CNSC Actions in Response to the Findings of the

Fall 2016 Report of the Commissioner of the Environment and Sustainable Development on the inspection of nuclear power plants



as at March 31, 2017

Audit recommendation and CNSC management response	CNSC actions	CNSC committed completion date in the audit report	CNSC status
1. The Canadian Nuclear Safety Commission should develop and implement a well-documented planning process for site inspections of nuclear power plants that can demonstrate that the process is systematic and risk-informed. This should include determining the minimum required frequency and type of inspections needed to verify compliance, updating the five-year baseline inspection plan, and assessing whether it is assigning the appropriate number and levels of staff to carry out the number of inspections required to verify compliance. CNSC Management Response: Agreed. The CNSC has instituted plans to systematically update its 5-year baseline inspection plan in a risk-informed manner to include a review of staff allocation, the frequency and the type of inspections needed to verify compliance. CNSC will target completion by March 31, 2017. On an annual basis, the CNSC already applies risk-informed decision making to prioritize areas to be inspected and to determine the number of site inspections and the level of resources required to conduct these activities, taking into account professional judgement and historical safety track records for each plant. The CNSC agrees that, through better documentation, it could demonstrate that the planning process is adequate and achieve greater consistency in the conduct of site inspection at nuclear power plants.	 Improved the documentation for site inspection planning, including: better documentation of the risk basis of all decisions taken in planning and adjustment of inspection plans better documentation of the five-year baseline inspection plan explicit assessment of the appropriate number and levels of staff to carry out the number of inspections required to verify compliance Implemented these improvements within the CNSC's operations. 	March 31, 2017	Completed as of March 31, 2017
The effectiveness of the CNSC's comprehensive compliance oversight program is demonstrated by industry's annual safety performance ratings and affirmed through international benchmarking and independent peer reviews. Each year, the CNSC publishes the safety ratings on its website in a regulatory oversight report on the safety performance of each of Canada's nuclear power plants. The CNSC has			





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allocated more than 200 staff to the licensing and compliance oversight of nuclear power plants, including 24 on-site inspectors and numerous technical experts. A recent internal audit of the overall CNSC Operations Planning Process (2016) concluded that there is reasonable assurance that the management control framework is adequate and functioning appropriately, adequate tools and guidance are in place, and the results are implemented and documented. 2. The Canadian Nuclear Safety Commission should develop detailed criteria to help it identify when to conduct Type I inspections.	The compliance planning process has been updated to include detailed criteria for when to conduct Type I inspections as part of the CNSC's management	December 2016	
CNSC Management Response: Agreed. Criteria for determining when Type 1 site inspections are to be conducted are currently being formalized and the CNSC will include them in its management system by December 2016. During the audit period, several major relicensing or refurbishment activities for nuclear power plants entailed comprehensive compliance reviews (including desktop reviews, site inspections and reviews of unplanned events.) These reviews provided the required information needed to ensure regulatory compliance, and as a result Type 1 inspections were not required during that period.	 system. The criteria which would trigger the need for a Type I are: a new licensing basis program a significantly changed licensing basis program an unacceptable systematic compliance performance of a licensing basis program 		Completed as of September 30, 2016





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3. The Canadian Nuclear Safety Commission should ensure that its inspections follow its own procedures. This requires that it develop approved inspection guides with appropriate criteria before conducting inspections to assess that nuclear power plants are complying with applicable regulatory and licence requirements. The CNSC should clearly explain to its staff how to decide which documents should be considered transitory and which documents should be retained after they issue inspection reports.

CNSC Management Response: Agreed. The CNSC has taken immediate action to raise awareness and ensure observance of site inspection procedures by site inspectors. The CNSC commits to completing by December 2016 a procedure document that will specify management expectations regarding the conduct of site inspections, including the consistent use of authorized inspection guides. The CNSC will also provide clear document retention instructions to the site inspectors.

The CNSC has a comprehensive management system which contains processes and procedures that cover all steps in the compliance process, including inspection guides for use during site inspections. Through its compliance verification activities, the CNSC ensures that licensees conform to the NSCA, its regulations and all applicable regulatory documents as well as site-specific licence conditions handbooks that set out detailed compliance verification criteria. The conversion of these criteria into detailed field inspection guides against which an inspector conducts an inspection could be more consistent.

Inspection guides have been approved for 2016–17 and 2017–18.

Management has reinforced the policy of requiring an approved inspection guide for planned site inspections. Management will be enforcing the policy in CNSC management performance contracts and leadership competencies.

Management has provided clarification and instructions to all nuclear power plant inspectors for inspection document retention, as well as guidance for deciding which documents should be considered transitory.

December 2016

Completed as of September 30, 2016



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4. The Canadian Nuclear Safety Commission should ensure that it documents	The CNSC has developed a tracking mechanism to ensure that lessons learned	December 2016	
lessons learned in carrying out its inspections to help it make continuous	be documented at the conclusion of each inspection. These lessons learned		
improvements to its inspection practices.	are being incorporated into current and future inspection guides to ensure		
CNSC Management Response: Agreed. The CNSC will improve staff awareness of, and adherence to, current procedural requirements to capture the lessons learned from inspections. In addition, new processes will be established by December 2016 to track the implementation of these lessons for continuous improvement of regulatory oversight.	continuous improvement.		Completed as of September 30, 2016
The CNSC's NPP inspection teams have effective practices for capturing and sharing lessons learned from site and other inspections, such as weekly staff meetings and quarterly full-team meetings (site staff, specialists and project officers). In addition, a database to capture and share NPP operational regulatory oversight experience, and a new consolidated NPP site-specific regulatory status report (in pilot stage) are now available to record lessons learned. The CNSC will ensure that these practices are consistently applied.			
5. The Canadian Nuclear Safety Commission should determine why it does not issue timely final inspection reports and decide whether it needs to make any changes to its processes or standards. CNSC Management Response: Agreed. Action completed. Several corrective actions were identified and implemented, with the result that in 2015–16, the service standard for delivery of final inspection reports was consistently met. The CNSC will continue to monitor observance of its service standard.	An action plan to improve timely reporting of compliance inspections was put in place in fiscal year 2014–15 to address known issues. As a result, the service standard was met in 2015–16. Management has committed to review performance on a quarterly basis to ensure the timely delivery of final inspection reports continues.	Action complete	Completed as of September 30, 2016



