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Commission Request for Information

Demande d'information de la Commission

CNSC Regulatory Safety Oversight Culture Assessment

Évaluation de la culture de surveillance de la sûreté réglementaire de la CCSN

Public Meeting

Réunion publique

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Submitted by:
CNSC Staff

Soumise par :
Le personnel de la CCSN

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Summary

This CMD summarizes the work carried out by Canadian Nuclear Safety Commission (CNSC) staff to complete its first regulatory safety oversight culture assessment. This CMD is provided in response to the Commission's direction for CNSC staff to implement a mechanism to formally assess CNSC staff safety culture.

There are no actions requested of the Commission. This CMD is for information only.

The following items are attached:

- CNSC Regulatory Safety Oversight Culture Assessment - Final Report
- Management Action Plan for the CNSC Regulatory Safety Oversight Culture Assessment

Résumé

Le présent CMD résume les travaux effectués par le personnel de la Commission canadienne de sûreté nucléaire en vue de terminer la première évaluation de la culture de surveillance de la sûreté réglementaire. Ce CMD est présenté en réponse à la Directive de la Commission donnée au personnel de la CCSN concernant la mise en œuvre d'un mécanisme pour évaluer officiellement la culture de sûreté à la CCSN.

Aucune mesure n'est requise de la Commission. Ce CMD est fourni à titre d'information seulement.

Les pièces suivantes sont jointes :

- Évaluation de la culture de surveillance de la sûreté réglementaire de la CCSN - Rapport final
- Plan d'action de la direction concernant l'évaluation de la culture de surveillance de la sûreté réglementaire de la CCSN

Signed/signé le

18 September 2018



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EXECUTIVE SUMMARY

This CMD summarizes the work carried out by Canadian Nuclear Safety Commission (CNSC) staff to complete its first regulatory safety oversight culture (RSOC) assessment. This CMD is provided in response to the Commission's direction of August 2016 for CNSC staff to "implement a mechanism to formally assess CNSC staff safety culture as soon as practicable" [1].

Under the advice and guidance of external experts, CNSC staff have assessed their regulatory safety oversight culture against the principles and attributes of the Nuclear Energy Agency's (NEA) The Safety Culture of an Effective Nuclear Regulatory Body [2]. The assessment methodology was developed to align with the International Atomic Energy Agency's (IAEA) Safety Report Series No. 83, Performing Safety Culture Self-Assessments [3], to the extent practicable. The CNSC is one of the few nuclear regulators in the world to undertake a comprehensive assessment of its own safety oversight culture.

The final assessment report (included in appendix A of this CMD) was shared with all CNSC staff in February 2018. The assessment findings include CNSC strengths and areas for improvement. The findings also include five recommendations to further strengthen the CNSC's RSOC. The CNSC management team agrees with the recommendations.

CNSC staff have prepared a detailed management action plan (MAP) to respond to the assessment recommendations. A copy of the MAP is included in appendix B of this CMD. The MAP is currently being monitored and tracked to completion through the CNSC's Harmonized Plan Program.

Overall, CNSC staff conclude that the completed RSOC assessment and implementation of the MAP addresses the direction received from the Commission to implement a mechanism to formally assess CNSC staff safety culture.

This CMD provides the information requested by the Commission.

Documents referenced in this CMD are available to the public upon request.

1 OVERVIEW

1.1 Background

Following the August 2016 Commission proceedings of CMD 16-M46: *Technical Review of Probabilistic Safety Issues raised in Anonymous letter* [4], the Commission directed Canadian Nuclear Safety Commission (CNSC) staff to “implement a mechanism to formally assess CNSC staff safety culture as soon as practicable” [1].

To address this direction, CNSC management decided to conduct an organization-wide safety (oversight) culture assessment under the leadership of the Executive Vice President and Chief Regulatory Operations Officer and regulatory safety oversight culture champion. The CNSC is one of the few nuclear regulators in the world to undertake an assessment of its own safety oversight culture.

In August 2017, CNSC staff provided a progress update on the assessment to the Commission [5] and committed to report back to the Commission in 2018 once the assessment was complete.

To advise and guide the assessment team, CNSC staff engaged the services of Dr. Mark Fleming, a Professor of Safety Culture at Saint Mary’s University, who is also an independent expert on safety culture. The team benefited from the work that Dr. Fleming is currently conducting in conjunction with the International Atomic Energy Agency (IAEA) regarding the development of a safety culture assessment questionnaire for regulatory bodies.

To conduct the assessment, CNSC staff utilized international best practice and guidance by assessing its regulatory safety oversight culture (RSOC) against the principles and attributes of the Nuclear Energy Agency’s (NEA) *The Safety Culture of an Effective Nuclear Regulatory Body* [2]. The assessment methodology was developed to align with the IAEA’s Safety Report Series No. 83 *Performing Safety Culture Self-Assessments* [3], to the extent practicable.

The final assessment report (included in appendix A of this CMD) was shared with all CNSC staff in February 2018. In addition, staff conducted multiple proactive and ongoing activities to engage staff, this included Town hall meetings, Managers forum and divisional meetings. The assessment findings include CNSC strengths and areas for improvement. The assessment findings include five recommendations to further strengthen the CNSC’s RSOC. The CNSC management team agrees with the assessment recommendations.

CNSC staff have prepared a detailed MAP to respond to the assessment recommendations. The CNSC management team have approved the MAP and will monitor and track it to completion through the CNSC’s Harmonized Plan (HP) Program. A copy of the MAP is included in appendix B of this CMD.

This CMD summarizes the work carried out by CNSC staff to complete their first internal RSOC self-assessment.

2 RESEARCH AND BENCHMARKING

2.1 Regulatory Safety Oversight Culture

Safety culture is a well-known concept to nuclear regulators and is recognized as an important element of safe nuclear operation performance and management. At its core, a safety culture is how the members of an organization think and act with regard to safety. Safety culture is defined by the IAEA as “the assembly of characteristics and attitudes in organizations and individuals which enables and supports safety as a key value, and protection and safety issues receive the attention warranted by their significance”[6]. A distinction is often made with respect to the differences in the safety culture of a regulator and that of a licensee. While both share similar aspects, the regulator’s safety culture is exercised from an oversight standpoint and remains distinct from that of the licensee – putting into focus the term “safety oversight culture” which is unique to the nuclear regulator.

At the CNSC, our RSOC can be described as our shared attitudes, values, and behaviours that influence how we fulfil our regulatory responsibilities and is reflected in the CNSC’s management system.

2.2 Recent Initiatives to Strengthen CNSC staff Regulatory Safety Oversight Culture

CNSC staff have undertaken several initiatives in recent years to strengthen its regulatory safety oversight culture. For example, CNSC conduct regular “Taking the Pulse” surveys to obtain feedback and seek staff opinion on a number of topics, including CNSC staff’s regulatory safety oversight culture. CNSC’s key behavioural competencies [7], as well as Government of Canada’s Key Leadership Competencies [8], guide the development of the CNSC staff’s technical and regulatory competencies.

CNSC staff have implemented several policies, such as the *Policy on Science in a Regulatory Environment* [9] (which established a new Chief Science Officer role), as well as the *Open Door Policy* [10] which was formally documented. Several other practices include conducting periodic safety culture town hall meetings which are led by CNSC’s Executive Vice President and Chief Regulatory Operations Officer, who is the regulatory safety oversight culture champion. The RSOC working group was created in 2013 to support the safety oversight culture champion in promoting, embracing and maintaining a healthy safety oversight culture at the CNSC.

CNSC staff are implementing a number of improvement initiatives that supports Knowledge Management (KM) within the organization, such as the capability for nuclear safety project, regulatory operations training program and workforce planning. The former identifies internal and external capabilities required now and in the future, and the latter identifies expected and unexpected workforce gaps and informs workforce strategies, which includes identifying critical roles and potential successors.

The scientific integrity working group (SIWG) has also instituted mechanisms to help with decision making. These include the *Non-Concurrence Process* [11] and the *Differences of Professional Opinion Process* [12]. In addition, CNSC staff have adopted a multi-key approach to decision making that encourages diverse opinions to be heard and results documented.

To further drive workplace improvements, CNSC staff actively participate in the Government of Canada's Public Service Employee Survey (PSES) and CNSC staff managers participate in the Association of Professional Executives of the Public Service of Canada (APEX) Work and Health Surveys.

2.3 The Safety Culture of an Effective Nuclear Regulatory Body

In 2016 the NEA produced a guidance document titled *The Safety Culture of an Effective Nuclear Regulatory Body* [2]. The document, authored by senior regulators, outlines five principles and their associated attributes for a healthy safety culture within nuclear regulators. The principles are:

1. Leadership for safety is demonstrated at all levels in the regulatory body.
2. All staff of the regulatory body have individual responsibility and accountability for exhibiting behaviours that set the standard for safety.
3. The culture of the regulatory body promotes safety, and facilitates cooperation and open communication.
4. Implementing a holistic approach to safety is ensured by working in a systematic manner.
5. Continuous improvement, learning, and self-assessment are encouraged at all levels in the organization.

The NEA has encouraged all nuclear regulators to use these principles and underlying attributes as a benchmark to continuously strengthen their effectiveness as they fulfil their mission to protect public health and safety. The CNSC has considered these principles to guide their assessment and creation of the MAP.

3 REGULATORY SAFETY OVERSIGHT CULTURE ASSESSMENT

3.1 Assessment Methodology

The methodology for the assessment of the CNSC's RSOC was developed to align with the IAEA's Safety Report Series No. 83 *Performing Safety Culture Self-Assessments* [3], to the extent practicable. The assessment used a multi-method approach to gather and collect data from document reviews, focus group discussions and the administration of a questionnaire on safety oversight culture perceptions.

The assessment methodology was comprised of the following steps:

- a review of the results from previous CNSC staff surveys (e.g. PSES, APEX, Taking the Pulse)
- a review of the results of previous safety culture town hall meetings (2014 and 2016)
- a comparison of the above noted results against the five principles identified in the NEA's *The Safety Culture of an Effective Nuclear Regulatory Body* [2]
- the development of six key themes to explore during the focus groups:
 1. Psychological safety
 2. Leadership
 3. Decision making
 4. Questioning attitude
 5. Communication and collaboration
 6. Continuous learning and improvement

A total of 10 focus group meetings were held, 8 with staff and 2 with management (directors and directors general). The focus groups were facilitated by an independent consultant, Mr. Alain Rabeau, who is an expert in organizational change management and employee engagement.

Focus group participants were selected from across the organization (including site and regional offices), by using a random sampling technique that included representation from varied work areas. Across the CNSC, 117 staff members (98 staff and 19 management) participated in the focus groups. A questionnaire with 30 questions on safety oversight culture perceptions was administered at the start of each focus group meeting, followed by a theme-by-theme discussion on how the CNSC is doing and what improvements could be made in the areas covered by the themes.

Following the (staff and management) focus group meetings, an analysis of the results of the data collected from all methods was conducted and the assessment findings were summarized in a final report, included in Appendix A of this CMD.

4 ASSESSMENT RESULTS

The assessment results identify CNSC strengths and areas for improvement and include five recommendations to further strengthen the CNSC's RSOC. The CNSC management team agrees with the assessment recommendations and is taking concrete actions to address them.

4.1 Strengths

The following strengths were highlighted in the assessment. CNSC staff:

- perceive safety as the overarching priority in decision making

- generally feel comfortable using existing mechanisms to raise issues and concerns
- display a willingness to collaborate and share expertise across the organization
- feel safe reporting mistakes and are able to express their professional opinions at work
- believe they receive the required training, and possess the appropriate competencies to fulfill their duties
- believe that leaders and managers take action based on the results of regular self-assessments and audits

4.2 Areas for Improvement

The following areas for improvement were highlighted in the assessment. CNSC staff:

- feel there is a need for improvement in communicating the rationale behind decisions. This does not refer to Commission decisions, which are well documented in the CNSC's record of proceedings, but rather line management decisions
- perceive that at times managers do not solicit challenges to their own assumptions or seek varied perspectives
- feel that the timeliness of management decisions could be improved and that the decision making process (other than that of the Commission's) should be more open, particularly to challenge varied perspectives
- perceive the ability of leaders and managers to resolve differences of opinion requires increased attention
- feel that the flow of information could be improved between the hierarchical levels within the organization
- believe there is a need to have a common understanding of safety oversight culture amongst CNSC staff
- believe there is a need to manage and transfer the technical and regulatory knowledge of long-standing employees

To address the areas for improvement identified above, the assessment includes five recommendations to further strengthen the CNSC's RSOC. The CNSC management team agrees with the recommendations and is taking concrete action to address them.

5 RECOMMENDATIONS AND MANAGEMENT RESPONSES

The five recommendations and CNSC management responses are as follows:

Recommendation 1:

The CNSC should provide supervisors, managers and executives with ongoing coaching and mentoring in the leadership characteristics necessary to maintain a healthy safety oversight culture. This recommendation aims to ensure that leaders and managers, at all levels of the organization, are conscious of the influence and control they have in helping to create a positive environment that promotes a healthy safety oversight culture. The CNSC should work toward this in a deliberate manner.

CNSC management response: Agreed. The CNSC acknowledges the importance of its leaders fully understanding and embracing their role in promoting and demonstrating a healthy safety oversight culture. Informed by feedback collected through this assessment, the CNSC is committed to the development of plans to enhance its leadership selection, performance management and development activities to reinforce the leadership characteristics necessary for maintaining a healthy safety oversight culture. These include the need for leaders to:

- demonstrate a high commitment to safety in decisions and behaviours
- foster a respectful, collaborative work environment where staff are able to freely raise concerns
- value all views, concerns and ideas, and accept and be open to different opinions
- encourage the self-reporting of mistakes by management and staff as an opportunity for organizational learning and continuous improvement
- demonstrate a strong sense of collaboration and coordination across the organization
- involve subordinates and communicate effectively in decision making
- monitor and enforce adherence to organizational policies and processes

The specific additional initiatives planned for enhancing leadership capacity include more frequent use of 360 degree feedback that will inform management development plans. As well, Taking the Pulse surveys will be utilized to monitor demonstrated management behaviours. Merit ratings will include consideration of these expected behaviours (to be completed by March 2019).

The Government of Canada's Key Leadership Competencies (KLCs) [8] describe the desired behaviour of managers and executives across the Public Service and align well with the leadership behaviours required to support a healthy safety culture for the regulator. As CNSC staff have previously integrated the KLCs into all executive talent management activities, we will further apply those competency assessments into selection processes for supervisor positions (REG6-8) starting in September 2018. The 2018 PSES as well as Taking the Pulse surveys will allow us to monitor improvement in this area.

Recommendation 2:

The CNSC should develop a problem identification, resolution, reporting, and communication tool to further increase transparency around the communication of safety issues. The tool will enhance transparency and provide assurances that safety issues are evaluated by the organization, promptly addressed, corrected in a way that is commensurate with their significance, and communicated to staff.

CNSC management response: Agreed. The CNSC acknowledges the importance of increasing transparency around the communication of safety-related issues and the need for a single tool to standardize how the CNSC captures, monitors, corrects and communicates on safety issues raised by staff. The CNSC is committed to developing and implementing a single tool in consultation with staff to increase transparency and provide assurance that all safety issues raised by staff are captured, monitored and appropriately addressed. In designing the tool, the CNSC will incorporate best practices from other regulatory bodies and major licensees (to be completed by March 2019).

Recommendation 3:

The CNSC should develop an overarching safety oversight culture vision or policy statement outlining the desired culture that the CNSC is striving to achieve. This recommendation seeks to provide a common understanding of safety oversight culture among staff and further position safety as an overarching value.

CNSC management response: Agreed. The CNSC recognizes the importance of articulating the desired safety oversight culture the organization is striving to achieve. The CNSC is committed to developing a draft policy in consultation with staff by August 2018. The CNSC will complete the communication and rollout of this policy to all staff by December 2018.

The policy will build upon recognized staff understanding of the importance of safety oversight culture and further solidify previously existing and more-recently implemented policies, programs, processes and improvement initiatives such as the CNSC key behavioural competencies for all employees, leadership competencies for managers, and the recently completed policies and processes developed by the Scientific Integrity Working Group.

Recommendation 4:

The CNSC should develop strategies to ensure that critical technical and regulatory knowledge, including knowledge of past experience and decision making, is actively managed as a resource and is readily available to staff. This recommendation aims to ensure that critical technical and regulatory knowledge is captured within the organization.

CNSC management response: Agreed. The CNSC recognizes the importance of managing critical technical and regulatory knowledge across the organization and the need for a corporate-wide knowledge management strategy.

The CNSC has begun implementing a comprehensive three-year knowledge management strategy to capture and share corporate, technical and regulatory knowledge to maintain the organization's capacity and capability to meet its mandate (to be completed by May 2020).

The CNSC has also implemented the Capability for Nuclear Safety project, which aims to ensure continued access to required scientific and technical expertise, knowledge and research infrastructure (to be completed by December 2018).

Recommendation 5:

The CNSC should conduct a follow-up safety oversight culture assessment in three to five years to confirm the effectiveness of the actions resulting from this assessment and to deepen the commitment to continuously strengthen the CNSC's safety oversight culture.

CNSC management response: Agreed. The CNSC is committed to conducting a follow-up assessment of its safety oversight culture in three to five years. The CNSC will continue to remain an active participant in national and international developments in regulator safety oversight culture. The follow-up assessment will be in addition to the current approach of evaluating progress on employee uptake and effectiveness of new programs and mechanisms through such means as employee surveys, town hall sessions, management retreats, and all-staff discussions.

6 MANAGEMENT ACTION PLAN

CNSC staff have prepared a detailed MAP to respond to the assessment recommendations. The MAP establishes CNSC staff leads and identifies deliverables and due dates for completing the work. The MAP is currently being monitored and tracked to completion through the CNSC's HP Program. A copy of the MAP is included in appendix B of this CMD.

7 OVERALL CONCLUSIONS

The assessment and the initiatives put in place illustrate CNSC staff's commitment to strengthen our RSOC. Overall, CNSC staff conclude that the completed assessment and the initiatives put in place address the direction received from the Commission to implement a mechanism to formally assess CNSC safety culture.

CNSC staff will implement the MAP and continue to foster ongoing dialogue through our day-to-day activities and meetings as well as at our town halls. We will continue to monitor progress through regular surveys, and adjust based on feedback and lessons learned.

The CNSC plans to conduct a follow-up assessment in 2022 to confirm the effectiveness of the actions taken resulting from this assessment and to deepen the commitment to continuously strengthen the CNSC's RSOC.

REFERENCES

1. Minutes of the Canadian Nuclear Safety Commission Meeting held on August 17-18, 2016, e-Doc 5091144.
2. Nuclear Energy Agency publication, *The Safety Culture of an Effective Nuclear Regulatory Body*, e-Doc 5101198.
3. International Atomic Energy Agency Safety Report Series No. 83, *Performing Safety Culture Self-Assessments*, e-Doc 5066997.
4. CMD 16-M46, *Technical Review of Probabilistic Safety Assessment Issues Raised in an Anonymous Letter* e-Doc 5051883.
5. CMD 17-M37, *Follow-up on August 2016 Commission Proceedings on the Anonymous Letter* e-Doc 5282226.
6. INSAG4 *Safety Culture A report by the International Nuclear Safety Advisory Group* IAEA 1991
7. CNSC's Key behavioural competencies e-Doc 5005157
8. Government of Canada's Key Leadership Competencies
<https://www.canada.ca/en/treasury-board-secretariat/services/professional-development/key-leadership-competency-profile.html>
9. Policy on Science in a Regulatory Environment e-Doc 5094894
10. Open Door Policy e-Doc 5046788
11. Non-Concurrence Process e-Doc 5012876
12. Difference of Professional Opinion Process e-Doc 3858318

ACRONYMS

APEX – Association of Professional Executives of the Public Service of Canada

CNSC – Canadian Nuclear Safety Commission

HP – Harmonized Plan

IAEA – International Atomic Energy Agency

KLC – Government of Canada’s Key Leadership Competencies

KM – Knowledge Management

MAP – Management Action Plan

NEA – Nuclear Energy Agency

PSES – Public Service Employee Survey

RSOC – Regulatory Safety Oversight Culture

SIWG – Scientific Integrity Working Group

**A. CNSC REGULATORY SAFETY OVERSIGHT CULTURE
ASSESSMENT REPORT**



Regulatory Safety Oversight Culture Assessment Report

February 2018



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Executive summary

The Canadian Nuclear Safety Commission (CNSC) is committed to being the best nuclear regulator in the world. Continuous improvement and innovation are engrained in the way we work, as we constantly increase collaboration, openness and transparency. To that end, we have recently completed an assessment of our regulatory safety oversight culture.

This report is the culmination of the CNSC's first regulatory safety oversight culture assessment. This assessment includes an analysis of many background documents, as well as the results of 10 focus groups and a questionnaire administered to focus group participants.

This report is framed using principles from the Nuclear Energy Agency's (NEA) *The Safety Culture of an Effective Nuclear Regulatory Body*. The NEA is a member of the Organisation for Economic Co-operation and Development (OECD).

Regulator safety oversight culture can be described as the shared attitudes, values, and behaviours that influence how the regulator fulfills its mandated responsibilities. It is important because nuclear safety regulators are vulnerable to internal and external threats, including:

- regulatory capture, when a regulator focuses on advancing industry's interests
- a politicized mission, when a regulator is concerned with optics rather than safety
- a punitive organizational culture, which inhibits the vertical flow of information through a decision-making hierarchy
- a "siloed" culture, which inhibits the horizontal flow of information necessary to decision making
- bureaucratic inertia and complacency, which weakens regulatory oversight
- tolerance of inadequate capacity and competency, which erodes the regulator's effectiveness

CNSC safety oversight culture initiatives

The CNSC has undertaken several initiatives in recent years to strengthen its safety oversight culture. For example, it conducts regular "Taking the Pulse" surveys to obtain feedback and seek staff opinion on a number of topics, including the CNSC's safety oversight culture. Key behavioural competencies, as well as leadership competencies, guide the development of the CNSC's relevant technical and regulatory competencies.

The CNSC has implemented several policies, such as the *Policy on Science in a Regulatory Environment* (which established a new **chief science officer role**), as well as the *Open Door Policy*. Several practices also put in place included **conducting periodic safety culture town hall meetings** which are led by the Executive Vice President and Chief Regulatory Operations Officer, the safety oversight culture champion.

The CNSC is implementing a number of improvement initiatives, including a specific one on knowledge management, as well as the Capability for Nuclear Safety project, and the identification of critical competencies in support of workforce planning and development.

The CNSC has also instituted mechanisms to help with decision making. These include the *Non-Concurrence Process*, the *Differences of Professional Opinion Process* and the two-key/multi-key system.

To further drive workplace improvements, the CNSC has taken part in the Government of Canada's Public Service Employee Survey (PSES), held every three years, as well as the Public Service Employee Annual Survey

(PSEAS). CNSC managers have also participated in the Association of Professional Executives of the Public Service of Canada (APEX) Work and Health Surveys (held every five years). The results of the 2017 APEX survey indicate that the CNSC treats its employees with respect (85% agree) and that the CNSC makes efforts to prevent harm to employees from harassment, discrimination or violence (93% agree). However, the 2017 APEX survey showed room for improvement in managers' ability to bring up tough issues (54% agree).

In July 2017, focus group meetings were held with 23 staff members from across the CNSC to identify why they choose the CNSC as an employer of choice. Staff shared that the areas they value the most about the CNSC are: its great work-life balance; boast-worthy compensation and benefits; opportunities for learning, movement and advancement; the ability to make a difference in a small organization; open and transparent management practices; fun social events; and fantastic colleagues.

To date, the CNSC is one of very few nuclear regulators in the world to conduct a formal assessment of its safety oversight culture.

Methodology

The methodology for the assessment was developed by CNSC staff with support from external experts. These included Dr. Mark Fleming, a recognized expert in safety culture from Saint Mary's University. The assessment used a multi-method approach to gather and collect data from document reviews, focus group discussions and the administration of a questionnaire on safety oversight culture perceptions.

The methodology consisted of the following steps:

- a review of previous CNSC staff survey results (e.g., public service employee surveys, "taking the pulse" surveys)
- a review of the results of previous safety culture town hall meetings
- a review of relevant data from the above surveys and town hall results and comparison of them against the NEA's *The Safety Culture of an Effective Nuclear Regulatory Body*
- the development of six key themes, which were further explored during focus group meetings

From April to June 2017, 10 focus group meetings were conducted, 8 with staff and 2 with management (directors and directors general). Focus group participants were selected from across the organization (including site and regional offices), by using a random sampling technique that included representation from varied work areas. Across the CNSC, 117 staff members (98 staff and 19 management) participated in the focus groups. A questionnaire with 30 questions on safety oversight culture perceptions was administered at the start of each focus group meeting, followed by a theme-by-theme discussion on how the CNSC is doing and what improvements could be made in the areas covered by the themes.

Following the focus group meetings, an analysis of the results of the data collected from all methods was conducted. The assessment findings have been summarized in this report.

The assessment methodology was developed to align with the International Atomic Energy Agency's (IAEA) *Safety Reports Series No. 83: Performing Safety Culture Self-assessments*, to the extent practicable.

Findings and recommendations

This report includes the assessment findings on the CNSC's strengths and areas for improvement (summarized

below), which are presented in accordance with the five principles and related attributes for an effective nuclear regulatory body, as outlined in the NEA's *The Safety Culture of an Effective Nuclear Regulatory Body*.

- NEA Principle 1:** “Leadership for safety is to be demonstrated at all levels in the regulatory body.”

Strengths: At the CNSC, staff perceive safety as the overarching priority in decision making. Questionnaire results also indicate that staff understand their role in contributing to the safety oversight culture and that they are treated with respect. The results also indicate that staff perceive themselves as able to raise issues without fear of reprisals, and believe they can challenge managers’ decisions without this fear.

Areas for improvement: Despite the strengths noted above, 14% of individuals taking part in the focus groups perceived themselves as the objects of reprisals. As well, 26% of focus group participants revealed a decline in their perception of managers as role models in a positive safety culture. Finally, the questionnaires and the focus group discussions revealed a need for improvement in communicating the rationale behind decisions. This does not refer to Commission decisions, which are well documented in the CNSC’s records of proceedings, but rather line management decisions.

Recommendation 1: The CNSC should provide supervisors, managers and executives with ongoing coaching and mentoring in the leadership characteristics necessary for maintaining a healthy safety oversight culture. This recommendation aims to ensure that leaders and managers, at all levels of the organization, are conscious of the influence and control they have in helping to create a positive environment that promotes a healthy safety oversight culture. The CNSC should work toward this in a deliberate manner.

CNSC management response: Agreed. The CNSC acknowledges the importance of its leaders fully understanding and embracing their role in promoting and demonstrating a healthy safety oversight culture. Informed by feedback collected through this assessment, the CNSC is committed to the development of plans to enhance its leadership selection, performance management and development activities to reinforce the leadership characteristics necessary for maintaining a healthy safety oversight culture. These include the need for leaders to:

- demonstrate a high commitment to safety in decisions and behaviours
- foster a respectful, collaborative work environment where staff are able to freely raise concerns
- value all views, concerns and ideas, and accept and be open to different opinions
- encourage the self-reporting of mistakes by management and staff as an opportunity for organizational learning and continuous improvement
- demonstrate a strong sense of collaboration and coordination across the organization
- involve subordinates and communicate effectively in decision making
- monitor and enforce adherence to organizational policies and processes

The specific additional initiatives planned for enhancing leadership capacity include more frequent use of 360 degree feedback that will inform management development plans. As well, pulse surveys will be utilized to monitor demonstrated management behaviours. Merit ratings will include consideration of these expected behaviours (to be completed by March 2019).

Recommendation 2: The CNSC should develop a problem identification, resolution, reporting, and communication tool to further increase transparency around the communication of safety issues. The tool will enhance transparency and provide assurances that safety issues are evaluated by the organization, promptly addressed, corrected in a way that is commensurate with their significance, and communicated to staff.

CNSC management response: Agreed. The CNSC acknowledges the importance of increasing transparency around the communication of safety-related issues and the need for a single tool to standardize how the CNSC captures, monitors, corrects and communicates on safety issues raised by staff. The CNSC is committed to developing and implementing a single tool in consultation with staff to increase transparency and provide assurance that all safety issues raised by staff are captured, monitored and appropriately addressed. In designing the tool, the CNSC will incorporate best practices from other regulatory bodies and major licensees (to be completed by March 2019).

- **NEA Principle 2:** “All staff of the regulatory body have individual responsibility and accountability for exhibiting behaviours that set the standard for safety.”
Strengths: CNSC staff understand the need to collaborate to support the safety oversight culture. Inter- and intra-branch collaboration was noted as a strength in the questionnaires and focus group discussions. Results also show a willingness to share expertise.
Areas for improvement: None noted.
Recommendation: None noted.

- **NEA Principle 3:** “The culture of the regulatory body promotes safety, and facilitates co-operation and open communication.”
Strengths: Questionnaires indicate that staff are comfortable using existing mechanisms to raise issues and concerns. Additionally, they indicate that staff have felt safe reporting mistakes and are able to express their professional opinions at work or in publications.
Areas for improvement: A number of focus group participants do not believe that managers solicit challenges to their own assumptions and perceive that the CNSC does not seek varied perspectives.
Recommendation: Recommendation 1 and the concomitant management response aim to further improve this area.

- **NEA Principle 4:** “Implementing a holistic approach to safety is ensured by working in a systematic manner.”
Strengths: As noted previously, the willingness to collaborate and share expertise across the organization indicates that staff value a holistic approach. Furthermore, staff clearly understand the complexity of regulatory decisions and appreciate the need for a clear regulatory framework.
Areas for improvement: Five areas came to light under this principle:
 - The timeliness of management decisions should be improved.
 - The decision-making process (other than the Commission’s) should be more open, particularly to challenge varied perspectives.

- The ability of leaders and managers to resolve differences of opinion requires increased attention.
- The flow of communication should be improved between the hierarchical levels within the organization.
- A common understanding of safety oversight culture is needed among CNSC staff.

Recommendation 3: The CNSC should develop an overarching safety oversight culture vision or policy statement outlining the desired culture that the CNSC is striving to achieve. This recommendation seeks to provide a common understanding of safety oversight culture among staff and further position safety as an overarching value.

CNSC management response: Agreed. The CNSC recognizes the importance of articulating the desired safety oversight culture the organization is striving to achieve. The CNSC is committed to developing a policy in consultation with staff by August 2018. The CNSC will complete the communication and rollout of this policy to all staff by December 2018.

The policy will build upon recognized staff understanding of the importance of safety oversight culture and further solidify previously existing and more-recently implemented policies, programs, processes and improvement initiatives such as the CNSC key behavioural competencies for all employees, leadership competencies for managers, and the recently completed policies and processes developed by the Scientific Integrity Working Group.

- **NEA Principle 5:** “Continuous Improvement, learning, and self-assessment are encouraged at all levels in the organization.”

Strengths: CNSC staff believe that they receive the required training, and consequently indicate that they possess the appropriate competencies to fulfill their duties. Staff also believe that leaders and managers take action based on the results of regular self-assessments and audits.

Areas for improvement: Staff noted the need to manage and transfer the technical and regulatory knowledge of long-standing employees. It is an area of concern that is raised in both the questionnaire responses and the focus group discussions.

Recommendation 4: The CNSC should develop strategies to ensure that critical technical and regulatory knowledge, including knowledge of past experience and decision making, is actively managed as a resource and is readily available to staff. This recommendation aims to ensure that critical technical and regulatory knowledge is captured within the organization.

CNSC management response: Agreed. The CNSC recognizes the importance of managing critical technical and regulatory knowledge across the organization and the need for a corporate-wide knowledge management strategy. The CNSC has begun implementing a comprehensive three-year knowledge management strategy to capture and share corporate, technical and regulatory knowledge to maintain the organization’s capacity and capability to meet its mandate (to be completed by May 2020).

The CNSC has also implemented the Capability for Nuclear Safety project, which aims to ensure continued access to required scientific and technical expertise, knowledge and research infrastructure (to be completed by December 2018).

Recommendation 5: The CNSC should conduct a follow-up safety oversight culture assessment in three to five years to confirm the effectiveness of the actions resulting from this assessment and to deepen the commitment to continuously strengthen the CNSC's safety oversight culture.

CNSC management response: Agreed. The CNSC is committed to conducting a follow-up assessment of its safety oversight culture in three to five years. The CNSC will continue to remain an active participant in national and international developments in regulator safety oversight culture. The follow-up assessment will be in addition to the current approach of evaluating progress on employee uptake and effectiveness of new programs and mechanisms through such means as employee surveys, town hall sessions, management retreats, and all-staff discussions.

Introduction

Safety (oversight) culture

Safety culture is a well-known concept to nuclear regulators and is recognized as an important element of safe nuclear operation performance and management. At its core, a safety culture is how the members of an organization think and act with regard to safety. It is defined as “the product of individual and group values, attitudes, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of their approach to the regulation of industry safety.”¹ Similarly, the International Nuclear Safety Group (INSAG) definition states that a “safety culture is the assembly of characteristics and attitudes in organizations and individuals which enables and supports safety as a key value, and protection and safety issues receive the attention warranted by their significance.”

A distinction is often made with respect to the subtle differences in the safety culture of a regulator and that of a licensee. While both share similar aspects, the regulator’s safety culture is exercised from an oversight standpoint and remains distinct from that of the licensee – putting into focus the term “safety oversight culture” that is unique to the nuclear regulator.

Threats to the safety oversight culture of a nuclear regulatory body

Nuclear safety regulators can be vulnerable to internal and external threats that may impact a strong safety oversight culture, including the following:²

- **Regulatory capture:** This occurs when a regulator becomes concerned with advancing the interests of the industry it is charged with regulating. It may result in decisions that are unduly influenced by industry.
- **Politicizing of the mission:** This occurs when a regulator is overly concerned with the optics around actions and decisions, rather than the pursuit of continuous safety improvements.
- **Punitive organizational culture:** A punitive culture inhibits or shuts down the vertical flow of information throughout the regulator’s hierarchy.
- **“Siloed” culture:** A siloed culture inhibits or shuts down the flow of horizontal information across the regulator’s units/teams/departments.
- **Bureaucratic inertia and organizational complacency:** When the status quo becomes the norm, weakened and ineffective oversight result.
- **Toleration of inadequate capacity and competency:** Reduced competencies **and** inadequate capacity to conduct the required oversight activities lead to the loss of focus and the erosion of regulatory competence.
- **Adoption of a compliance mentality:** This occurs when the regulatory body views its oversight role as simply applying checklists instead of managing the dynamic nature of hazards and risks.
- **Over-preoccupation in dealing with active failures:** This happens when the principal focus is on individual non-compliance events, rather than on identifying and addressing the systemic root causes of failures.

¹ Definition provided by Dr. Mark Fleming.

² Adapted from Bradley, C., *Regulator safety (oversight) culture: How a regulator’s culture influences safety outcomes in high hazard industries*. Doctoral dissertation.

The safety oversight culture of an effective nuclear regulatory body

Investigations into major industrial accidents have consistently found that inadequacies in safety management and the underlying safety culture are contributing causes. Specific to the nuclear industry, the Fukushima Daiichi accident prompted nuclear regulators to examine their own safety oversight cultures. With this in mind, the International Atomic Energy Agency (IAEA) called for increased attention to the nuclear regulator safety oversight culture.

The Nuclear Energy Agency Committee (NEA) on Nuclear Regulatory Activities produced an important guidance document titled *The Safety Culture of an Effective Nuclear Regulatory Body*. The document, authored by senior regulators, outlines five principles and their associated attributes for a healthy safety culture within nuclear regulators. Using these principles and attributes, nuclear regulators are encouraged to assess their safety culture and bring about the necessary steps to address areas of concern.

Recent CNSC initiatives to strengthen its safety oversight culture

At the heart of a healthy safety oversight culture is the philosophy of continuous improvement. Over the years, the CNSC has deployed several initiatives to strengthen its safety oversight culture. Notable initiatives include the following:

- Conduct of **regular staff and management surveys**: The CNSC has taken part in the Public Service Employee Surveys (PSES – held every three years) as well as the Public Service Employee Annual Survey (PSEAS). CNSC managers have taken part in the APEX Work and Health Surveys (held every five years). In addition, the CNSC has conducted regular pulse surveys that specifically target safety oversight culture perceptions. The PSES, PSEAS and pulse surveys provided (albeit with some limitations) a baseline for this safety oversight culture assessment.
- Development and implementation of **key behavioural competencies and key leadership competencies for managers**: These are a means of ensuring the development of relevant behavioural competencies in support of a healthy safety oversight culture.
- Hosting of **safety culture town halls** to engage employees in an ongoing safety oversight culture dialogue.
- Implementation of the **Open Door Policy**, and the introduction of the practice of **skip-level meetings** to strengthen an open dialogue between employees and management.
- Implementation of the **Collaborative Workplace Initiative**, to foster an environment in which civility and CNSC values underpin all interactions, and where excellence and well-being are encouraged and actively promoted.
- Implementation of the **Policy on Science in a Regulatory Environment**, and establishment of the position of **chief science officer**.
- Implementation of a **Non-Concurrence Process** to ensure that when concerns are raised, they are addressed, resolved and communicated back to those who raised the concerns.
- Updating of the **Differences of Professional Opinion Process**, which provides a formal mechanism through which the chief science officer convenes a panel to review the issues and formulate final recommendations.
- The **CNSC's two-key/multi-key system**, which is best described as a mindset to create a psychologically safe space for open discussion.

- Launch of improvement initiatives to strengthen **knowledge management retention and transfer**, the Capability for Nuclear Safety project, as well as the identification of critical regulatory and technical competencies in support of workforce planning and development. **The CNSC as an employer of choice:** In July 2017, focus group discussions were held with 23 staff members from across the organization to identify why they choose the CNSC as an employer of choice. Staff shared that the areas they value the most about the CNSC are: its great work–life balance; boast-worthy compensation and benefits; opportunities for learning, movement and advancement; the ability to make a difference in a small organization; open and transparent management practices; fun social events; and fantastic colleagues.
- Completion of this **safety oversight culture assessment report**.

Methodology

About safety oversight culture assessments

Safety oversight culture assessments “...provide insight into organizational behaviour and relationship dynamics that influence safety decisions and performance.”³ A safety oversight culture assessment is used to analyze the overall outcomes, as well as the underlying factors and behaviours that contribute to those outcomes. In addition, it provides information that describes the strengths and areas for improvement within the safety oversight culture, thereby enabling the development of plans for continuous improvement. These assessments are, by their very nature, inquiry-based and exploratory and rely in part on qualitative analysis. They are not statements about the effectiveness of human performance regarding a specific program. Rather, they are “...part of a larger systemic learning–development–improvement cycle...” whose purpose is to “capture information that helps to foster dialogue, reflection, and insights within the organization...”⁴ These insights provide a qualitative assessment of the current state of the organization’s safety oversight culture, from which further dialogue and actions can be developed to continue building upon existing strengths and areas for improvement.

Methods

Safety oversight culture assessments are carried out using a variety of qualitative and quantitative instruments. **Document reviews** reveal an organization’s intentions, plans and policies, and are foundational to further inquiry. **Questionnaires** provide a means of acquiring safety oversight culture perceptions from a broad range of individuals. The **observation** of safety oversight culture practices and norms are an additional way to collect information relevant to a self-assessment. **Focus groups** consisting of small numbers of staff allow for the exploration of facts, stories, opinions, experiences and behaviours related to the safety oversight culture. **Interviews** provide an opportunity to gather in-depth information on the safety oversight culture. While each method has its own merits and limitations, it would be time-consuming to use all five methods. Therefore, the CNSC’s safety oversight culture self-assessment leveraged three methods: document reviews, focus groups and questionnaires.

³ *Safety Reports Series No. 83: Performing Safety Culture Self-assessments*. International Atomic Energy Agency. Page 15.

⁴ *Ibid.* Page 16.

Methodology and approach

This is the CNSC's first comprehensive safety oversight culture assessment. Accordingly, senior management recognized the importance of setting out the following principles to guide its development:

- **Develop in-house capacity:** Given the CNSC's intent to conduct assessments periodically, it is important for the CNSC to develop this in-house capacity. In addition, the involvement of internal resources in the conduct of the assessment would provide assurances that the recommendations would be practical and effective.
- **Build on existing information:** A significant amount of information about the CNSC's safety oversight culture already exists in various forms. The assessment therefore leverages existing information from PSES, PSEAS and internal CNSC pulse surveys; results from safety culture town hall meetings; and results from management retreats.
- **Remain consistent with existing guidance on conducting safety culture assessments:** The methodology is to be informed by and consistent with *The Safety Culture of an Effective Nuclear Regulatory Body* from the Nuclear Energy Agency (NEA) and the International Atomic Energy Agency's (IAEA) *Safety Reports Series No. 83: Performing Safety Culture Self-assessments*.
- **Complete this assessment according to the organization's readiness level:** The manner in which the assessment is conducted is to be commensurate with the CNSC's level of understanding of safety oversight culture and the resources available. The resultant findings and recommendations must resonate with staff and management to produce the required changes.

These principles led to an approach that enabled the development of an internal assessment capacity at the CNSC. It is supported by expert advice from Dr. Mark Fleming, a renowned safety culture expert from Saint Mary's University; and Alain Rabeau, from the Intersol Group, for his facilitation and change management expertise.

Information sources

The assessment project relied on several background sources: PSES (2011 and 2014) PSEAS (2017), internal CNSC pulse surveys, results from safety culture town hall meetings, and results from annual management retreats in 2016 and 2017. Additionally, relevant information from the recently released APEX Executive Work and Health Survey (2017) has been included.

The assessment included an analysis of these documents, a series of 10 focus group meetings, and a safety oversight culture questionnaire, which was administered to focus group participants. Of these 10 meetings, 8 were conducted with staff, 2 with managers.

Document review

The background sources mentioned in the previous section were foundational to the assessment. In-depth analyses were conducted as outlined below.

Town hall meetings

Safety culture town hall meetings were held in June and July of 2016 and were a direct follow-up from town halls held in 2014. The 2016 meetings were led by Executive Vice-President and Chief Regulatory Operations Officer Ramzi Jammal, who is the safety oversight culture champion. The safety culture town hall featured an open-forum dialogue with senior management. A report was prepared, and its contents were analyzed as part of this assessment.

Staff perception surveys

In recent years, CNSC staff have responded to a variety of surveys, some focusing on the safety oversight culture and others on broader topics. Often, these surveys have been accompanied by directorate-level management action plans and commitments.

The PSES has traditionally been conducted every three years, and more recently the CNSC has participated in the new annual PSEAS. These surveys measure employees' opinions in relation to employee engagement, leadership, the workforce and the workplace, mental health, and diversity. While these surveys can provide useful information about an organization's safety oversight culture, it should be noted that these surveys do not directly measure safety oversight culture.

Internal pulse surveys have also been conducted since 2010. The surveys are designed to provide staff with an opportunity to voice their opinions on different themes related to the CNSC's goal of continuous workplace improvement. They are not designed to specifically look at safety oversight culture, but rather to focus on employee and organizational wellness. Nevertheless, they provide valuable insights into elements associated with a healthy safety oversight culture.

Focus groups and the Focus Group Questionnaire 2017

From April to June 2017, a series of focus group meetings were conducted and a safety oversight culture questionnaire was administered before each focus group discussion got underway. Of these 10 meetings, 8 were conducted with staff and two with management. Focus group participants were selected from across the organization (including site and regional offices), by using a random sampling technique that included representation from varied work areas. A total of 117 staff members across the CNSC, consisting of 98 staff and 19 management (directors and directors general) participated in the focus groups. For reference, the CNSC employs a staff of approximately 850 professionals. The content in the focus group discussions and the accompanying questionnaire resulted in part from an analysis of the CNSC's background documents, named in the "Document review" section above. That approach was founded on *The Safety Culture of an Effective Nuclear Regulatory Body* and in *Safety Reports Series No. 83: Performing Safety Culture Self-assessments*, along with the expert advice of Dr. Fleming.

This in-depth analysis identified six themes worthy of further inquiry:

- psychological safety
- leadership
- collaboration and communication
- questioning attitude
- decision making

- continuous learning and improvement

Focus groups

The objectives of the focus groups were to explore issues related to the six themes, obtain insights into participants' perceptions and concerns, and identify improvement opportunities. Focus group discussions were led by a third-party professional facilitator and took place at the head office, with regional staff participating by videoconference.

The meetings began with participants completing a questionnaire on the CNSC's safety oversight culture and then a presentation about a working definition of safety oversight culture, before a discussion of the six themes. The focus group discussions were structured consistently in each session.

For each theme, participants were asked to describe the desired state, offer their perceptions and views on the current state, and formulate suggestions for improvements and priority actions to strengthen the CNSC's safety oversight culture.

Safety oversight culture questionnaire

The intent of the focus group questionnaire was twofold: to gather data that could be compared to data collected previously, and to establish new baseline data for future questions. The questionnaire was designed with the six discussion themes in mind and, when possible, questions were reused from previous surveys to better compare findings. Additional questions were developed, using the work that Dr. Fleming is developing for the IAEA's safety culture assessment questionnaires for use across nuclear regulatory bodies.

Results

Principle 1: "Leadership for safety is to be demonstrated at all levels in the regulatory body"

Principle 1 affirms the importance and role of leadership in shaping a safety oversight culture. This principle states:

"The quality and actions of leadership have widespread consequences for an organisation's safety oversight culture and its performance. Leaders significantly affect an organisation's safety culture through the priorities they establish, the behaviours and values they model, the reward systems they administer, the trust they create, and the context and expectations they establish for interpersonal relationships, communication and accountability. Leaders also exert significant influence on change initiatives. They have the power and responsibility to set strategy and direction, align people and resources, motivate and inspire people, and ensure that problems are identified and solved in a timely manner."⁵ Five attributes further define the behaviours and practices of this principle:

- a) **"Safety first is a guiding principle in the regulatory body.** The prioritisation of safety over other competing requirements should be ingrained in the culture of the regulatory body...

⁵ *The Safety Culture of an Effective Nuclear Regulatory Body*. Nuclear Energy Agency. Organisation for Economic Co-Operation and Development. Page 15.

- b) **“All leaders throughout the regulatory body demonstrate a commitment to safety in their decisions and behaviours.** In day-to-day decision making, all leaders of the regulatory body effectively prioritise the consideration of safety over other matters (e.g., time pressure) with a high degree of integrity, transparency and consistency...
- c) **“Leaders create an environment for positive development of the safety culture.** An important responsibility for leaders at each level is to create an atmosphere of free and open exchange of views and ideas as well as one of raising concerns. Therefore it is crucial to allow criticism, and to accept and be open to different opinions...”
This attribute also notes that a leader (or manager), when making a final decision, should explain why the decision was made.
- d) **“Leaders clearly define individual roles, responsibilities and authority.** Leaders are enabled by the organisation to define roles, responsibilities and authority, as well as a code of ethics within the regulatory body...
- e) **“Leaders ensure that the necessary resources are available to meet the safety mission.** Leaders strive to strategically plan and ensure the prerequisites for the regulatory body – such as effective technical independence and the availability of sufficient resources – to ensure that its mandate is continuously met...”⁶

CNSC strengths

The assessment reveals several strengths related to this principle:

- **Safety first is the overriding priority:** The Focus Group Questionnaire 2017 indicates that CNSC staff believe that safety remains the overriding priority when decisions are made (Q25: Staff perceptions: 56% agree, 36% neutral, 8% disagree). Staff understand the role they play in a healthy safety oversight culture: The 2014 pulse survey on safety culture indicates that individuals understand their role in contributing to safety culture (Q2: 80% agree, 14% neutral, 6% disagree). The same survey also indicates strong agreement with the statement that safety is a top priority for management (Q5: 82% agree, 13% neutral, 5% disagree).
- **Employees are treated with respect:** Survey respondents indicated that the organization treats its employees with respect, as indicated in the 2011 PSES (83% agree), 2014 PSES (85% agree), 2017 APEX survey (85% agree) and in the 2016 pulse survey on civility in the workplace (91% agree they are treated with respect by co-workers, and 87% agree they are treated with respect by their supervisor or manager).
- **Issues can be raised without fear of reprisals:** The ability to raise issues without the fear of reprisals has been examined by the CNSC for several years. Several staff surveys have explored this topic, and the results continue to trend in a positive direction, specifically the Focus Group Questionnaire 2017 question related to the statement, “The CNSC has established a culture whereby I feel I can raise issues without fear of reprisal.” (Q2: Staff perceptions: 56% agree, 25% neutral, 19% disagree) (Q2: Management perceptions: 75% agree, 25%, neutral), 2016 pulse survey on raising issues 2016 (Q1: 52% agree, 19% neutral, 29% disagree), 2013 pulse survey on raising issues (Q1: 50% agree, 24% neutral, 26% disagree). In the 2017 APEX survey, 93% of respondents agreed that the CNSC makes efforts to prevent harm to employees from harassment, discrimination or violence.

⁶ Ibid. Pages 15 to 17.

- **Managers' decisions can be challenged without fear of reprisals:** This topic is also trending slightly upward as evidenced in the Focus Group Questionnaire 2017 (Q3: Staff perceptions: 44% agree, 41% neutral, 15% disagree) (Q3: Management perceptions: 69% agree, 31% neutral), 2016 pulse survey on raising issues (Q4: 46% agree, 31% neutral, 23% disagree), 2013 pulse survey on raising issues (Q1: 37% agree, 35% neutral, 28% disagree).

These results show that raising issues without fear of reprisals **and** challenging decisions made by management without fear of reprisals were noted as a strength in the surveys. That said, discussions in the focus groups stressed the importance of addressing some negative perceptions, given the importance of this area. Considerable discussion also focused on eliminating **any** fear of reprisals regardless of the extent.

Areas for improvement

The assessment indicates a need to strengthen practices and behaviours in three areas:

- **Fear of reprisals:** This relates to the creation of an environment in which a safety culture can develop and employees can raise issues without the fear of reprisals. Despite the results noted in the questionnaire, 14% of focus group participants mentioned that they perceived themselves as the object of reprisals by leaders or managers. In addition, 26% of focus group participants believed that their psychological safety at work was low, particularly when dealing with senior leaders. In addition to these findings, staff responses to the Focus Group Questionnaire 2017 statement “There is a high level of trust between management and staff” indicated a modest level of trust. (Q1: Staff perceptions: 34% agree, 43% neutral, 23% disagree). However, 15% of focus group participants perceived low levels of trust between management and staff. Note that managers responded differently to this question (Q1: Management perceptions: 47% agree, 47% neutral, 6% disagree).⁷ The 2017 APEX survey showed that 54% of managers agreed with the statement “Members of this team are able bring up tough issues” compared to 64% across the public service overall).
- **Leaders and managers as role models of a healthy safety oversight culture:** A second area for improvement is managers setting an example as a role model for a safety oversight culture. Over the years, survey results have been consistent in this area. Specifically, respondents of the 2011 and 2014 PSES indicated that managers led by example in ethical behaviour (2011 PSES Q39: 54% agree, 21% neutral, 17% disagree) (2014 PSES Q39: 53% agree, 19% neutral, 24% disagree). The subsequent 2016 pulse survey on civility in the workplace, with a similar question (i.e., managers serving as role models for civility and respect in the workplace) showed an increase (Q6: 61% agree, 16% neutral, 23% disagree). However, non-exemplary behaviour was an organizational concern and a principal topic discussed at the 2016 management retreat. Subsequently, the responses to a similar question (Q6: “Our management behaves as role models for a positive safety culture”), posed in the Focus Group Questionnaire 2017, showed a decline (Q6: Staff perceptions: 34% agree, 42% neutral, 24% disagree).⁸ Similar findings emerged from the focus group discussions on leadership, where specific examples were shared by participants illustrating situations where leaders or managers did not behave as role models for a safety oversight culture. Furthermore, the 2017 APEX survey showed that 24% of managers felt they had experienced harassment from their superiors compared to 19% across the public service overall.

⁷ Refer to Focus Group Questionnaire 2017 results, presented in the appendix

⁸ A cautionary note on this matter: participation rates to the pulse surveys are lower than those obtained in the PSES.

- Decision rationale:** A third area requiring strengthening relates to communicating the rationale for decisions. The Focus Group Questionnaire 2017 results show a clear opportunity to improve the way decisions are communicated. It reveals that less than one third of respondents believe that decision rationales are clearly communicated (Q22: Staff perceptions: 30% agree, 30% neutral, 40% disagree) (Q22: Management perceptions: 27% agree, 53% neutral, 20% disagree). Responses to Q4 also support this finding. Q4 states that when differing views or opinions are raised, management adequately explains the rationale behind the decision (Q4: Staff perceptions: 27% agree, 42% neutral, 31% disagree) (Q4: Management perceptions: 25% agree, 69% neutral, 6% disagree). Focus group discussions also revealed that decision making requires additional attention, and two concerns emerged. First, the desire to consult, when combined with the time required to develop internal consensus, sometimes results in a laborious decision-making process. A second concern consistently expressed in the focus group discussions was that the criteria and rationale for decisions are not consistently communicated to staff. Focus group participants offered suggestions that would improve the decision-related flow of communication to employees and, in particular, many participants suggested that a mechanism be established to allow issues to be raised, tracked and reported in an automated system.

Recommendations

The assessment illustrates the need for leaders and managers at all levels of the organization to be fully conscious of the influence and control they have in helping create a positive environment for the development of a healthy safety oversight culture. Focus group participants suggested a number of improvements, most notably the need for leaders and managers to receive upward feedback to provide them with a better understanding of the impact of their actions. In addition, many suggestions were made around providing additional coaching and mentoring for leaders and managers to improve their communication and conflict-resolution skills. Focus group participants pointed out that the coaching provided to Operations Management Committee members is having a positive impact.

Recommendation 1: The CNSC should provide supervisors, managers and executives with ongoing coaching and mentoring in the leadership characteristics necessary for maintaining a healthy safety oversight culture. This recommendation aims to ensure that leaders and managers, at all levels of the organization, are conscious of the influence and control they have in helping to create a positive environment that promotes a healthy safety oversight culture. The CNSC should work toward this in a deliberate manner.

CNSC management response: Agreed. The CNSC acknowledges the importance of its leaders fully understanding and embracing their role in promoting and demonstrating a healthy safety oversight culture. Informed by feedback collected through this assessment, the CNSC is committed to the development of plans to enhance its leadership selection, performance management and development activities to reinforce the leadership characteristics necessary for maintaining a healthy safety oversight culture. These include the need for leaders to:

- demonstrate a high commitment to safety in decisions and behaviours
- foster a respectful, collaborative work environment where staff are able to freely raise concerns
- value all views, concerns and ideas, and accept and be open to different opinions
- encourage the self-reporting of mistakes by staff at all levels as an opportunity for organizational learning and continuous improvement

- demonstrate a strong sense of collaboration and coordination across the organization
- involve subordinates and communicate effectively in decision making
- monitor and enforce adherence to organizational policies and processes

The specific additional initiatives planned for enhancing leadership capacity include more frequent use of 360-degree feedback that will inform management development plans. As well, pulse surveys will be utilized to monitor demonstrated management behaviours. Merit ratings will include consideration of these expected behaviours (to be completed by March 2019).

Numerous suggestions were offered to improve the flow of communications around decisions, particularly in terms of providing transparency and a rationale for decisions. Suggestions ranged from providing leaders and managers with tools and techniques to resolve conflict, to implementing a problem identification and resolution system for tracking and reporting on emerging issues.

Recommendation 2: The CNSC should develop a problem identification, resolution, reporting, and communication tool to further increase the transparency around the communication of safety issues. The tool will enhance transparency and provide assurances that safety issues are evaluated by the organization, promptly addressed, corrected in a way that is commensurate with their significance, and communicated to staff.

CNSC management response: Agreed. The CNSC acknowledges the importance of increasing transparency around the communication of safety-related issues and the need for a single tool to standardize how the CNSC captures, monitors, corrects and communicates on safety issues raised by staff. The CNSC is committed to developing and implementing a single tool in consultation with staff to increase transparency and provide assurance that all safety issues raised by staff are captured, monitored and appropriately addressed. In designing the tool, the CNSC will incorporate best practices from other regulatory bodies and major licensees (to be completed by March 2019).

Principle 2: “All staff of the regulatory body have individual responsibility and accountability for exhibiting behaviours that set the standard for safety”

“Personal accountability reflects the fact that individual staff members accept responsibility and take ownership of their performance and the role they have in nuclear safety. In organisations with healthy safety oversight cultures, individuals have a strong sense of accountability for safety and behave accordingly.”⁹ Three attributes further define the behaviours and practices of this second principle:

- a) **“Personal commitment to and accountability for safety from every staff member, at all levels of the organisation...”**
- b) **“A strong sense of collaboration and co-ordination of activities across the organisation.** Individuals and work groups should communicate and co-ordinate their activities within and across organisational boundaries to ensure nuclear safety is maintained...”

⁹ *The Safety Culture of an Effective Nuclear Regulatory Body.* Nuclear Energy Agency. Organisation for Economic Co-Operation and Development. Page 15.

- c) **“The need for moral courage and agility in doing the right thing.** Individuals should have the necessary support to raise safety concerns and to withstand undue pressure which may have a negative impact on safety...”¹⁰

CNSC strengths

Numerous strengths are associated with this principle, particularly regarding collaboration:

- **Understanding that collaboration is essential to a healthy safety oversight culture:** The 2014 pulse survey on safety culture indicates that staff understand collaboration as essential to a healthy safety oversight culture (Q6: 78% agree, 12% neutral, 10% disagree).
- **Intra-branch collaboration:** Respondents to the Focus Group Questionnaire 2017 indicated that a **high degree of intra-branch collaboration** exists (Q13: Staff perceptions: 88% agree, 5% neutral, 7% disagree) (Q13: Management perception: 100% agree), and these results are similar to those from the 2014 pulse survey on employee engagement and organizational alignment (83% agree, 9% neutral, 8% disagree).
- **Inter-branch collaboration:** Similarly, **inter-branch collaboration also rated highly** (Q14: Staff perceptions: 76% agree, 16% neutral, 8% disagree) (Q14: Management perceptions: 94% agree, 6% neutral). These results are also consistent with responses to similar questions in the 2014 pulse survey on employee engagement and organizational alignment (65% agree, 19% neutral, 17% disagree).
- **Respect for and sharing of individual expertise:** Respondents to the Focus Group Questionnaire 2017 indicate a high degree of respect for a diversity of expertise (Q11: Staff perceptions: 73% agree, 12% neutral, 15% disagree) as well as a strong willingness to share expertise (Q12: Staff perceptions: 82% agree, 10% neutral, 8% disagree).
- **Openness to seek clarification on assigned tasks:** Responses to Q17 in the Focus Group Questionnaire 2017 illustrate, in part, a commitment to accountability, as staff and management indicated that they seek clarification before undertaking an unclear task (Q17: Staff perceptions: 76% agree, 13% neutral, 11% disagree) (Q17: Management perceptions: 75% agree, 12% neutral, 13% disagree).

Areas for improvement

The strengths listed in the previous section indicate that the CNSC demonstrates a strong commitment to the collaboration necessary for a healthy safety oversight culture. No specific weaknesses were revealed under this principle.

Principle 3: “The culture of the regulatory body promotes safety, and facilitates cooperation and open communication”

The NEA explains that “to promote nuclear safety, the regulatory body needs to foster cooperation within its own organization. A regulatory body with a healthy safety culture provides a respectful, collaborative working environment which is supportive of open, honest and free dialogue where staff are able to freely raise concerns.”¹¹ Principle 3 is further described by four attributes:

¹⁰ Ibid. Page 17.

¹¹ Ibid. Page 18.

- a) **“Openness and transparency.** In order to build trust and confidence, both internally and externally, the regulatory body should communicate and consult in an open and transparent manner, and fully engage with its staff and stakeholders...
- b) **“Clear organisational commitment to co-operation.** Co-operation and dialogue at all levels of the regulatory body’s organisation (including technical support organisations, where applicable) [foster] engagement and alignment...
- c) **“A questioning attitude, and mechanisms to raise differing opinions on regulatory decisions.** Safety is fostered and supported by working environments that promote questioning attitudes, facilitate discussion on safety concerns and are free of any fear of negative consequences...
- d) **“Promotion of safety and associated knowledge.** Promoting the importance of safety, the dissemination of related knowledge and support of research should be encouraged and made part of the organisational culture of the regulatory body.”¹²

CNSC strengths

Three strengths stand out under this principle relating to openness, transparency and a questioning attitude:

- **Having comfort in using existing mechanisms:** Existing mechanisms, such as the *Differences of Professional Opinion Process* and the *Non-Concurrence Process* in place at the CNSC, allow staff to raise and resolve issues. The Focus Group Questionnaire 2017 revealed that CNSC staff are comfortable using these methods (Q5: Staff perceptions: 57% agree, 26% neutral, 17% disagree) (Q5: Management perceptions: 88% agree, 12% neutral). These results are consistent with staff responses from the 2014 pulse survey on safety culture (Q5: 53% agree, 16% neutral, 28% disagree, 3% not applicable).
- **Expressing professional opinions:** Staff believe that they are encouraged to express their professional opinions at work and through external publications (Q20: Staff perceptions: 59% agree, 25% neutral, 16% disagree) (Q20: Management perceptions: 81% agree, 19% neutral).

Areas for improvement

Several opportunities for improvement appear under this principle:

- **Challenging assumptions:** The Focus Group Questionnaire 2017 indicates that openness and transparency require strengthening, as shown by the response to Q15, which states “Our management solicits challenges to their assumptions” – only one quarter of staff and one third of managers agree with the statement (Q15: Staff perceptions: 25% agree; 35% neutral; 40% disagree) (Q15: Management perceptions: 38% agree; 37% neutral; 25% disagree).
- **Seeking different perspectives:** An opportunity for strengthening also rests in the topic addressed in Q16, which states “The CNSC actively seeks different perspectives” (Q16: Staff perceptions: 36% agree; 37% neutral; 27% disagree) (Q16: Management perceptions: 31% agree; 50% neutral; 19% disagree). These findings are consistent with the focus group discussions, which revealed a perception by some staff that a questioning attitude is not always welcome. This finding is consistent with those expressed under principle 1 regarding the fear of reprisals. Furthermore, on 16 occasions, focus group participants indicated

¹² Ibid. Pages 18 and 19.

that they were reluctant to challenge a view (through a questioning attitude), anticipating that it would not be well received by leaders and managers.

Recommendation

Leaders and managers need to develop an increased awareness of how their behaviours are perceived by staff, and develop practices that invite staff to challenge assumptions and offer differing perspectives. During focus group discussions, participants made many suggestions in this regard, including the 360-degree feedback, human interaction skills (i.e., “soft” skills) development and ongoing coaching support. Furthermore, focus group participants acknowledged the efforts made by some leaders and managers to increase the frequency and effectiveness of the various types of meetings (e.g., town halls, skip-level meetings, daily “stand-up” meetings). However, the discussions also indicated that these practices were not consistently used throughout the organization and that further efforts were required. Recommendation 1 and the concomitant management response aim to further improve this area.

Principle 4: “Implementing a holistic approach to safety is ensured by working in a systematic manner”

“A healthy safety culture is dependent on the regulatory body using a robust, holistic, multi-disciplinary approach to safety. Regulators oversee and regulate complex socio-technical systems that, together with the regulatory body itself, form part of a larger system made up of many stakeholders, with competing as well as common interests.”¹³ Five attributes define effective regulator behaviours and practices:

- a) **“A healthy respect for the consequences of all actions and decisions taken by the regulatory body.** In its decision-making process, the regulatory body should apply a conservative approach, by considering the short and long-term potential outcomes...
- b) **“Clear awareness of roles and responsibilities in relation to licensees...** Regulatory oversight should help licensees strengthen safety and not unduly interfere in the licensees’ own processes so as not to diminish the importance of the licensees’ own responsibility for safety...
- c) **“A clear regulatory framework.** Safety is enhanced when the regulatory body sets a clear and comprehensive regulatory framework, based on hazards and risks. This framework should not be so detailed as to set up undue constraints. Regulatory requirements and guidelines need to keep evolving in order to incorporate lessons learnt and new developments...
- d) **“Proactivity, adaptability and a holistic approach.** Safety is enhanced when the regulatory body applies proactive, adaptable and holistic approaches to the delivery of its mandate. Such approaches involve effective problem anticipation, good foresight, suitable planning and a capacity to react quickly and properly to changing or new circumstances...
- e) **“Recognition of the complexity of safety issues.** Safety issues are complex and involve a number of inter-related factors, activities and groups, whose importance and effect on each other and on safety might not be immediately recognisable. Appropriate monitoring, evaluation and oversight, as well as (where needed)

¹³ Ibid. Page 19.

preventative or corrective actions are required to ensure that important indicators of degraded performance or safety are not ignored.”¹⁴

CNSC strengths

Two areas of strength stand out under this principle:

- **Holistic approach to safety:** Implementing and maintaining a holistic approach to safety require a diversity of expertise and the willingness to share it. A holistic approach also requires staff to collaborate with their colleagues within their divisions and branches and across the entire organization. In this capacity, the CNSC does well, as the results from the questionnaire and focus group meetings indicate. The results show this as a strength as described under principle 2, in regard to the respect for consequences of decisions.
- **Complexities of decisions:** The matter of staff providing input into CNSC regulatory decisions garnered a significant discussion in all the focus group meetings. From these discussions, it is clear that CNSC staff understand and appreciate the consequences and complexities of the regulator’s decisions. Moreover, focus group discussions also demonstrated a clear understanding of the need to maintain a relevant regulatory framework in the face of new technologies and evolving licensee contexts.

Areas for improvement

Improvements would be beneficial in four areas:

- **Timeliness of decisions:** As noted earlier, this is an area requiring improvement. This was documented in the 2014 PSES (that is, in the responses to the statement that senior management makes effective and timely decisions), in which 48% of respondents indicated that they strongly/somewhat agree. It was evident again in the Focus Group Questionnaire 2017 in Q21, which states “Management makes effective and timely decisions” (Q21: Staff perceptions: 31% agree, 37% neutral, 32% disagree) (Q21: Management perceptions: 38% agree, 37% neutral, 25% disagree). The results were also reflected in focus group discussions when participants noted that the desire to consult, when combined with an inability to effectively resolve differences of opinion, resulted in slow or deferred decisions.
- **Openness regarding decision making:** There are indications that the decision-making process must be more open and welcoming to challenges. The Focus Group Questionnaire 2017 results support this finding in response to Q23, which states “Challenges are welcomed during the decision-making process” (Q23: Staff perceptions: 34% agree, 41% neutral, 25% disagree) (Q23: Management perceptions: 56% agree, 38% neutral, 6% disagree).
- **Resolution of differences of opinion:** This area could also be strengthened. Significant discussion took place during the focus group meetings about the difficulty in resolving differences. The Focus Group Questionnaire 2017 results support this finding in Q24, which states “Differences of opinion are professionally resolved” (Q24: Staff perceptions: 40% agree, 47% neutral, 13% disagree) and Q23, “Challenges are welcomed during the decision-making process” (Q23: Management perceptions: 56% agree, 38% neutral, 6% disagree). Two principal findings emerged in the analysis of the focus group discussions. First, the difficulty in resolving differences may be due to a lack of “soft” skills. Some leaders and managers may not have fully mastered the skills necessary to address and resolve conflicts. Furthermore, the absence of an overarching vision, policy and supporting documents (i.e., guidance) about

¹⁴ Ibid. Pages 19 and 20.

a safety oversight culture added to the challenge of resolving differences of opinions and delayed decisions.

- **Improvement in the flow of communications:** In the focus group meetings, the theme of collaboration and communications was explored, and participants noted the efforts made by leaders and managers in improving the information flow through a variety of means (e.g., town hall meetings, informal stand-up meetings, skip-level meetings). Participants noted that, despite these efforts, these practices are not used consistently throughout the CNSC. Continued, sustained efforts to improve the flow of information between hierarchical levels are therefore necessary.

Recommendations

The ability to respond constructively to differences of opinions, especially in the context of a regulatory decision-making process, requires direct communication and collaborative, problem-solving skills. Focus group participants indicated that such skills require continuous fine tuning and improvements, and would benefit all CNSC staff. Therefore, building on a previous recommendation, it is suggested that all leaders, managers and staff be supported with ongoing coaching and mentoring, development and support in these critical communications and problem-solving skills (recommendation 1). Leaders and managers may not fully comprehend the impact of their individual communication styles and practices. To provide insights around communication effectiveness, leaders and managers would benefit from upward feedback to reinforce helpful communication practices and modify those that are ineffective. Finally, the development of a safety oversight culture policy statement would further position safety as an overarching value and provide staff with guidance and increased clarity on their assigned roles and responsibilities as members of a nuclear regulatory body.

Recommendation 3: The CNSC should develop an overarching safety oversight culture vision or policy statement outlining the desired culture that the CNSC is striving to achieve. This recommendation seeks to provide a common understanding of safety oversight culture among staff and further position safety as an overarching value.

CNSC management response: Agreed. The CNSC recognizes the importance of articulating the desired safety oversight culture the organization is striving to achieve. The CNSC is committed to developing a policy in consultation with staff by August 2018. The CNSC will complete the communication and rollout of this policy to all staff by December 2018.

The policy will build upon recognized staff understanding of the importance of safety oversight culture and further solidify previously existing and more-recently implemented policies, programs, processes and improvement initiatives such as the CNSC key behavioural competencies for all employees, leadership competencies for managers, and the recently completed policies and processes developed by the Scientific Integrity Working Group.

Principle 5: “Continuous improvement, learning, and self-assessment are encouraged at all levels in the organisation”

The effectiveness of a regulatory body relies on its “...commitment to continuous improvement, by regularly performing self-assessments, external reviews and by developing a learning attitude in order to avoid ‘blind

spots’ and identify areas for improvement.”¹⁵ Four attributes describe the behaviours and practices of this principle:

- a) **“Looking at ourselves in the mirror: safety culture self-assessment and peer reviews.** The regulatory body should take a good look in the mirror to see its own ‘ways of thinking and ways of doing’: its philosophy, policies, processes, procedures and practices... The self-assessment process comprises a first phase of qualitative evaluation. The findings of this qualitative evaluation are then compared to a set of references, which leads to an action plan. Such an assessment should be performed periodically...
- b) **“Learning from experience, fostering exchanges and increasing knowledge.** In order for individuals and organisations to avoid complacency and continuously challenge existing conditions and activities, the regulatory body should develop and maintain an open-minded and learning attitude in the technical and regulatory field...
- c) **“Knowledge management to build a healthy safety culture.** As part of the regulatory body’s knowledge management programme, careful attention should be paid to the transfer of knowledge and history of nuclear programmes to a new generation of staff...
- d) **“Continuous improvement as a clear value of the regulatory body...** The regulatory body should be aware of the basis of its organisational culture (values, assumptions and artefacts). It should not only correct its weaknesses but should also focus on maintaining and enhancing its strengths. The importance of improving the regulatory body’s performance should be clear at all levels of the organisation. Commitment to continuous improvement should be reflected in corporate policy, and the regulatory body should devote sufficient time and resources to this continuous improvement loop...”¹⁶

Strengths

This assessment and the initiatives the CNSC has put in place to strengthen its oversight culture are evidence of its commitment to continuous improvements in its safety oversight culture. In addition, there are two important strengths to consider:

- **Required training:** The CNSC provides employees with the training required to complete the job as demonstrated in the Focus Group Questionnaire 2017 (Q27: Staff perceptions: 65% agree, 25% neutral, 10% disagree) (Q27: Management perception: 94% agree, 6% neutral).
- **Competency:** Similarly, employees and managers indicate that they feel they are competent in fulfilling their duties (Q28: Staff perceptions: 74% agree, 18% neutral, 8% disagree) (Q28: Management perceptions: 88% agree, 12% neutral).
- **Action based on audits and self-assessments:** The CNSC’s leaders and managers take action based on the results of self-assessments and audits. This finding is evidenced in the Focus Group Questionnaire 2017 results (Q29: Staff perceptions: 58% agree, 32% neutral, 10% disagree) (Q29: Management perceptions: 75% agree, 19% neutral, 6% disagree).

¹⁵ Ibid. Pages 20 and 21.

¹⁶ Ibid. Pages 21 and 22.

Areas for improvement

Both the Focus Group Questionnaire 2017 and the focus group discussions highlighted the need to manage and transfer knowledge held by long-time staff who have retired or are about to retire. The Focus Group Questionnaire 2017 results for Q26, which states that the CNSC captures important information from experienced people before they leave the organization were revealing (Q26: Staff perceptions: 25% agree, 28% neutral, 47% disagree) (Q26: Management perceptions: 19% agree, 43% neutral, 38% disagree). It demonstrates the need to manage knowledge in order to continue to build a healthy safety oversight culture.

Recommendations

The CNSC should develop approaches to ensure that critical technical and regulatory knowledge is managed and transferred between staff. To further entrench continuous learning and enhance the safety oversight culture, the CNSC should undertake ongoing, periodic safety oversight culture assessments.

Recommendation 4: The CNSC should develop strategies to ensure that critical technical and regulatory knowledge, including knowledge of past experience and decision making, is actively managed as a resource and is readily available to staff. This recommendation aims to ensure that critical technical and regulatory knowledge is captured within the organization.

CNSC management response: Agreed. The CNSC recognizes the importance of managing critical technical and regulatory knowledge across the organization and the need for a corporate-wide knowledge management strategy. The CNSC has begun implementing a comprehensive three-year knowledge management strategy to capture and share corporate, technical and regulatory knowledge to maintain the organization's capacity and capability to meet its mandate (to be completed by May 2020). The CNSC has also implemented the Capability for Nuclear Safety project, which aims to ensure continued access to required scientific and technical expertise, knowledge and research infrastructure (to be completed by December 2018).

Recommendation 5: The CNSC should conduct a follow-up safety oversight culture assessment in three to five years to confirm the effectiveness of the actions resulting from this assessment and to deepen the commitment to continuously strengthen the CNSC's safety oversight culture.

CNSC management response: Agreed. The CNSC is committed to conducting a follow-up assessment of its safety oversight culture in three to five years. The CNSC will continue to remain an active participant in national and international developments in regulator safety oversight culture. The follow-up assessment will be in addition to the current approach of evaluating progress on employee uptake and effectiveness of new programs and mechanisms through such means as employee surveys, town hall sessions, management retreats, and all-staff discussions.

Summary of recommendations and management response

Recommendation 1: The CNSC should provide supervisors, managers and executives with ongoing coaching and mentoring in the leadership characteristics necessary for maintaining a healthy safety oversight culture. This recommendation aims to ensure that leaders and managers, at all levels of the organization, are conscious of the influence and control they have in helping to create a positive environment that promotes a healthy safety oversight culture. The CNSC should work toward this in a deliberate manner.

CNSC management response: Agreed. The CNSC acknowledges the importance of its leaders fully understanding and embracing their role in promoting and demonstrating a healthy safety oversight culture. Informed by feedback collected through this assessment, the CNSC is committed to the development of plans to enhance its leadership selection, performance management and development activities to reinforce the leadership characteristics necessary for maintaining a healthy safety oversight culture. These include the need for leaders to:

- demonstrate a high commitment to safety in decisions and behaviours
- foster a respectful, collaborative work environment where staff are able to freely raise concerns
- value all views, concerns and ideas, and accept and be open to different opinions
- encourage the self-reporting of mistakes by staff at all levels as an opportunity for organizational learning and continuous improvement
- demonstrate a strong sense of collaboration and coordination across the organization
- involve subordinates and communicate effectively in decision making
- monitor and enforce adherence to organizational policies and processes

The specific additional initiatives planned for enhancing leadership capacity include more frequent use of 360-degree feedback that will inform management development plans. As well, pulse surveys will be utilized to monitor demonstrated management behaviours. Merit ratings will include consideration of these expected behaviours (to be completed by March 2019).

Recommendation 2: The CNSC should develop a problem identification, resolution, reporting, and communication tool to further increase the transparency around the communication of safety issues. The tool will enhance transparency and provide assurances that safety issues are evaluated by the organization, promptly addressed, corrected in a way that is commensurate with their significance, and communicated to staff.

CNSC management response: Agreed. The CNSC acknowledges the importance of increasing transparency around the communication of safety-related issues and the need for a single tool to standardize how the CNSC captures, monitors, corrects and communicates on safety issues raised by staff. The CNSC is committed to developing and implementing a single tool in consultation with staff to increase transparency and provide assurance that all safety issues raised by staff are captured, monitored and appropriately addressed. In designing the tool, the CNSC will incorporate best practices from other regulatory bodies and major licensees (to be completed by March 2019).

Recommendation 3: The CNSC should develop an overarching safety oversight culture vision or policy statement outlining the desired culture that the CNSC is striving to achieve. This recommendation seeks to

provide a common understanding of safety oversight culture among staff and further position safety as an overarching value.

CNSC management response: Agreed. The CNSC recognizes the importance of articulating the desired safety oversight culture the organization is striving to achieve. The CNSC is committed to developing a policy in consultation with staff by August 2018. The CNSC will complete the communication and rollout of this policy to all staff by December 2018.

The policy will build upon recognized staff understanding of the importance of safety oversight culture and further solidify previously existing and more-recently implemented policies, programs, processes and improvement initiatives such as the CNSC key behavioural competencies for all employees, leadership competencies for managers, and the recently completed policies and processes developed by the Scientific Integrity Working Group.

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CNSC management response: Agreed. The CNSC is committed to conducting a follow-up assessment of its safety oversight culture in three to five years. The CNSC will continue to remain an active participant in national and international developments in regulator safety oversight culture. The follow-up assessment will be in addition to the current approach of evaluating progress on employee uptake and effectiveness of new programs and mechanisms through such means as employee surveys, town hall sessions, management retreats, and all-staff discussions.

References

[Association of Professional Executives of the Public Service of Canada \(APEX\) Executive Work And Health Survey results - 2017](#)

Bradley, Claudine Sharon. "Regulator safety (oversight) culture: How a regulator's culture influences safety outcomes in high hazard industries." PhD diss., Fielding Graduate University, 2017.

[CNSC Management Retreat Recap – 2016](#)

[CNSC Management Retreat Recap – 2017](#)

[CNSC Safety Culture Town Hall Sessions, Summary of findings – 2014](#)

[CNSC Safety Culture Town Hall Sessions, What We Heard Report – 2016](#)

[CNSC Taking the Pulse Survey on Civility in the Workplace – 2016](#)

[CNSC Taking the Pulse Survey on Employee Engagement and Organizational Alignment – 2014](#)

[CNSC Taking the Pulse Survey on Raising Issues – 2016](#)

[CNSC Taking the Pulse Survey on Safety Culture – 2014](#)

International Atomic Energy Agency. *Safety Reports Series No. 83: Performing Safety Culture Self-assessments*. 2016.

Nuclear Energy Agency Committee on Nuclear Regulatory Activities. *The Safety Culture of an Effective Nuclear Regulatory Body*. Nuclear Energy Agency. Organisation for Economic Co-Operation and Development. 2016.

[Public Service Employee Annual Survey \(PSEAS\) Results for CNSC – 2017](#)

[Public Service Employee Survey \(PSES\) Results for CNSC – 2011](#)

[Public Service Employee Survey \(PSES\) Results for CNSC – 2014](#)

Appendix – Focus Group Questionnaire 2017

Focus Group Questionnaire 2017 results

| Psychological safety | | Staff perception | | | Management perception | | |
|----------------------|--|------------------|---------|-------|-----------------------|---------|-------|
| | | (%) | | | (%) | | |
| | | Disagree | Neutral | Agree | Disagree | Neutral | Agree |
| 1 | At the CNSC, there is a high level of trust between management and staff. | 23 | 43 | 34 | 6 | 47 | 47 |
| 2 | The CNSC has established a culture whereby I feel I can raise issues without fear of reprisal. | 19 | 25 | 56 | 0 | 25 | 75 |
| 3 | When I disagree with a decision made by management, I can respectfully challenge that decision without fear of reprisal. | 15 | 41 | 44 | 0 | 31 | 69 |
| 4 | When differing views/opinions are raised, management adequately explains the rationale behind the resolution to all sides. | 31 | 42 | 27 | 6 | 69 | 25 |
| 5 | I am comfortable using existing methods available for raising and resolving issues. | 17 | 26 | 57 | 0 | 12 | 88 |

| Leadership | | Staff perception | | | Management perception | | |
|------------|---|------------------|---------|-------|-----------------------|---------|-------|
| | | (%) | | | (%) | | |
| | | Disagree | Neutral | Agree | Disagree | Neutral | Agree |
| 6 | Our management behaves as role models for a positive safety culture. | 24 | 42 | 34 | 25 | 44 | 31 |
| 7 | Our management takes clear responsibility for their own actions and errors. | 19 | 41 | 40 | 19 | 37 | 44 |
| 8 | Our management demonstrates that people are valued. | 22 | 27 | 51 | 0 | 37 | 63 |
| 9 | Leadership skills are systematically developed at the CNSC. | 21 | 44 | 35 | 13 | 43 | 44 |
| 10 | Overall, I have seen improvement in the management's leadership style over the last year. | 24 | 38 | 38 | 7 | 13 | 80 |

| Collaboration and communication | | Staff perception | | | Management perception | | |
|---------------------------------|---|------------------|---------|-------|-----------------------|---------|-------|
| | | (%) | | | (%) | | |
| | | Disagree | Neutral | Agree | Disagree | Neutral | Agree |
| 11 | The CNSC respect diversity of expertise. | 15 | 12 | 73 | 6 | 13 | 81 |
| 12 | CNSC employees are willing to share their expertise. | 8 | 10 | 82 | 0 | 6 | 94 |
| 13 | I am able to effectively complete work that involves collaboration with others, outside my division but within my branch. | 7 | 5 | 88 | 0 | 0 | 100 |
| 14 | I am able to effectively complete work that involves collaboration with others outside my branch. | 8 | 16 | 76 | 0 | 6 | 94 |

| Questioning attitude | | Staff perception | | | Management perception | | |
|----------------------|--|------------------|---------|-------|-----------------------|---------|-------|
| | | (%) | | | (%) | | |
| | | Disagree | Neutral | Agree | Disagree | Neutral | Agree |
| 15 | Our management solicits challenges to their assumptions. | 40 | 35 | 25 | 25 | 37 | 38 |
| 16 | The CNSC actively seeks different perspectives. | 27 | 37 | 36 | 19 | 50 | 31 |
| 17 | When things are unclear we seek clarity before proceeding with the task. | 11 | 13 | 76 | 13 | 12 | 75 |
| 18 | The CNSC is careful to avoid complacency. | 26 | 36 | 38 | 19 | 50 | 31 |
| 19 | Employees feel safe to report mistakes. | 21 | 37 | 42 | 13 | 31 | 56 |
| 20 | I am encouraged to let my professional opinion be known (at work or through external publication). | 16 | 25 | 59 | 0 | 19 | 81 |

| Decision making | | Staff perception | | | Management perception | | |
|-----------------|--|------------------|---------|-------|-----------------------|---------|-------|
| | | (%) | | | (%) | | |
| | | Disagree | Neutral | Agree | Disagree | Neutral | Agree |
| 21 | Management makes effective and timely decisions. | 32 | 37 | 31 | 25 | 37 | 38 |
| 22 | The rationale for decisions is clearly communicated. | 40 | 30 | 30 | 20 | 53 | 27 |
| 23 | Challenges are welcomed during the decision-making process. | 25 | 41 | 34 | 6 | 38 | 56 |
| 24 | Differences of opinions are professionally resolved. | 13 | 47 | 40 | 6 | 50 | 44 |
| 25 | Safety is the overriding priority when decisions are made at the CNSC. | 8 | 36 | 56 | 0 | 50 | 50 |

| Continuous learning and improvement | | Staff perception (%) | | | Management perception (%) | | |
|-------------------------------------|---|----------------------|---|-------|---------------------------|---------|-------|
| | | Disagree | Neutral | Agree | Disagree | Neutral | Agree |
| | | 26 | The CNSC captures important information from experienced people before they leave the organization. | 47 | 28 | 25 | 38 |
| 27 | At the CNSC, employees receive the training they require to succeed in their job. | 10 | 25 | 65 | 0 | 6 | 94 |
| 28 | Employees are competent to fulfill their responsibilities. | 8 | 18 | 74 | 0 | 12 | 88 |
| 29 | Management takes actions based on the results of audits/self-assessments. | 10 | 32 | 58 | 6 | 19 | 75 |
| 30 | At the CNSC, we use a systematic approach to improving the organization. | 29 | 30 | 41 | 25 | 56 | 19 |

B. MANAGEMENT ACTION PLAN

| Report Recommendation | CNSC Management Response | Lead | Action | Due Date |
|--|--|---|--|---|
| <p>1. <i>The CNSC should provide supervisors, managers and executives with ongoing coaching and mentoring in the leadership characteristics necessary for maintaining a healthy safety oversight culture. This recommendation aims to ensure that leaders and managers, at all levels of the organization, are conscious of the influence and control they have in helping to create a positive environment that promotes a healthy safety oversight culture. The CNSC should work toward this in a deliberate manner.</i></p> | <p>CNSC Management Response: Agreed.</p> <ul style="list-style-type: none"> The CNSC acknowledges the importance of its leaders fully understanding and embracing their role in promoting and demonstrating a healthy safety oversight culture. Informed by feedback collected through this assessment, the CNSC is committed to the development of plans to enhance its leadership selection, performance management and development activities to reinforce the leadership characteristics necessary for maintaining a healthy safety oversight culture. These include the need for leaders to: demonstrate a high commitment to safety in decisions and behaviours foster a respectful, collaborative work environment where staff are able to freely raise concerns value all views, concerns and ideas, and accept and be open to different | <p>Executive Committee (EC) Members</p> | <p>Leadership Selection</p> <ul style="list-style-type: none"> Integrate KLC Mobilizing People behavioural indicators (effective and ineffective) into supervisory assessment and selection processes Continue to reinforce the messaging to aspiring managers that technical knowledge is critical but not sufficient for appointment to supervisory, management or executive positions Continue to use a variety of assessment tools for internal and external candidates to assess both technical and behavioral competencies Continue to monitor best practices in executive assessment to improve our leadership selection approach Continue to use TBS Key Leadership Competencies (KLCs) for management and executive staffing assessments Continue to deem candidates qualified at the executive level only if s/he meets the expected performance “at level” on all KLCs Monitor and report on effectiveness of actions | <p>September 2018</p> <p>Complete and reviewed annually</p> <p>Complete and reviewed annually</p> <p>Complete and reviewed annually</p> <p>Complete and reviewed annually</p> <p>Complete and reviewed annually</p> <p>March 2019</p> |
| | | | <p>Performance Management</p> <ul style="list-style-type: none"> Update Performance Management Contracts (PMCs) for executives to contain the following commitment: <i>‘Generate positive progress against PSES Directorate level results that indicate need for improvement towards building a healthy and respectful workplace that is free from incivility and harassment’</i> Continue to conduct in-depth bi-annual review of | <p>Complete and reviewed annually</p> <p>Complete and</p> |

| Report Recommendation | CNSC Management Response | Lead | Action | Due Date |
|-----------------------|---|------|---|---|
| | <p>opinions</p> <ul style="list-style-type: none"> encourage the self-reporting of mistakes by management and staff as an opportunity for organizational learning and continuous improvement demonstrate a strong sense of collaboration and coordination across the organization involve subordinates and communicate effectively in decision making monitor and enforce adherence to organizational policies and processes <p>The specific additional initiatives planned for enhancing leadership capacity include more frequent use of 360 degree feedback that will inform management development plans. As well, pulse surveys will be utilized to monitor demonstrated management behaviours. Merit ratings will include consideration of these expected behaviours (to be completed by March 2019).</p> | | <p>MGT-RLE performance at Performance Review Committee (PRC)</p> <ul style="list-style-type: none"> Continue to ensure PRC performance discussions and assigned ratings are based on what executives accomplish (deliverables) and how they went about achieving their objectives (behaviour). Monitor and report on effectiveness of actions <p>Leadership Development</p> <ul style="list-style-type: none"> Deliver CNSC speaker series to all CNSC staff on the leadership characteristics necessary for a healthy regulatory safety oversight culture. Register all managers new to the CNSC and/or new to their role to attend in CSPA New Director’s program and as well as invite them to participate in the CNSC new Directors’ Community of Practice (CoP) Encourage all CNSC managers to make use of externally available coaches Upon request, give managers access to multi-rater assessment tools to gather information from multiple sources about their leadership and management competencies Promote to employees and managers, access to learning and development activities internally, externally including the CSPA to build on their skills to help create a more respectful and collaborative environment. Continue to build on OMC group member coaching to encourage OMC members to model expected behaviors as outlined in the OMC TOR. | <p>reviewed bi-annually Complete and reviewed annually March 2019</p> <p>December 2018</p> <p>Complete and reviewed annually</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing via training bulletin boards, ILP, articles</p> <p>Complete and reviewed annually</p> |

| Report Recommendation | CNSC Management Response | Lead | Action | Due Date |
|--|--|--------------------------------------|--|---|
| | | | <ul style="list-style-type: none"> • Seek yearly feedback on expected behaviours via surveys • Monitor and report on effectiveness of actions | <p>Ongoing</p> <p>March 2019</p> |
| <p>2. The CNSC should develop a problem identification, resolution, reporting, and communication tool to further increase transparency around the communication of safety issues. The tool will enhance transparency and provide assurances that safety issues are evaluated by the organization, promptly addressed, corrected in a way that is commensurate with their significance, and communicated to staff.</p> | <p>CNSC Management response: Agreed.</p> <p>The CNSC acknowledges the importance of increasing transparency around the communication of safety-related issues and the need for a single tool to standardize how the CNSC captures, monitors, corrects and communicates on safety issues raised by staff. The CNSC is committed to developing and implementing a single tool in consultation with staff to increase transparency and provide assurance that all safety issues raised by staff are captured, monitored and appropriately addressed. In designing the tool, the CNSC will incorporate best practices from other regulatory bodies and major licensees (to be completed by March 2019).</p> | <p>Hugh Robertson DG, DRIMPM</p> | <ul style="list-style-type: none"> • Conduct benchmarking of best practices from other regulators and major licensees • Develop a systematic approach or process for the management of opportunities for improvement identified by CNSC staff • Pilot new approach/process to a single division or directorate • Incorporate feedback from the pilot, and implement gradual roll-out of the new approach/process to the rest of CNSC staff | <p>August 2018</p> <p>December 2018</p> <p>January 2019</p> <p>March 2019</p> |

| Report Recommendation | CNSC Management Response | Lead | Action | Due Date |
|--|--|--------------------------------------|---|---|
| <p>3. The CNSC should develop an overarching safety oversight culture vision or policy statement outlining the desired culture that the CNSC is striving to achieve. This recommendation seeks to provide a common understanding of safety oversight culture among staff and further position safety as an overarching value.</p> | <p>CNSC Management response: Agreed</p> <p>The CNSC recognizes the importance of articulating the desired safety oversight culture the organization is striving to achieve. The CNSC is committed to developing a policy statement in consultation with staff by August 2018. The CNSC will complete the communication and rollout of this policy to all staff by December 2018.</p> <p>The policy statement will build upon recognized staff understanding of the importance of safety oversight culture and further solidify previously existing and more-recently implemented policies, programs, processes and improvement initiatives such as the CNSC key behavioural competencies for all employees, leadership competencies for managers, and the recently completed policies and processes developed by the Scientific Integrity Working Group.</p> | <p>Hugh Robertson DG, DRIMPM</p> | <ul style="list-style-type: none"> • Conduct benchmarking of safety culture policies from other regulators and major licensees • Develop draft CNSC safety oversight culture policy • Circulate draft policy for internal CNSC staff review • Incorporate CNSC staff comments on the draft policy • MC approval of draft policy • Complete communication and roll-out of new CNSC safety oversight culture policy to all CNSC staff | <p>Complete</p> <p>June 2018 July 2018 September 2018 October 2018</p> <p>December 2018</p> |

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| <p>4. <i>The CNSC should develop strategies to ensure that critical technical and regulatory knowledge, including knowledge of past experience and decision making, is actively managed as a resource and is readily available to staff. This recommendation aims to ensure that critical technical and regulatory knowledge is captured within the organization.</i></p> | <p>CNSC management response: Agreed</p> <p>The CNSC recognizes the importance of managing critical technical and regulatory knowledge across the organization and the need for a corporate-wide knowledge management strategy. The CNSC has begun implementing a comprehensive three-year knowledge management strategy to capture and share corporate, technical and regulatory knowledge to maintain the organization’s capacity and capability to meet its mandate (to be completed by May 2020).</p> <p>The CNSC has also implemented the Capability for Nuclear Safety project, which aims to ensure continued access to required scientific and technical expertise, knowledge and research infrastructure (to be completed by December 2018).</p> | <p>Peter Elder, VP TSB & Chief Science Officer</p> | <p><u>Knowledge Management</u></p> <p>Continue implementation of the approved knowledge management (KM) plan to 2020. Highlights of this plan include:</p> <ul style="list-style-type: none"> • Identify critical knowledge roles and successors • Add KM objectives in management PMCs • Commit to conducting an external follow up assessment by a 3rd party expert • Develop a KM policy and roll-out to CNSC staff • Engage CNSC experts to develop knowledge transfer plans • Develop e-Access public folder structure to support KM • Monitor and report on KM initiative progress • Continue to use and expand the following KM tools across the CNSC: <ul style="list-style-type: none"> ○ Communities of Practice (e.g. Inspectors, Designated Officers) ○ Job mentoring and job shadowing ○ Case Management (IT Tool) ○ Documenting lessons learned | <p>Complete Complete 2019-20</p> <p>August 2018 March 2019 March 2020 Annual update to MC</p> <p>Ongoing</p> |
| | | | <p><u>Capability for Nuclear Safety</u></p> <p>Continue implementation of the approved Capability of Nuclear Safety Project Plan. Highlights include:</p> <ul style="list-style-type: none"> • Create a catalogue of the capabilities required • Identify future needs based on emerging or changing technologies or activities, including a prioritization of needs/gaps • Develop a strengthened strategy for accessing required capability outside the CNSC including | <p>Complete September 2018</p> <p>November 2018</p> |

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| | | | influencing the Federal Nuclear Science and Technology program <ul style="list-style-type: none"> Develop report summarizing the capability internal and external to the CNSC, identifying any gaps as well as proposed remedial actions | December 2018 |
| | | | <u>Regulatory Operations Training Program (ROTP)</u> Continue implementation of the Regulatory Operations Training Plan. Highlights include: <ul style="list-style-type: none"> Develop 3 computer based training (CBT) modules: <ul style="list-style-type: none"> Regulatory Framework Licensing and certification Compliance Develop training to cover learning objectives not suitable for CBT (e.g. learning from case studies and regulatory experience) | December 2018 September 2019 |
| <p>5. The CNSC should conduct a follow-up safety oversight culture assessment in three to five years to confirm the effectiveness of the actions resulting from this assessment and to deepen the commitment to continuously strengthen the CNSC's safety oversight culture.</p> | <p>CNSC management response: Agreed.</p> <p>The CNSC is committed to conducting a follow-up assessment of its safety oversight culture in three to five years. The CNSC will continue to remain an active participant in national and international developments in regulator safety oversight culture. The follow-up assessment will be in addition to the current approach of evaluating progress on employee uptake and effectiveness of</p> | <p>Hugh Robertson DG, DRIMPM</p> | <ul style="list-style-type: none"> Review lessons learned, successes and opportunities for improvement related to the assessment Document lessons learned in a report for future assessment teams Continue to evaluate progress through annual PSES surveys Conduct follow-up safety oversight culture assessment to confirm the effectiveness of the completed actions from this plan | September 2018 December 2018 Per PSES survey timelines May 2022 |

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| | new programs and mechanisms through such means as employee surveys, town hall sessions, management retreats, and all-staff discussions. | | | |