

 <p>McMaster University Risk Management Manual</p>	<p>RMM 108 Nuclear Facilities Control Committee</p>	<p>Revision: R0.4 Date: 2017 September 22 Page: 1 of 5</p>
<p>Submitted: Chair, NFCC</p> 	<p>Approved: Vice President Research</p> 	<p>Authorized: President and Vice-Chancellor</p> 

1. PURPOSE

- 1.1. McMaster University's Nuclear Facilities shall be operated in a manner that is consistent with public safety and within the terms of the facility licences granted by the Canadian Nuclear Safety Commission (CNSC). The Nuclear Facilities Control Committee (NFCC) shall determine if this objective is being achieved through review and audit of facility operations. The Committee, through its Chair, reports to the Vice-President, Research.

2. SCOPE

- 2.1. This document applies to all activities involving Nuclear Facilities, as defined in the Canadian Nuclear Safety and Control Act and Regulations, owned and/or operated by McMaster University.

3. RELATED DOCUMENTS

- 3.1. The Canadian Nuclear Safety and Control Act
- 3.2. The General Nuclear Safety and Control Regulations
- 3.3. The Class I Nuclear Facility Regulations
- 3.4. The Class II Nuclear Facility Regulations
- 3.5. The Radiation Protection Regulations
- 3.6. The Nuclear Substances and Radiation Devices Regulations
- 3.7. The Nuclear Security Regulations
- 3.8. The Packaging and Transport of Nuclear Substances Regulations

4. DEFINITIONS

- 4.1. CNSC The Canadian Nuclear Safety Commission as established by Section 8 of the Canadian Nuclear Safety and Control Act. The regulatory body governing the use of nuclear substances, radiation devices, and nuclear facilities in Canada and its territorial waters.
- 4.2. NFCC The Nuclear Facilities Control Committee.

5. RESPONSIBILITIES

5.1. The Vice President, Research will:

- 5.1.1. Monitor the effectiveness of the NFCC in executing its delegated authority and responsibilities.
- 5.1.2. Provide necessary financial and human resources for the execution of the NFCC delegated authority and responsibilities.



5.2. The Nuclear Facilities Control Committee (NFCC) will:


- 5.2.1. Serve as McMaster University's internal regulatory body concerning all issues of operational safety in the University's nuclear facilities;
- 5.2.2. Review the University's nuclear facilities operating practices and management decisions against the requirements of the nuclear facilities licence(s) granted to McMaster University by the CNSC and against industry standards of good operating practices;
- 5.2.3. Consider for approval all licence applications to be submitted by McMaster University to the CNSC and all changes sought on behalf of the University in existing licenses and supporting documents;
- 5.2.4. Monitor the operational procedures within the facilities by periodic audits of log books and by periodic visits to the facilities;
- 5.2.5. Consider for approval all instructional, research, and commercial use of the facilities, subject to Health Physics Advisory Committee and other necessary approvals;
- 5.2.6. Advise the Director of Nuclear Facilities and Operations on all matters brought to the Committee's attention;
- 5.2.7. Strike sub-committee of individuals with relevant knowledge and experience as required to accomplish its objectives.

5.3. The Chair of the NFCC will:

- 5.3.1. Report to the Vice-President, Research;
- 5.3.2. Arrange for minutes of all NFCC meetings to be copied to the CNSC and the Vice-President, Research;
- 5.3.3. Prepare an annual report of its activities, submitted to the President through the Vice-President, Research and copied to the CNSC.

5.4. The Director of Nuclear Facilities and Operations will:

- 5.4.1. Provide administrative support to the Committee; and
 - 5.4.2. Maintain records related to the operation of the Committee.
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6. TERMS OF REFERENCE

6.1. Membership

This committee shall be established independent from Nuclear Operations and Facilities management, though members of management are included on the committee as non-voting members.

6.2. **The NFCC shall be constituted as follows:**

6.2.1. At least seven (7) voting members of whom all but at least one external appointment shall be McMaster University employees or have an academic appointment with the university. Membership shall consist of:

- (a) the Chair;
- (b) a member of the McMaster University Crisis Management Team;
- (c) the Senior Health Physicist and a member of Health Physics staff;
- (d) members of McMaster's academic, management, professional or technical staff;
- (e) one or more external appointment(s) knowledgeable in facility safety; and
- (f) others as required.

6.2.2. Non-voting members shall include:

- (a) the Director, Nuclear Operations and Facilities,
- (b) the Manager of each nuclear facility,
- (c) the Laboratory Services Manager,
- (d) the Iodine Production Manager,
- (e) the Manager Operations Quality Management and Training, and
- (f) the Secretary of the committee.

6.2.3. Members are recommended by the Chair NFCC and appointed by the Vice-President, Research after consultation with the Deans of Engineering, Health Sciences and Science, and the Provost. The Chair, with approval of the committee, may make a temporary appointment for up to six months pending approval by the Vice-President, Research. It is desirable to have at least one member from each of the faculties of Science, Engineering, and Health Sciences.

6.2.4. The Chair, the academic members, and the external member should normally serve for three-year terms that are renewable. Normally none of these members should serve more than two consecutive terms.

6.2.5. Exceptions to terms in Item 6.2.4 require the approval of the committee and endorsement of the Vice-President Research.

6.2.6. Individuals who go on research leave while they are members of the NFCC should be replaced during their absence. They should finish out their term upon return.



6.3. **Medical Consultant**

The Committee shall appoint a Medical Consultant to be called upon for advice under appropriate circumstances.

6.4. **Selection of the Chair**

The Chair shall be selected and appointed by the Vice President ,Research from amongst the candidates nominated by the Committee members.

6.5. **Quorum**

6.5.1. A quorum shall consist of four voting members and shall include the Chair or an alternate designated by the Chair.

6.6. **Meetings**

6.6.1. Meetings shall be held regularly at the call of the Chair. The Director, Nuclear Facilities and Operations and the Managers of the nuclear facilities shall also be empowered to call meetings, if necessary.

6.6.2. Meetings shall be held at least quarterly.

6.6.3. Items voted on at meetings require a simple majority to pass. The Chair shall only vote to break a tie. Items circulated to the Committee may be voted on at meetings or, if circumstances warrant, by individual polling of the members. Votes conducted by poll require unanimous approval by all members responding to the poll. This must be at least four of the voting members of the committee. Any dissent during polling requires a committee meeting be held for formal resolution. There shall be a good faith effort to contact all members.

6.7. **Items of Business**

The following is a partial list of identified items, related to facility operations, requiring consideration by the NFCC:

6.7.1. The NFCC considers for approval reports to be submitted to the CNSC in compliance with the facility licences.

6.7.2. Under the Emergency Preparedness Plan, the committee conducts the Annual Planning Conference at which the Type D Emergency plans are reviewed.

6.7.3. Major issues involving operating procedures and policies are reviewed and considered for approval by the Committee. This includes the various policy and program documents issued by the facilities in compliance with their licences.

6.7.4. Changes which exceed the limits of authority granted in facility licences, which involve modifications to the licence, or the procurement of new licences are considered for approval by the NFCC before submission to the CNSC.



6.7.5. The Committee reviews, considers for approval, or receives for information procedures to:

- (a) determine if they are consistent with safe operation of the facilities in compliance with the operating licences,
- (b) determine if they are consistent with safe use of radioactive material within the facilities; and
- (c) determine if they are consistent with safe production and disposal of radioactive materials,

6.8. **Sub-Committees**

6.8.1. The NFCC may, at its discretion, establish sub-committees to carry out aspects of its work.

6.8.2. Each sub-committee shall have written Terms of Reference approved by the Chair.

7. **RECORDS**

7.1. Minutes of meetings shall be maintained by the Director of Nuclear Facilities and Operations as permanent records.

7.1.1. Minutes of each Committee meeting shall be distributed to the CNSC, the Vice-President Research, the President and Vice Chancellor (as licence holder), all NFCC members and such others as the Chair may designate.

8. **MEMBERSHIP**

8.1. Current Membership of the NFCC – see Avenue to Learn for listing or the McMaster Nuclear Reactor website link: <http://mnr.mcmaster.ca/>.



CURRENT MEMBERSHIP

Adriaan Buijs – Joined September 2011 – **Voting Member**

Soo Hyun Byun – Joined October 2005 - **Voting Member**

Costas Economou – Joined April 2017 - **Non-Voting Member**

Troy Farncombe – Joined November 2010 - **Voting Member**

Christopher Heysel – Joined June 2001 - **Non-Voting Member**

Brandon Johnston – Joined June 2011 - **Non-Voting Member**

John Luxat - Joined Jan. 2004 - Appointed Chair - April 2007 - **Voting Member/Tie-Breaker**

Christopher Malcolmson – Joined November 2005 - **Voting Member**

Joe McCann – Joined January 2014 – **Non-Voting Member**

Scott McMaster – Joined August 2000 - **Non-Voting Member**

Diana Moscu – Joined September 2015 - **Non-Voting Member**

David Novog - Joined November 2007 - **Voting Member**

Robert Pasuta – Joined December 2015 - **Non-Voting Member**

Alice Pidruczny – Joined October 1987 - **Non-Voting Member**

Nik Popov – Joined September 1998 - **Voting Member**

William Prestwich – Joined July 1993 - **Voting Member**

Victor Snell – Joined October 2012 - **Voting Member**

Krysia Steinberg – Joined October 2006 – **Non-Voting Member**

Brad Trushinski – Joined July 2000 - **Non-Voting Member**

Dave Tucker – Joined May 1998 - **Voting Member**
