



# Follow-up Audit of the CNSC Integrated Action Plan on the Lessons Learned From the Fukushima Daiichi Nuclear Accident

Office of Audit and Ethics

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## Executive Summary

### Background

The follow-up audit of the Canadian Nuclear Safety Commission (CNSC) Integrated Action Plan on the lessons learned from the Fukushima Daiichi nuclear accident was part of the approved CNSC Risk-Based Audit Plan for 2013–14 to 2015–16.

### Audit objective, scope and approach

The objectives of the audit were to assess the adequacy of the processes established by the CNSC for meeting commitments, as well as the progress made in implementing the actions detailed in the *CNSC Integrated Action Plan on the Lessons Learned from the Fukushima Daiichi Nuclear Accident* (CNSC Integrated Action Plan).

The CNSC Integrated Action Plan identified 22 recommendations across three areas:

1. nuclear power plants (NPPs) – 13 recommendations (further broken down into 33 staff actions and 56 action items)
2. major nuclear facilities (other than NPPs) – 8 recommendations (further broken down into 8 staff actions and 14 action items)
3. communication and public education – 1 recommendation (further broken down into 7 staff actions and 14 actions items)

The scope of the audit included all three areas for which recommendations were made and covered processes and activities as at the time of audit fieldwork.

Audit fieldwork was conducted between April and July 2014, and included interviews with management and staff, reviews of relevant documents, and testing of a sample of 77 of 330 files (or 23 percent) pertaining to the status of action items during the period under review.

### Summary of observations

An adequate framework is in place to track and manage the status of the CNSC Integrated Action Plan:

- Oversight practices are in place to monitor implementation of the plan.
- Processes are in place to report information to management on a timely basis. Information being reported to the Commission on the status of the CNSC Integrated Action Plan was found to be accurate.
- Adequate tools specific to each directorate (area) were used across all areas involved in the work related to the CNSC Integrated Action Plan to support

information tracking and reporting. While it is always desirable to have a single or consistent set of tools, the use of area-specific tools did not have a negative impact on the operation.

Processes are in place to support consistent and accurate closure of items identified in the CNSC Integrated Action Plan:

- Roles and responsibilities for completion of Fukushima-related action items are defined and understood.
- Closure acceptance processes are defined and operating as intended. Closure acceptance processes varied by area within the CNSC, based on the level of risk associated with the activity or facility.
- The approach for maintaining information to support the closure of action items varied by area within the CNSC. Sufficient evidence was found to support closure or other assertions made in Commission member documents. While the use of area-specific approaches did not have a negative impact on the operation, a consistent approach would better substantiate decision-making and demonstrate the application of due diligence.

## **Conclusion**

Overall, the processes established by the CNSC for meeting commitments and the progress made in implementing the actions detailed in the *CNSC Integrated Action Plan on the Lessons Learned from the Fukushima Daiichi Nuclear Accident* are adequate.

The CNSC has adequate processes in place for tracking and managing the commitments made in the CNSC Integrated Action Plan. This includes oversight mechanisms, and tools and processes for providing accurate and timely information on progress against the CNSC Integrated Action Plan.

The CNSC has put processes in place to support closure of action items, including clear roles and responsibilities, and processes and criteria to be used to close action items.

Information reported to the Commission on the status of Fukushima-related action items was tested on a sample basis as part of the audit. Testing did not identify material deficiencies with respect to accuracy of the assertions made in reports provided to the Commission or with respect to evidence to support closure. Progress has been made towards meeting the commitments outlined in the CNSC Integrated Action Plan, as reported to the Commission on a scheduled basis.

The findings and the recommendation have been communicated and agreed to by Regulatory Operations Branch management. The management action plan is scheduled for implementation no later than January 2015.

## **Conformance with professional standards**

This audit engagement conforms to the *Internal Auditing Standards for the Government of Canada*, as supported by the results of the quality assurance and improvement program.

# 1. Introduction

## 1.1. Background

On March 11, 2011, a magnitude 9.0 earthquake, followed by a large tsunami, struck Japan. The combined impacts of the earthquake and tsunami triggered a severe nuclear accident at TEPCO's Fukushima Daiichi nuclear power plant.

The Fukushima accident prompted nuclear regulators around the world to launch comprehensive reviews of all their major facilities. At the Canadian Nuclear Safety Commission (CNSC), in April 2011, the Executive Vice President and Chief Regulatory Operations Officer established the CNSC Fukushima Task Force to evaluate the operational, technical and regulatory implications of the nuclear incident in relation to Canada's nuclear power plants (NPPs).

The task force review was completed in September 2011, and the findings and recommendations were presented to the Commission in the *CNSC Fukushima Task Force Report* of October 2011. In response to the recommendations, the CNSC developed an action plan to further strengthen the safety of licensed NPPs and other major nuclear facilities.

In August 2011, the CNSC President formed the External Advisory Committee (EAC) to provide an independent assessment of the CNSC's response to the Fukushima Daiichi accident. As a result of their work, the EAC identified some areas for further enhancement.

The *CNSC Integrated Action Plan on the Lessons Learned From the Fukushima Daiichi Nuclear Accident* (CNSC Integrated Action Plan), published in August 2013, reflects: (a) the recommendations of the CNSC Fukushima Task Force; (b) the findings of the EAC; and (c) comments received through public consultations held following the Fukushima Daiichi accident.

The CNSC Integrated Action Plan identified a total of 22 recommendations across three areas:

1. nuclear power plants (NPPs) – 13 recommendations (further broken down into 33 staff actions and 56 action items)
2. major nuclear facilities (other than NPPs) – 8 recommendations (further broken down into 8 staff actions and 14 action items)
3. communication and public education – 1 recommendation (further broken down into 7 staff actions and 14 actions items)

Responsibility for implementing the recommendations and actions associated with these three areas resides with the Directorate of Power Reactor Regulation (DPRR),

Directorate of Nuclear Cycle and Facilities Regulation (DNCFR), and Strategic Communications Directorate (SCD), respectively.

## **1.2. Authority**

The follow-up audit of the CNSC Integrated Action Plan on the lessons learned from the Fukushima Daiichi nuclear accident was part of the approved CNSC Risk-Based Audit Plan for 2013–14 to 2015–16.

## **1.3. Objectives and scope**

The objectives of the audit were to assess: (a) the adequacy of the processes established by the CNSC for completing the items identified in the CNSC Integrated Action Plan; and (b) progress made in implementing the actions detailed in the CNSC Integrated Action Plan.

The scope of the audit covered all three areas for which recommendations were made (NPPs, other major nuclear facilities, and communication and public education) in the CNSC Integrated Action Plan. The audit scope covered processes and activities as at the time of audit fieldwork (April to July 2014).

## **1.4. Analysis of risks**

During the audit planning phase, a risk analysis was conducted to identify areas of inherent risk exposure for the audit entity, and to evaluate and prioritize their relevance to the audit objectives. The risk analysis was based on documentation review and preliminary interviews with CNSC representatives.

The following areas of inherent risk exposure were identified for examination during the audit:

- processes related to the closure of action items
- timeliness and accuracy of reporting

## **1.5. Lines of enquiry and audit criteria**

Appendix A provides a list of the lines of enquiry and related audit criteria used to achieve the audit objectives.

## **1.6. Approach and methodology**

The audit was conducted from February to August 2014, with procedures that included 21 interviews<sup>1</sup> with management and staff, review and analysis of relevant

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<sup>1</sup> Please refer to appendix B for the list of interviews conducted.

documentation, walk-throughs of tools in place to supporting information tracking/reporting, and testing and analysis of a sample of 77 of 330 files (23 percent)<sup>2</sup> pertaining to the status of action items during the period under review.

The audit findings represent the status of activities and practices in place as at July 2014. Audit findings were communicated to CNSC management prior to their finalization.

### **1.7. Conformance with professional standards**

This audit conforms with the *Internal Auditing Standards for the Government of Canada*, as supported by the results of the Office of Audit and Ethics quality assurance and improvement program.

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<sup>2</sup> The sample is broken down as follows:

- NPP actions 1–5: 36 of 204 closed action items listed in the DRRR dashboard to track NPP progress. (Actions 1–5 are applied across NPP facilities, thus the number of action items being reported on is greater than the 56 action items listed in the CNSC Integrated Action Plan.)
- NPP actions 6–13: 7 of 39 activities related to action items reported upon in CMD 13-M34 (August 2013).
- Other major nuclear facilities actions 1–8: 20 of 73 activities related to action items reported upon in CMD 13-M34 (August 2013).
- Communication and public education actions 1–7: 14 of 14 action items identified in the CNSC Integrated Action Plan.

## 2. Audit Observations and Recommendations

### 2.1. *Line of enquiry 1 – An adequate framework exists to track and manage the status of the CNSC Integrated Action Plan*

To assess the framework in place for tracking and managing the status of the CNSC Integrated Action Plan, the audit examined the oversight practices in place for monitoring progress, the processes in place to support timely and accurate reporting of information to management, and the tools in place to support information tracking and reporting.

#### 2.1.1. *Oversight practices for monitoring progress*

The audit examined the extent to which management has established oversight practices for monitoring the implementation of the CNSC Integrated Action Plan.

**Adequate oversight practices are in place for monitoring implementation of the CNSC Integrated Action Plan at both the strategic and operational level.**

At the strategic level, the Commission is the focal point for updates on the status of the CNSC Integrated Action Plan. The Commission receives information both through specific updates focused on the progress against the CNSC Integrated Action Plan and through updates at the directorate and/or division level.

At the operational level, two approaches were evident through the audit, tied to the risk level of the activity. For higher-risk areas, project management practices were established (specifically for nuclear power plants (NPPs) and the Chalk River National Research Universal (NRU) reactor) to guide the implementation of Fukushima-related action items.

To manage actions related to NPPs, DPRR established the Fukushima Safety Improvements Implementation Team (FSIIT), a dedicated project team put in place to manage progress against these action items. Additionally, the CNSC-CANDU Industry Integration Team (CIIT) Strategic Forum was established to enable CNSC and NPP industry representatives to maintain high-level contact and exchange information on progress against the CNSC Integrated Action Plan on a regular, scheduled basis (biannual meetings).

To manage actions related to the Chalk River NRU reactor, the Nuclear Laboratories and Research Reactors Division (NLRRD) established a review team to manage Fukushima-related action items for the Chalk River NRU,

and incorporated these action items within the Chalk River NRU Integrated Implementation Plan.

As for the CNSC areas involved in Fukushima-related actions considered lower risk, these areas<sup>3</sup> addressed Fukushima-related action items for which they had responsibility or involvement through established business practices and norms (i.e., existing portfolio responsibilities, as well as management and oversight structures).

### **Recommendation**

None.

#### **2.1.2. Processes for accuracy and timeliness of information reported to management**

The audit examined the extent to which processes have been established to ensure that the information reported to management is accurate and is reported on a regular basis.

**CNSC divisions responsible for reporting on the status of action items have established processes to report information to management on a scheduled basis. Testing results found status updates being reported to management to be accurate.**

Updates to the Commission from an integrated standpoint (all stakeholders) on the CNSC Integrated Action Plan have in the past been coordinated by either a DRR or DNCFR representative. Timeliness of information provided to the Commission is managed through the structured Commission member document (CMD) process and associated schedule, published by the Commission Secretariat. The CMD lead for a given cycle ensures timeliness for reporting by tracking and managing the schedule and cut-off dates, as published by the Commission Secretariat.

To produce the document, the CMD lead initiates the reporting process with a kickoff meeting. A work plan is developed to guide the process, identifying contributors and timelines. Work is conducted at the divisional level to gather information and draft updates, and the divisional contributions are provided to the CMD preparation lead for integration and preparation of the final CMD.

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<sup>3</sup> DNCFR: Uranium Mines and Mills Division, Waste and Decommission Division, Nuclear Processing Facilities Division; Strategic Communications Directorate: Public Affairs and Media Relations Division; Regulatory Policy Directorate: Regulatory Framework Division; and Directorate of Nuclear Substance Regulation: Accelerators and Class II Facilities Division.

CNSC divisions ensure accuracy of information through standard compliance verification and licensing-related business processes for review and closure of actions.

Testing results found the information being reported to be accurate. The status of actions being reported in the CMD were tested by tracing a sample<sup>4</sup> of “closed” action items for all three areas of actions identified in the CNSC Integrated Action Plan: NPPs, other major nuclear facilities, and communication and public education. Testing found the status being reported to be accurate and aligned with supporting documentation.

### **Recommendation**

None.

#### ***2.1.3. Tools to support information tracking and reporting***

The audit examined the adequacy of the tools used to support information tracking and reporting.

**Adequate directorate (area) specific tools were used across all areas involved in the CNSC Integrated Action Plan related work to support information tracking and reporting. While it is always desirable to have a single or consistent set of tools, the use of area-specific tools did not have a negative impact on the operation.**

The audit found that the tools already in use within a given area were leveraged for Fukushima-related activities. The tools used included: RIB/BIR, e-Access (use of folders and workspaces), and Microsoft suite products for tracking sheets (Excel, Word).

For action items related to NPPs, the Fukushima Safety Improvements Implementation Team put in place a dedicated workspace in e-Access, that was accessible to all CNSC staff involved in FSIIT, and developed a dashboard to support information tracking and reporting. The actual completion of work leveraged RIB/BIR for action item tracking, per established business processes within the CNSC.

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<sup>4</sup> A judgmental sampling approach was used for sample selection, to ensure sufficient coverage of the various licensees and/or areas of CNSC. The sample was selected using: (a) the dashboard maintained by DPRR to track NPP progress on Fukushima action items 1–5 (May 1 2014 version); (b) the August 2013 status update to the Commission (CMD 13-M34) for action items 6–13 related to NPPs, and action items 1–8 related to other major nuclear facilities; and (c) all action items identified for communication and public education in the CNSC Integrated Action Plan. For details on sample size, please refer to footnote 2.

For action items related to other major nuclear facilities, the various divisions managed and tracked Fukushima-related information through standard business practices (for example, established information-tracking mechanisms such as integrated implementation plans), and in some cases developed tracking sheets specifically to track the status of Fukushima-related action items.

For action items related to communication and public education, information on Fukushima-related action items was exchanged through established business practices, including daily status meetings, and briefings and status reports to senior management (director general, vice-president).

The audit team has provided some suggestions for management consideration for future projects (attached as appendix C).

### **Recommendation**

None.

## **2.2. *Line of enquiry 2 – Processes are in place to support consistent and accurate closure of items identified in the CNSC Integrated Action Plan***

To assess the processes in place to support consistent and accurate closure of items identified in the CNSC Integrated Action Plan, the audit examined whether roles and responsibilities are clearly defined and understood, closure acceptance processes are defined and operating as intended, and closure acceptance is supported by evidence.

### **2.2.1. *Roles and responsibilities***

The audit examined the extent to which clear roles and responsibilities have been established to ensure the proper implementation of the CNSC Integrated Action Plan items.

**Roles and responsibilities for completion of action items are clearly defined and understood across the CNSC. High-level roles and responsibilities are documented in the CNSC Integrated Action Plan. At the operational level, two primary approaches were taken across the CNSC, aligned with risk levels: (a) establishing a project to manage Fukushima-related action items, or (b) employing existing business processes and established portfolio responsibilities to manage Fukushima-related action items.**

For actions related to NPPs, which are considered the highest-risk licensees, DPRR instituted a structured project management approach, through the establishment of the Fukushima Safety Improvements Implementation Team

(FSIIT). Roles and responsibilities for FSIIT are clearly defined in a project charter. Roles and responsibilities for reviewing NPP industry updates are defined in a closure criteria and expectations document developed specifically for the CNSC Integrated Action Plan items related to NPPs. Lastly, a terms of reference document is in place for the CNSC-CIIT Strategic Forum.

Other areas involved in Fukushima-related action items (DNCFR, Regulatory Policy Directorate (RPD) and SCD) followed existing business processes and established roles and responsibilities for addressing action items for which they were responsible. For the Chalk River NRU, which is considered a higher-risk facility relative to other areas within DNCFR, a CNSC Fukushima Review Team was established, and a terms of reference document was put in place.

Reviews of relevant documentation confirmed that roles and responsibilities (a) were documented through various means, including specific project charters and closure criteria and expectations documentation (DPRR for FSIIT, DNCFR-NLRRD for Chalk River NRU), existing work structures and practices as codified in work descriptions (for DNCFR), account management responsibilities (for SCD-Public Affairs and Media Relations Division (PAMRD)) and roles and responsibility matrices and process guidelines (for RPD-Regulatory Framework Division (RFD)); and (b) were circulated and understood by staff.

### **Recommendation**

None.

#### **2.2.2. Closure acceptance processes**

The audit examined the extent to which closure acceptance processes have been defined and determined whether they are operating as intended.

**Closure acceptance processes associated with the CNSC Integrated Action Plan action items are defined and operating as intended. The closure acceptance processes varied by area within the CNSC, based on the level of risk associated with the activity.**

For action items related to NPPs (considered higher-risk facilities), a closure criteria and expectations document was developed by the Directorate of Assessment and Analysis and finalized by DPRR (FSIIT) in consultation with internal areas and industry. The document provides detailed guidance to staff, establishing clear criteria and expectations for reviewing reports received from NPPs, including clear roles and responsibilities and expectations for assessment and analysis of information received.

For other major nuclear facilities, DNCFR reviewed these licensees through the process established under subsection 12(2) of the *General Nuclear Safety and Control Regulations* (GNSCR), which enables the CNSC to request information or actions from licensees. Information requests issued by DNCFR under GNSCR 12(2) required licensees to review their sites in light of the Fukushima accident and identify any needed improvements. Responses received from licensees were reviewed for reasonableness by CNSC staff and, where it was felt that submissions were adequate, the 12(2) requests were closed.

The audit noted that DNCFR staff applied a more rigorous, risk-informed approach to the Chalk River NRU than other facilities under DNCFR. The NRU is a more complex facility than those other facilities and has a higher perceived risk. As such, the NLRD safety review team established a project charter, terms of reference and safety review criteria for Chalk River-related items.

In cases where internal stakeholders were responsible for completing and closing Fukushima-related action items (SCD-PAMRD, RPD-RFD), closure was deliverable based (i.e., publishing or development of deliverables as identified in the CNSC Integrated Action Plan) with respect to communication products for SCD and revisions to regulatory documentation for RPD. As noted previously, established business processes were used to close action items.

## **Recommendation**

A consolidated recommendation relating to DNCFR's closure acceptance practices is presented below, as part of section 2.2.3.

### ***2.2.3. Evidence to support closure acceptance***

The audit examined the appropriateness of the approaches used for maintaining information to support the closure of action items.

**The audit noted that each group within the CNSC had its own approach to maintaining information to support the closure of action items based on their respective work practices. Through testing of action item status, the audit found that closure of items is supported by evidence of actions taken, assessment and approval for closure. While the use of area-specific approaches did not have a negative impact on the operation, it is always desirable to have a consistent approach, in order to better substantiate decision-making and demonstrate the application of due-diligence.**

A sample<sup>5</sup> of files was tested for action items identified in the CNSC Integrated Action Plan related to NPPs, other major nuclear facilities, and communication and public education. Testing was undertaken to determine whether the sample of items reported as “closed” in the most recent CMD (August 2013) were supported by evidence as defined by each area (DPRR, DNCFR, SCD) in their approach to closure.

For NPP-related action items, testing found that all items were supported by evidence of closure and acceptance by the CNSC according to closure criteria defined by DPRR.

For other major nuclear facilities, testing found that closure of items was supported by evidence. Items were closed within DNCFR on the basis of reasonableness and staff understanding of the licensee. While the audit team was able to obtain evidence to support closure for items sampled, it was noted that a consistent approach was not taken to documenting the reviews that take place prior to closure.

Action items related to communication and public education, as previously noted, were deemed closed by SCD upon completion or publishing of the deliverable noted in the CNSC Integrated Action Plan. Testing found evidence in place to support the assertions made regarding closure of these action items (e.g., website content was posted and presentations were given in international forums).

Closure acceptance practices are in place to support review and closure of action items (both internal and external). However, as noted above, a consistent approach to documenting reviews conducted within DNCFR was not found to be in place. The lack of a consistent approach may result in challenges when trying to substantiate decision-making processes.

### **Recommendation 1**

While no safety issue was noted, it is recommended that the Director General, DNCFR, establish a consistent, directorate-wide approach to documenting and maintaining evidence related to the assessment of information received from licensees and the closure of action items.

### **Management response and action plan**

DNCFR management agree with the findings of the report. DNCFR uses a risk-informed approach to the closure of action items that employs established business practices.

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<sup>5</sup> Refer to footnote 2 for details on sample size and footnote 4 for the sampling approach.

The Director General, DNCFR is undertaking an evaluation of DNCFR's approach to closure of all Fukushima action items (timeline: November 2014).

DNCFR management will through line-management oversight ensure that, on an ongoing basis, in closing all action items, established business practices are followed , and an adequate documented paper-trail is maintained (timeline: January 2015).

### **3. Overall Conclusion**

Overall, the processes established by the CNSC for meeting commitments and the progress made in implementing the actions detailed in the *CNSC Integrated Action Plan on the Lessons Learned from the Fukushima Daiichi Nuclear Accident* are adequate.

The CNSC has adequate processes in place for tracking and managing the commitments made in the CNSC Integrated Action Plan. This includes oversight mechanisms, and tools and processes for providing accurate and timely information on progress against the CNSC Integrated Action Plan.

The CNSC has put processes in place to support closure of action items, including clear roles and responsibilities, and processes and criteria to be used to close action items.

Information reported to the Commission on the status of Fukushima-related action items was tested on a sample basis as part of the audit. Testing did not identify material deficiencies with respect to accuracy of the assertions made in reports provided to the Commission, or with respect to evidence to support closure. Progress has been made towards meeting the commitments outlined in the CNSC Integrated Action Plan, as reported to the Commission on a scheduled basis.

The Office of Audit and Ethics would like to acknowledge and thank management for their support throughout the conduct of this audit.

## **Appendix A: Lines of Enquiry and Audit Criteria**

The risk analysis assisted the audit team in developing lines of audit enquiry and related audit criteria, which were used to assess the adequacy of controls established to manage the identified inherent risk areas.

The lines of audit enquiry and audit criteria are presented below:

- 1. An adequate framework exists to track and manage the achievement of the CNSC Integrated Action Plan objectives.**
  - 1.1. Oversight is in place to monitor progress against the CNSC Integrated Action Plan.
  - 1.2. Information reported to management is accurate and timely.
  - 1.3. Tools are in place to support information tracking and reporting.
  
- 2. Processes are in place to support consistent and accurate closure of items identified in the CNSC Integrated Action Plan.**
  - 2.1. Roles and responsibilities for completion of action items are clearly defined and understood.
  - 2.2. Closure acceptance processes are clearly defined and are operating as intended.
  - 2.3. Closure acceptance is supported by evidence.

The audit criteria were developed based on an assessment of the inherent risks associated with this audit, and draw upon the Office of the Comptroller General's *Audit Criteria Related to the Management Accountability Framework*.

## Appendix B: Interviews Conducted

Directorate of Power Reactor Regulation	Greg Rzentkowski, Director General, Directorate of Power Reactor Regulation
	Hatem Khouaja, Lead Technical Advisor, Directorate of Power Reactor Regulation
	Albert Thibert, Senior International Relations Officer, Policy, Aboriginal and International Relations Division, Strategic Planning Directorate (previously with DPRR, Licensing Support Division)
	Thomas Lavrisa, Senior Regulatory Program Officer, Pickering Regulatory Program Division
Directorate of Nuclear Cycle Facilities Regulation	Peter Elder, Director General, Directorate of Nuclear Cycle Facilities Regulation
	Don Howard, Director, Waste and Decommissioning Division
	Pamela Doughty, Senior Project Officer, Waste and Decommissioning Division
	Michael Rinker, Director, Nuclear Processing Facilities Division
	Ann Erdman, Senior Project Officer, Nuclear Processing Facilities Division
	Jean Leclair, Director, Uranium Mines and Mills Division
	Christian Carrier, Director, Nuclear Laboratories and Research Reactors Division
Nathalie Riendeau, Senior Project Officer, Nuclear Laboratories and Research Reactors Division	
Regulatory Policy Directorate	Colin Moses, Director, Regulatory Framework Division
Strategic Communications Directorate	Sunni Locatelli, Director General, Strategic Communications Directorate
	Timothea Gibb, Director, Public Affairs and Media Relations Division
Directorate of Assessment and Analysis	Chris Harwood, Lead, Safety Analysis, Reactor Behaviour Division
Directorate of Safety Management	Andre Bouchard, Director, Human and Organization Performance Division
	Aaron Derouin, Human and Organizational Factors Specialist, Human and Organization Performance Division
Directorate of Security and Safeguards	Luc Sigouin, Director, Emergency Management Programs Division
	Laurent Nicolai, Licensee Emergency Programs Officer, Emergency Management Programs Division
Directorate of Nuclear Substance Regulation	Kavita Murthy, Director, Accelerators and Class II Facilities Division

## **Appendix C: Suggestions for Management Consideration for Future Projects**

The audit team has developed some suggestions on management practices and processes for consideration for future projects. These suggestions were identified in the course of conducting this audit.

### **General observations**

While the CNSC has tools and processes in place to support reporting to the Commission and tracking the status of action items, variation in the tools and processes was noted across the different areas involved (i.e., how information was presented in the Commission member document, and methods in use to track and manage information in each area).

With multiple tracking tools used, the audit team noted that tabulating the number of open and closed actions was complex and cumbersome.

As well, at the time of audit fieldwork, interviews with smaller divisions (e.g., the Strategic Communications Directorate and the Regulatory Policy Directorate) noted that there was some uncertainty with respect to the extent of reporting planned for the 2014 reporting cycle.

### **Suggestions for consideration**

For future initiatives of similar size and scope (i.e., high visibility, involving many activities, and involving multiple areas within the CNSC and multiple licensees), the CNSC should consider having an overall coordination function in place to establish and communicate expectations and timelines, coordinate reporting, and establish common tools and templates for tracking and managing information.

This would provide value by reducing variation in practices, as well as supporting quality assurance, consistency in reporting, and workload management, and allow the CNSC to more efficiently locate and present substantiation for decision-making processes (should the CNSC be asked to do so).

## Appendix D: Audit Recommendation and Management Action Plan

The following table presents the recommendation and management action plan raised in section 2, “Audit Observations and Recommendations,” of the report.

Action owner (office of primary interest)	Management response and action plan	Timeline
<p><b>Recommendation 1: While no safety issue was noted, it is recommended that the Director General, Directorate of Nuclear Cycle and Facilities Regulation (DNCFR), establish a consistent, directorate-wide approach to documenting and maintaining evidence related to the assessment of information received from licensees and the closure of action items.</b></p>		
<p><b>Director General, Directorate of Nuclear Cycle and Facilities Regulation</b></p>	<p>DNCFR management agree with the findings of the report. DNCFR uses a risk-informed approach to the closure of action items that employs established business practices.</p> <p>The Director General, DNCFR is undertaking an evaluation of DNCFR’s approach to closure of all Fukushima action items.</p> <p>DNCFR management will through line-management oversight ensure that, on an ongoing basis, in closing all action items, established business practices are followed, and an adequate documented paper-trail is maintained.</p>	<p>November 2014</p> <p>January 2015</p>

## Appendix E: Acronyms

CIIT	CANDU Industry Implementation Team
CNSC	Canadian Nuclear Safety Commission
CNSC Integrated Action Plan	<i>CNSC Integrated Action Plan on the Lessons Learned From the Fukushima Daiichi Nuclear Accident</i>
CMD	Commission member document
DNCFR	Directorate of Nuclear Cycle and Facilities Regulation
DPRR	Directorate of Power Reactor Regulation
EAC	External Advisory Committee
FSIIT	Fukushima Safety Improvements Implementation Team
GNSCR	<i>General Nuclear Safety and Control Regulations</i>
NLRRD	Nuclear Laboratories and Research Reactors Division
NPP	Nuclear power plant
NRU	National Research Universal
PAMRD	Public Affairs and Media Relations Division
RFD	Regulatory Framework Division
RPD	Regulatory Policy Directorate
SCD	Strategic Communications Directorate