

AMENDMENT RECORD			
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0		ALL	New issue applicable for the de-fuelled HIFAR facility.

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## 1. Derivation of the Limits and Conditions

The Limits and Conditions (LCs) for the HIFAR facility were derived in the following way:

- 1.1 Each of the OLCs for the operational HIFAR facility were reviewed against the criteria identified in the references in Section 1.2 below to see whether they would still be applicable during the Possess and Control period.
- 1.2 The outline of the LCs was developed with the guidance of the ANSI/ANS - 15.1 - 1990 'The Development of Technical Specifications for Research Reactors', IAEA Safety Series No. 35 ' Safe Operation of Research Reactors and Preparation of the Safety Analysis Report, 1994 Edition and the draft IAEA Safety Standard DS261, 'Operational Limits and Conditions and Operating Procedures for Research Reactors', Draft 4 February 2006.

## 2. Format (Outline) of the Limits and Conditions

The LCs have been formatted in a manner consistent with the IAEA Safety Guides and industry best practices.

### 2.1 Applicability

The applicability of the LC is identified in terms of the specific activity being undertaken.

### 2.2 Objective

The objective of an LC defines the purpose of the rules specified.

### 2.3 Limiting Condition

- 2.3.1 A "limiting condition" is the lowest functional capability or performance level of equipment or parameters required to meet the assumptions of the safety analyses for the facility. Limiting conditions have been specified in the individual LC sections and sub-sections.
- 2.3.2 Upon discovery of a failure to meet an LC, the Required Actions of the associated Conditions shall be met.
- 2.3.3 If the LC is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required unless otherwise stated.
- 2.3.4 Contravention (non-compliance) of a limiting condition shall be deemed to have taken place only when the required actions specified in the LCs are not completed within the completion time or there is a failure of equipment to respond automatically, if required by the limiting condition.

### 2.4 Surveillance Requirements

#### 2.4.1 General

The surveillance requirements specify the frequency and the scope of tests to show that the performance requirements associated with the function settings and limiting conditions for operation are being met.

#### 2.4.2 Types of Surveillance

2.4.2.1 Surveillance Requirements are requirements relating to test, calibration, or inspection to assure that systems and components are operable.

2.4.2.2 A system or component is operable when it is capable of performing its intended safety function. Surveillance requirements are established in order to provide a program for verifying operability. Although Surveillance Requirements must be met at all applicable times, performance of the surveillance requirements shall be in accordance with the frequencies stipulated in the LCs.

2.4.2.3 Surveillance testing shall be carried out in accordance with appropriate written procedures. The Quality Assurance (QA) System will ensure that there is appropriate verification that this is done.

2.4.2.4 Surveillance requirements are derived from international best practices, manufacturer's recommendations, codes and standards, and requirements determined by the safety and reliability analysis. Personnel safety and operational aspects are also taken into consideration in the derivation of the surveillance requirements.

2.4.2.5 Failure to meet a Surveillance requirement, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LC.

2.4.2.6 Failure to perform a Surveillance within the specified Frequency, including any permitted delay, shall be failure to meet the LC. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

2.4.2.7 The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

2.4.2.8 Failure to perform a Surveillance within its specified frequency plus any delay period applicable shall be reported to ARPANSA.

## 2.5 Actions

In the event that a limiting condition is not met, the required action(s) to be taken are specified. A time limit within which the actions must be completed has also been specified, as applicable.

## 2.6 Bases (Reasons)

The reasons for the selection of the limiting conditions are given in the LCs. These are based on the SAR, on the facility design or on aspects relating to the conduct of preliminary dismantling, refurbishment projects or the maintenance of a state of safe enclosure. Some of the limiting conditions are based on State and Federal requirements, or on conventions - administrative or otherwise - derived from decades of safe HIFAR operation.

## 2.7 References

References have been added to the LCs to confirm bases, where applicable.

## 3. Compliance with the LCs

3.1 Activities and tasks associated with the Facility shall be in accordance with the provisions of the LCs. Compliance with the LCs is mandatory. The management of such compliance is specified in the Effective Control Plan.

3.2. Any contravention of the limiting conditions of the LCs (refer Clause 2.3.2 above) must be reported to the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in accordance with the provisions of the applicable Facility Licence.

**4. Amendment to the LCs**

The LCs can be altered by ANSTO only with the prior agreement of the ARPANSA.

**5. References**

[1] Safety Analysis Report (SAR Rev 0) for the de-fuelled HIFAR Facility.

[2] HIFAR OLC 1.0 Rev 9 approved by ARPANSA (refer ARPANSA letter dated 20/4/06).

**DRAFT**