

## Document Preparation Profile (DPP)

### 1. IDENTIFICATION

<b>Document Category</b>	<b>Safety Guide</b>
<b>Working ID:</b>	<b>DS396</b>
<b>Proposed Title:</b>	Safety Assessment of Research Reactors and Preparation of the Safety Analysis Report
<b>Proposed Action:</b>	revision
<b>Published Title/Date</b>	Safety Assessment of Research Reactors and Preparation of the Safety Analysis Report/1994
<b>Safety Series No.:</b>	<b>SS No. 35-G1</b>
<b>SS Committee(s):</b>	<b>NUSSC</b>
<b>Technical Officer(s):</b>	T. Hargitai

### 2. OBJECTIVE

The objective of the present Safety Guide is to provide recommendations on how to fulfil requirements established for the safety assessment in the licensing process through the lifetime of the research reactor, such as responsibilities and functions of the organizations involved and steps towards the issue of the licence. In particular, this Guide gives guidelines for the performance of the safety analysis and for the preparation of the SAR.

### 3. BACKGROUND

The proposed publication is a revision of the previous Safety Guide SS 35-G1 having the same subject. Besides updating the material of this safety standard, this publication is intended to harmonize with the new structure and categorization of the IAEA Safety Publications and with the rest of the publications being developed within the framework of the IAEA programme on research reactor safety. The document is elaborating the requirements contained in "Safety Requirements of Research Reactors" NS-R-4.

### 4. INTERFACES

This Safety Guide will have interfaces with the following:

- Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety, GS-R-1, 2000
- Safety Requirements for Research Reactors, NS-R-4
- Safety Assessment of Research Reactors and Preparation of the Safety Analysis Report, SS No. 35-G1, 1994
- Review and Assessment of Nuclear Facilities by the Regulatory Body, SS No. GS-G-1.2, 2002
- Safety Assessment and Verification for Nuclear Power Plants, SS No. NS-G-1.2, 2001
- Quality Assurance for Safety in NPPs and Other Nuclear Installations, SS No. 50-C/SG-Q, 2001 (DS338 under preparation)
- The Operating Organization for Nuclear Power Plants, NS-G-2.4, 2002
- Format and Content of the Safety Analysis Report for Nuclear Power Plants, SS No. GS-G-4.1, 2004
- Safety Assessment and Verification, DS348

## 5. OVERVIEW

This Safety Guide addresses two interrelated issues: the safety assessment of the reactor and the preparation of the Safety Analysis Report for this purpose. It also provides general guidance on the conduct of the steps toward the licensing of a research reactor. The main reason for presenting such different topics together in a single Safety Guide is their interrelationship and joint importance in the licensing process.

### Table of contents:

1. Introduction
2. Requirements for safety assessment in the licensing process for a research reactor
3. Preparation of the safety analysis report
4. Performance of the review and assessment
- APPENDIX: Content of the safety analysis report
- ANNEX I: Safety analysis approaches and methods
- ANNEX II: Examples of input parameters and initial conditions
- ANNEX III: Examples of items to be considered in the reactor description

## 6. PRODUCTION: Provisional schedule for preparation of the document, outlining expected dates for:

Approval on DPP by the CSS\*: **November 2005**

Development: (consultant meetings, technical committee meetings): **2005**

Approval on draft by the Steering Committee: **by February 2006**

Approval by the Safety Standards Committees for submission to Member States for comments\*: **May 2006**

Revision of draft by taking into account the Comments by the Member States \*: **by August 2006**

Approval on the revised draft by the Steering Committee\*: **October 2006**

Submission to Publications Committee for approval: **November 2006**

Approval by the Safety Standards Committees for submission to the CSS;\* Editing\*: **May 2007**

Endorsement by the CSS\*: **June 2007**

Submission to Publications Committee: **June 2007**

Target publication date: **end of 2007**

note: \* is necessary only for the Safety Standards.