretariat, e-mail: conf_sfs_2003@iaea.org. Authors are urged to make use of the Synopsis Template in Word 2000 on the Conference web page. The specifications and instructions for preparing the synopsis and how to use the synopsis template are given in the attached "Instructions on how to prepare the synopsis and how to submit it electronically". Also attached is a "Sample Synopsis".

The synopsis will be considered by the Programme Committee only if the Participation Form A and Paper Submission Form B have been received by the IAEA through official government channels (see Section 14).

(b) Acceptance of papers/posters

Given the number of papers anticipated and the need to provide ample time for discussion, the number of papers that can be accepted for oral presentation is limited. Authors who would prefer to present their papers in a poster session are requested to indicate this preference in their letter accompanying the extended synopses.

Authors will be notified by February 2003 whether their papers have been accepted by the Programme Committee on the basis of the extended synopses for oral presentation or for presentation as a poster. Following acceptance of their paper, they will be informed of the assigned paper/poster number and session of presentation. The synopses, if accepted, will be reproduced in unedited form in the Book of Extended Synopses.

(c) Proceedings

The proceedings will be published by the IAEA as soon as possible after the Conference in unedited form on a CD-ROM.

All participants will receive a free copy of the proceedings.

The IAEA reserves the right to refuse the presentation or publication of any paper that does not meet the expectations raised by the information originally given in the extended synopsis.

7. PARTICIPATION

All persons wishing to participate in the Conference are requested to complete a Participation Form (Form A) and send it as soon as possible to the competent national authority (Ministry of Foreign Affairs or national atomic energy authority) for subsequent transmission to the IAEA. A participant will be accepted only if the Participation Form is transmitted through the competent official authority of a Member State of the IAEA or by an organization invited to participate.

Participants whose designations have been received by the IAEA will be notified directly two to three months before the Conference. This information will be posted on the Conference web page: <http://www.iaea.org/worldatom/Meetings/2003/>.

8. EXPENDITURES

The costs for the organization of the Conference are borne by the IAEA. No registration fee is charged to participants.

As a general rule, the IAEA does not pay the cost of attendance, i.e. travel and living expenses, of participants. However, limited funds are available to help meet the cost of the attendance of selected specialists mainly from Member States receiving technical assistance under the IAEA's Technical Co-operation Programme. Generally, not more than one grant will be awarded to any one country.

If governments wish to apply for a grant on behalf of one of their specialists, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants:

- (a) be submitted by **15 January 2003**;
- (b) be accompanied by a duly completed and signed Grant Application Form (see attached Form C).

Applications that do not comply with the conditions stated under (a) and (b) cannot be considered.

The grants awarded will be in the form of lump sums and will usually cover only part of the cost of attendance.

9. WORKING LANGUAGE

The working language of the Meeting will be English. All communications sent to the IAEA should be in English.

10. DISTRIBUTION OF DOCUMENTS

A preliminary programme of the Conference will be sent to participants before the meeting. The final programme and the Book of Extended Synopses will be made available upon registration.

11. ACCOMMODATION

Detailed information on accommodation and other relevant information will be sent to all designated participants well in advance of the Conference.

12. VISAS

If you need a visa to enter Austria (the 'Schengen visa'), please submit the necessary applications to the nearest diplomatic or consular representative of Austria as early as possible (please note that this procedure may take up to three weeks).

13. SECRETARIAT

The address of the Secretariat is:

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P.O. Box 100
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The Scientific Secretary of the Conference is Mr. K. Fukuda, IAEA, Division of Nuclear Fuel Cycle and Waste Technology (telephone no. +43 1 2600/ext. 22766 or 22765; e-mail address: conf_sfs_2003@iaea.org). Conference organization is provided by Ms. Regina Perricos, Conference Service Section, Division of Conference and Document Services (telephone no. +43 1 2600/ext. 21315 or 21311; e-mail address: r.perricos@iaea.org).

14. CHANNELS OF COMMUNICATION

The Participation Form (Form A) and the Form for Submission of a Paper/Poster (Form B), together with two copies of each synopsis, and, if applicable, the Grant Application Form (Form C), should be sent to the competent national authority (Ministry of Foreign Affairs or national atomic energy authority) for official transmission to the IAEA.

Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on administrative matters to the IAEA Conference Service Section.

15. CONFERENCE WEB PAGE

The Conference webpage address is:

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=102>