99-07-21

Advisory Commission on Safety Standards
Fifth Meeting
31 May – 2 June 1999
IAEA Headquarters, Vienna
Report of the Meeting

1. Introduction

Participants were welcomed to the fifth Meeting of the Advisory Commission on Safety Standards (ACSS) by Mr. Z. Domaratzki, Deputy Director General, Head of the Department of Nuclear Safety. Dr. Bishop welcomed the participants. The agenda for the fifth meeting of the ACSS was approved (Annex I).

The report of the fourth ACSS meeting was approved with the following amendment:
Section 2, under 'Governmental organization' 4th Sentence, Change to read: 'Appropriate quality assurance should be exercised in the development of these safety guides.'

2. Meeting of Chairpersons of ACSS, NUSSAC, RASSAC, TRANSSAC, and WASSAC

Dr. Bishop informed the Commission that a meeting of the Chairs was held on the morning of Monday 31 May, in the course of which a number of issues in relation to the development of standards were discussed. Some of the issues were also raised at the ACSS; the following is a summary of the issues raised and the result of the discussions:

Process for reaching consensus: Inadequate international consensus on topics such as geological disposal, rehabilitation of contaminated areas, clearance and exemption, low level radiation and natural exposures has made the development of safety standards on these topics very difficult. Both RASSAC and WASSAC are planning to devote sufficient time in their future meetings for discussion of related topics in order to raise the level of consensus. The Chairmen were encouraged to pursue the matter and report to the ACSS at an appropriate time. In this connection appropriate technical co-ordination with the work of OECD/NEA, in particular on the topic of deep geological depositories, was encouraged.

Safety Fundamentals: At the time of the approval of the safety fundamentals the Board of Governors requested the Secretariat to consider, at an appropriate time, the revision of the three fundamentals with the aim of combing them into a single publication. Now that most of the priority safety standards have been drafted and the development of an INSAG report on Safe Management of Sources of Radiation, "the umbrella document" has been completed it seem an appropriate time to consider the revision of the three safety fundamentals. Chairman of TRANSSAC pointed out that transport safety should also be included in the revision of safety fundamentals. It was generally agreed that the four Advisory Committees should be involved in the revision of the fundamentals. A draft DPP should be prepared for consideration of the Advisory Committees and the ACSS.

Common glossary: The draft IAEA Safety Glossary has been considered by the four Advisory Committees. A new draft will be prepared on the basis of the comments received. A presentation on the glossary will be given at the November 1999 meeting of the ACSS.

Forward Planning by the Advisory Committees: The Chairmen of Advisory Committees were requested to consider their future plans and inform the ACSS accordingly. In this connection Chairman of RASSAC

informed the meeting that the Committee is considering the process for the revision of the Basic Safety Standards.

Working of the Advisory Committees: It was generally agreed that closer contact between the Chairmen of the Committees and the Co-ordinators of the programme would be of great benefit, in particular in relation to the review and approval of safety standards being reviewed by more than one Committee. It was also pointed out that currently comments received from the members of Advisory Committees are from the individual members, it would be appropriate to receive the position of the Committees on the more significant issues arising from the review of the safety standards.

3. Activities of the Advisory Committees

The Chairmen of the four Advisory Committees (ACs) were invited to participate in the ACSS meeting: Mr. Govaerts (NUSSAC), Mr. Mason (RASSAC), Mr. Young (TRANSSAC) and Mr. Metcalf (WASSAC) were in attendance. The activities of the four ACs were presented which included a presentation of the three year report of the Committees. The Scientific Secretary presented the Status of the IAEA Safety Standards. ACSS members requested a number of clarifications regarding the activities of the Advisory Committees; these were addressed by the Chairmen and the co-ordinator of the area concerned. The following is a summary of the discussions:

Biannual revision of Transport regulations: Chairman of TRANSSAC informed the ACSS of plans to revise the regulations once every two years. This would be in line with the two yearly revision cycle of the United Nations Committee of Experts on Transport of Dangerous Goods and with the international modal authorities (IMO, ICAO, ADR, RID).

Early revision of safety requirements: In the process of developing safety guides sometimes issues are raised that may require a change to the published safety requirements. Co-ordinators of the programme and the technical officers should record such issues and how they may effect the text of the published safety requirements. When the development of the set of the safety guides has been completed the related safety requirement should be considered together with the proposed amendments for possible early revision by the Advisory Committees and the ACSS.

Fuel cycle facilities: The question was raised on the need for specific safety standards covering other fuel cycle facilities (e.g. fuel fabrication, enrichment and reprocessing plants). It should be noted that these facilities are included in the scope of the Safety Requirements on Governmental and Legal Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety (NS-180) and the supporting Safety Guides. However, development of specific standards for these facilities is currently not included in the programme of the Advisory Committees. The Secretariat was requested to prepare a report on the nature of safety question for these facilities and the number of such facilities currently being operated or planned. The report should be submitted to the ACSS for consideration at the November meeting.

Scheduling of meetings: More attention should be paid to the scheduling of meetings. In general the meetings of the ACs should precede the meetings of ACSS by at least six weeks. This will allow enough time for the submission of meeting reports to the ACSS and the discussion of the issues raised at the ACSS meetings. Careful attention should be paid, as far as possible, to avoid major national holidays when scheduling meetings.

Presentation of reports of ACs: A more uniform approach should be taken in presenting the results of the Advisory Committees at the ACSS meeting. In particular the presentations should concentrate more on

the Committee's position on issues of substance and the future plans of the Committees. Reference to defunct programmes such as INWAC should be avoided.

Adherence to the deadline for comments: The members of the ACSS and the Advisory Committees have the responsibility to respond to request for comments in a timely manner. Efforts should be made by the members to meet the deadline for comments and to introduce their substantial comments, as far as possible, in the initial review of the safety standards. This would expedite the development of the safety standards and provide the Member States with a more mature draft for their review and comments.

Status of the safety standards: When submitting draft safety standards for review by the ACSS and the ACs the status of the document should be more clearly stated on the cover page (See Section 4 of the minutes of the 4th ACSS meeting). Suggestions were also made to improve the status report of the safety standards. ACSS was informed that the status report will be made available on the IAEA website in the near future.

4. Endorsement of Safety Requirements

Four Safety Requirements were submitted to the ACSS for final endorsement. ACSS stressed the need for the approval of ACs prior to the submission of documents to the ACSS. The following is a summary of the discussion on each of the safety requirements:

Legal and governmental infrastructure for nuclear, radiation, radioactive waste and transport safety (NS 180): Mr. Lacey, Technical Officer for the development of the Safety Requirements NS-180, presented the document and its development. NUSSAC, RASSAC and TRANSSAC had approved the requirement prior to the ACSS meeting, WASSAC will consider the requirements in its next meeting planned for end of the month. There were few written comments from ACSS members and a number comments made during the discussion. The requirements as amended was endorsed for submission to the Board of Governors for approval.

The safety of nuclear power plants: Operation (NS 179): Mr. Vaishnys, Technical Officer for the development of the Safety Requirements NS-179, presented the document and its development. NUSSAC had approved the requirement prior to the ACSS meeting, amendments introduce by NUSSAC were distributed during the meeting. The requirements was endorsed for submission to the Board of Governors for approval.

The safety of nuclear power plants: Design (NS 181): Mr. Gasparini, Technical Officer for the development of the Safety Requirements NS-181, presented the document and its development. NUSSAC had considered the requirements prior to the ACSS meeting and had agreed that the requirement was ready for approval when changes to the treatment of the severe accident had been agreed on. Arrangements have been made by NUSSAC to consider the topic. ACSS will consider the requirements, after approval by NUSSAC, in the November meeting.

Predisposal management of radioactive waste including decommissioning (NS 152): Mr. Linsley, Head of Waste Safety Section, presented the Safety Requirements NS-152 and its development. WASSAC in its last meeting had approved the submission of the requirements to the ACSS. Comments on the requirements were received from a number of the ACSS members prior to the meeting and were resolved outside the meeting. The Secretariat was asked to review the defined terms at the end of the document to ensure that they are the same as those included in the Standards that have already been approved. Question was raised regarding the level of recommendations and amount of detail guidance provided in this requirement in comparison with the other three requirements (NS 179, NS 180, NS 181).

ACSS considered the matter and decided by majority consensus to forward the requirement to the Board of Governors for approval.

5. Endorsement of Safety Guides

Four safety guides, approved by the Advisory Committees, were sent to ACSS members (letters of 1998-02-25 and 1998-09-25) for information and comments according to the established procedure. Comments received from members of the ACSS were resolved by the Technical Officers, in consultation with the Chairmen of the Advisory Committees. The safety guides are currently being edited. The final edited text of the safety guides will be sent to Dr. Bishop and the Chairman of the lead Advisory Committee, before they are released for publication. The following is the list of the safety guides endorsed by the ACSS for publication since the its meeting in June 1998:

- NS 25 - Regulatory control of radioactive discharges into the environment;
- NS 61 - Preventing, detecting and responding to illicit trafficking in radioactive materials;
- NS 173 - Decommissioning of medical, industrial and research facilities;
- NS 257 - Decommissioning of nuclear power plants and research reactors.

6. Policy Issues

The sub-group established at the last meeting met prior to the ACSS meeting. Mr. Williams, Chairman of the sub-group presented the report. The report covers recommendations on: the terms of reference; management of ACSS business; role of the Advisory Committees; functions of the Agency to support ACSS; interfaces with other IAEA organizations and; interfaces with other Agencies. The report recommendations were accepted by ACSS with some amendments. Dr. Bishop will include a summary of the recommendations in a report to the Director General by the end of August.

7. Topics for Senior Regulators Meeting and Peer Discussion Group

Members of ACSS were requested to propose topics for the senior regulators meeting (to be held during the General Conference for one and a half day starting on the afternoon of Wednesday 29 September) and for Peer discussion groups. Each topic proposed was discussed and a ‘short list’ drawn up. A complete list of the topics proposed is attached hereto as Annex II for future reference.

The following is the list of topics selected for the Senior Regulators Meeting:

- Y2K issues including readiness, contingency planning and actual status;
- Regulatory effectiveness including how it can be improved, results of the peer discussion groups on the topic and results of the NEA workshop planned for June;
- Deregulation issues including impact on nuclear regulatory work;
- Management of safety including impact of management changes on safety.

The following three topics were selected for peer discussion groups (in order of priority):

- Public information;
- Quality management of regulatory activities;
- Use of contractors in the operation of nuclear facilities.

8. Dates and agenda for the next meeting

The next meeting of ACSS is scheduled for 22-23 November 1999. The meeting will start at 9:00 on Monday 22 November.

The schedule of ACSS meetings for the year 2000 is as follows:

5-7 June
27-29 November

ANNEX I

AGENDA
Fifth Meeting of the
ADVISORY COMMISSION ON SAFETY STANDARDS
31 May - 2 June 1999
Meeting Room CO7-V, IAEA Headquarters, Vienna

1. Opening of the Meeting (14:00)
   Z. Domaratzki DDG-NS

2. Introduction, Adoption of the Agenda and Summary Record of the Fourth ACSS Meeting
   Dr. Bishop

3. Overview of the Activities in the Department of Nuclear safety
   Z. Domaratzki DDG-NS

4. Presentation and discussion of reports of Safety Standards Advisory Committees

   4.1 Nuclear Safety Standards Advisory Committees
   P. Govaerts Chairman/D. Lacey Scientific Secretary - NUSSAC

   4.2 Radiation Safety Standards Advisory Committees
   C. Mason Chairman/A. Bilbao Scientific Secretary - RASSAC

   4.3 Transport Safety Standards Advisory Committees
   C. N. Young Chairman/R. Rawl Scientific Secretary - TRANSSAC

   4.4 Waste Safety Standards Advisory Committees
   P. Metcalf Chairman/D. Delattre Scientific Secretary - WASSAC

5. Status of the IAEA Safety Standards
   A. Karbassioun

6. Safety Requirements

   6.1 Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety (NS 180);
   P. Govaerts/D Lacey Technical Officer

   6.2 The Safety of Nuclear Power Plants: Operation (NS 179);
   P. Govaerts/P. Vaishnys Technical Officer

   6.3 The Safety of Nuclear Power Plants: Design (NS 181);
   P. Govaerts/M. Gasparini Technical Officer

   6.4. Predisposal Management of Radioactive Waste, including Decommissioning (NS 152)
   P. Metcalf/E. Warnecke, Technical Officer

7. Reporting of ACSS Activities (1996-1999)

8. Policy Issues

9. Co-ordination with INSAG

10. Presentation and Discussion of Regulatory Issues (*ACSS Members)*

11. Topics for Senior Regulators Meeting (GC, September 1999)

12. Any other business

13. Report of the Meeting and Recommendations

14. Date of Next meeting

ANNEX II

TOPICS FOR SENIOR REGULATORS MEETING AND PEER DISCUSSION GROUP

II.1 Proposed Topics for the Senior Regulators' Meeting

1. Y2K Readiness and Contingency Planning (Information Exchange during Rollover). (Lange)

2. Y2K Issue - Actual Status (Wendling)

3. Risk Informing the Reactor Oversight Process (Inspection/Enforcement/Assessment). (Lange)

4. Safety Goals - referred with Risk Management (Sumita)

5. Regulatory Independence (Lim)

6. Plant life-time extension (Lim)

7. New US NRC Approach for Safety Assessment (Lipar)

8. Which are the main objects of Regulatory Supervision? (Prêtre)
   a. the nuclear installations (systems, components ...)
   b. the operators (working procedures, manuals, training ....)
   c. both a. and b. at the same level
   d. others

9. For the last few years the European Utilities have been developing the so called EUR (European Utilities Requirements). Likewise, the US utilities have developed the Utilities Requirements Document (URD). In both documents the utilities define the requirements they believe are needed for future reactors. It is known that the Dutch Utilities have compared the European Requirements against the NUSS series of documents as appropriate. Other studies may exist. Therefore, it is proposed to discuss: The Principles and Basic Requirements in the NUSS documents against the Requirements by the Utilities (Alonso).

10. During the Convention on Nuclear Safety, some countries put a great deal of reliance on probabilistic safety studies, while others were more prudent. It seems that there will be interest to discuss: What is the Proper Balance Between the use of Probabilistic and Deterministic Methodologies in the Design of New Systems and in the Operation of Existing Plants (Alonso).

11. The Safety Standard Series under development contemplates both deterministic approaches and the probabilistic methodologies. It will be of interest to have a presentation by the chairpersons of the four Committees (including TRANSSAC) on the reflection that the two methodologies are going to have in the relevant documents they have and are producing. The title could be: Deterministic and Probabilistic Methodologies in the Safety Standards Series (Alonso).

12. Improving Regulatory Effectiveness (Duncan)

13. Assessment of Regulatory Effectiveness; Results of Peer Discussion Group on the topic (Secretariat).

14. Results of IRRT Missions and Action Plans for Improvement (Lipar)

15. Impact of Management Change on Safety (Williams)

16. Source and Necessity of Safety Research (Duncan)

17. Public Acceptance as an International Problem (Duncan)

18. Aged Reactors - especially for Research Reactors (Sumita)

19. Human Factors (Lim)

20. Decommissioning Safety Issues (Williams)

21. The Management of Radioactive Waste (Williams)

22. Co-operation of IAEA with other relevant International Organizations on the Fields of Nuclear Safety, Radiation Protection and Radioactive Waste Management - Coherence of Results (Wendling)

23. Impact of Deregulations on Nuclear Safety Regulatory Work (Holme)

23. (Radiation Topic to be selected for next year - Holme)

Note: A radiation topic to be selected for the meeting in year 2000 (Holme)

II.2 Proposed Topics for Peer Discussions

1. Impact of Deregulation on Nuclear Safety (Duncan)

2. Impact of Deregulation (Lim)

3. Deregulation of Electric Power Market and its Implication on Nuclear Safety (Wendling)

4. Quality Management of Regulatory Activities (Duncan)

5. Regulatory Point of View of Nuclear Safety Research (Lim)

6. Use of Contractors in the Operation of Nuclear Facilities (Williams)

7. The Future: where will the people come from to design, build, operate and regulate nuclear installations i.e. succession (Williams)

8. Ageing Management and Licence Renewal (Lipar)

9. Public Information (Lipar)

10. Spent Fuel Disposal (Lipar)

PARTICIPATION

G.C. Mason, Australia
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M. Asty, France
R.D. Wendling, Germany
F.W. Krüger, Germany
K. Sumita, Japan
K. Muramatsu, Japan
Y. K. Lim, Korea, Republic of
M. Lipár, Slovak Republic
A. Alonso, Spain
P. Trueba-Bellido, Spain
L-E. Holm, Sweden
S. Prêtre, Switzerland
L.G. Williams, United Kingdom
P.W. Dickenson, United Kingdom
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D. Lange, United States of America
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A. Bilbao, Radiation Safety Section
D. Delattre, Waste Safety Section
R. Rawl, Radiation Safety Section
P. Vaishnys, Operational Safety Section
M. Gasparini, Engineering Safety Section
A. Karbassioun, Scientific Secretary, Safety Co-ordination Section