| **#** | **Section** | **Commentator** | **Industry Issue** | **Suggested Change** | **MAJOR** or**Clarification** | **Impact on Industry** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Overview** | OPG, NB Power, Bruce Power, CNL | Industry appreciates the opportunity to provide feedback on this important document that will impact the everyday activities of nuclear industry workers. Our feedback shares the practical challenges of applying the proposed text as currently written. The majority of our comments focus on improving the clarity of the final document, while a few of the comments identify inconsistencies or conflicts with other REGDOCs, CNSC guidance, or Industry best practices.Following a collective review by personnel with extensive experience developing human performance programs, licensees have identified several areas where clarification is required or misunderstanding may be possible; these are detailed in this table of comments. The feedback is broken in to *Major* or requests for *Clarification* comments. Of note, we are highlighting below several themes, which are of particular importance and supported by the comments identified as *Major.*  These include:* Recognition of a graded, risk-based approach - There is a need to include language allowing licensees to take a risk-based approach to the application of the requirements of the REGDOC, which should include consideration of the size of the organization and the risk/hazards of the activities being undertaken. The document should provide guidance on implementation of a graded approach to the measures suggested under a human performance program.
* Integration of human performance requirements with the Management System - The document does not acknowledge integration into existing management systems that already incorporate human performance measures.
* Duplication, overlap, and/or compatibility with other REGDOCs – This REGDOC needs to clarify how it will interact with other related REGDOCs such as REGDOC-2.1.1, Management System, REGDOC-2.1.2, Safety Culture, and REGDOC-2.5.1-General Design Considerations: Human Factors. There is a high-potential to confuse the requirements of this REGDOC with other REGDOCs if the duplication, overlap and/or interactions are not clearly identified.
* Inclusion on Just Culture – Further to the previous bullet, the inclusion of the concept of ‘Just Culture’ in this document is inappropriate. Just Culture is an aspect of overall safety culture. The CNSC already has REGDOC-2.1.2; any guidance related to culture should be part of the safety culture document to prevent conflict or confusion. In addition, Just Culture incorporates more than just the aspects referenced in this REGDOC, which could lead to further confusion.

Our review also identifies sections of the document requiring further clarification and without this clarification the resources required to meet CNSC expectations for this REGDOC may outweigh any potential safety benefit realized as a result of the complexity of trying to articulate the interactions between all aspects of our programs and activities. Hence with this remaining uncertainty, it is difficult to assess the overall impact of this REGDOC, identify all compliance challenges or to propose all suggested changes. |
|  | **General** | OPG, NB Power, Bruce Power, CNL | It is unclear how the CNSC will inspect to this REGDOC and whether similar expectations would be applied to different licensees with different levels of risk.  | Include language allowing licensees to take a risk-based approach to the application of the requirements of the REGDOC. | Clarification |  |
|  | **General** | OPG, NB Power, Bruce Power, CNL | Organization of the document & Specific Requirements for Licensees:There are 4 requirements for licensees that are embedded throughout the document.  | For clarity, it is recommended the requirements be tabled at the beginning of Section 3 with links to the applicable sections that provide context and discussion in the body of the document.*3.1.1 Documenting the program's strategy and practices* ***The licensee shall*** *document the strategy and practices of their systemic approach for managing human performance by describing: […]**3.1.2 Implementing a systemic approach* ***The licensee shall*** *implement a systemic approach to managing human performance that supports safe and effective work for all workers.**3.2.1 Identifying responsibility for human performance* ***The licensee shall*** *identify a member of top management who is responsible for the human performance program and define and document their associated roles, responsibilities and authorities.**3.2.2 Developing and sustaining organizational learning* ***The licensee shall*** *implement processes to enable the business to understand and learn about factors that influence human performance and to ensure they are considered in continual improvement.* | Clarification |  |
|  | **General** | OPG, NB Power, Bruce Power, CNL | Human performance programs should apply rigour commensurate with risk. The document should recognize the need to develop human performance programs/requirements commensurate with the activities performed, the hazards present, and the size of the facility. For instance: * The degree of safety measures required (incl. measures to reduce human error) should be commensurate with the potential hazard.
* The variety of activities within a company and the associated potential hazards may differ from each other (e.g., production vs office) thus requiring different requirements.
* Some human performance activities may only be implementable at large facilities with dedicated human performance staff (e.g., implementation of resilience-engineering approach).
 | The human performance program requires some mechanism to focus its effort on safety-critical aspects of the activity and/or facility. Without this focus, the program will be less efficient and/or have gaps whereby safety relevant aspects are not addressed. Furthermore, this safety focus should have as its basis a rigorous, defensible risk management framework. For example, this could be the facility safety case, safety classifications of SSCs, or it could be some type of standalone risk management framework. However, it should not be an informal judgment or undefined. Provide guidance for implementing a graded risk-based approach. | **MAJOR** | If not risk-based, the program will be less efficient and/or have gaps whereby safety relevant aspects are not addressed.Lack of risk-based requirements will result in increased regulatory burden for some facilities with no additional benefit to nuclear safety. |
|  | **General** | OPG, NB Power, Bruce Power, CNL | The expected goal(s) of human performance programs should be clarified in REGDOC 2.2.1.While the REGDOC implies that the human performance program exists to strengthen facility safety, it is not explicitly stated as the central goal. | The expected goal(s) should be clearly stated, such that the policies and practices of the human performance program can be formulated to achieve that specific goal. | Clarification |  |
|  | **General** | OPG, NB Power, Bruce Power, CNL | The term “human factors” should be used in REGDOC 2.2.1.The term “human factors” is used very sparingly in the draft REGDOC 2.2.1 v2, appearing only in the context of “human factors in design” (aka human factors engineering). This is strange, as equivalent phrases (e.g. “factors that influence human performance […]”, “factors that influence work activities […], “factors that contributed to errors […]”, etc.) are used extensively throughout the document. | REGDOC 2.2.1 should use the appropriate term, as defined by REGDOC 3.6.Reference: CNSC REGDOC 3.6, Glossary of CNSC terminology - “Human Factors (HF)…”  | Clarification |  |
|  | **1.1** | OPG, NB Power, Bruce Power, CNL | Consider renumbering the REGDOC.The purpose of this document has changed significantly between v.1 and v.2. While v.1 was a statement of CNSC policy on Human Factors (originally P-119), v.2 identifies requirements for licensees. This change is problematic as existing documents (e.g. license condition handbooks, licensee programs and procedures, etc.) currently reference REGDOC 2.2.1 (which is v1) in ways which will be inappropriate to v2. | It would be much more straightforward to assign a different REGDOC number (e.g.; REGDOC-2.2.6) to Human Performance and retain 2.2.1 as the Human Factors policy statement or obsolete it altogether. | **MAJOR** | Licensees will need to trace all existing references to REGDOC 2.2.1 in their management system documentation to make the necessary updates.In the interim before such updates are complete, and in the event that some references are not updated correctly, there is the potential for confusion as REGDOC 2.2.1 is cited for incorrect purposes. |
|  | **1.2** | OPG, NB Power, Bruce Power, CNL | The words "Nuclear Facilities" appear to be missing after class I. | Amend final sentence to read "This regulatory document contains requirements and guidance for all Class I **nuclear facilities** and uranium mines and mills applicants and licensees." | Clarification |  |
|  | **1.2** | OPG, NB Power, Bruce Power, CNL | REGDOC 2.2.1 should apply to nuclear facilities on a risk-informed basis.This determination should be the primary consideration in determining the necessary formality and rigour of the human factors / human performance program. In contrast, requiring a human performance program for all Class I nuclear facilities and uranium mines and mills may underestimate or overestimate the relevance of human factors / human performance to facility safety. Some Class I nuclear facilities and uranium mines and mills may be less dependent on human performance for safe operation, by nature of the facility design (e.g. passive safety systems). Conversely, it is entirely possible that facilities other than those specified in the REGDOC (e.g. some nuclear waste facilities, medical facilities and/or research facilities) are dependent on human performance for safe operation and would benefit from a human performance program. The determination of applicability should be made based on the characteristics of the specific facility and its operations and is not necessarily generalizable to the license type. | In practice, the CNSC and/or license applicants should determine during licensing the extent to which facility safety is dependent on human factors / human performance. | **MAJOR** | If not addressed, excessive or insufficient rigour may be applied, relative to risk resulting in an inability to meet CNSC requirements. |
|  | **2.0** | OPG, NB Power, Bruce Power, CNL | The document refers to a Human Performance Program as an entity. Some facilities’ management systems no longer have a stand-alone Human Performance Program as the concepts of human performance have been integrated into the various programs in the management system. The philosophy of the REGDOC is human performance is integrated in all activities and the use of the terminology Human Performance Program throughout the document implies a non-integrated approach where a stand-alone program is needed. As written, this requirement could result in inspectors looking for a Human Performance Program and cause time to be spent between the regulator and the licensee understanding the management system structure. | Recommend clarifying the language throughout the document to allow for licensees to document the requirements of this REGDOC across multiple programs and discontinue the terminology “Program” in the document.Amend terminology Human Performance Program requirements and clarify if there is an expectation for documenting human performance requirements, if so, they should be exclusively stated.For example, section 3.1.1 guidance to be amended to:Documenting the human performance ~~program~~ requirements can take the form of a roadmap or overview that references and describes how the management system policies, processes, procedures, and other documents relate to human performance. The documented human performance ~~program~~ requirements may also be a stand-alone document. Separate from the documentation approach, the human performance ~~program~~ requirements should be implemented using the management system to achieve the necessary cross-cutting scope and integration in relation to the business.For goals and scope of the strategy and practices, the scope of the human performance ~~program~~ requirements should specify the departments, processes, procedures and work tasks to which the program applies, and where it applies to contractors and vendors. This can also include the rationale for the ~~program~~ requirements, which explains why ~~a~~ human performance ~~program~~ requirements ~~are~~ are important to the licensee’s goals. | Clarification |  |
|  | **Section 2 bullet 2** | OPG, NB Power, Bruce Power, CNL | Human performance should not only be implemented in execution phases of the work, but it should be explicitly defined while planning the work.  | Consider adding the word “plan”At the group level, how teams/departments **plan**, organize, supervise and resource the work, the importance they place on various aspects of the work….. | Clarification |  |
|  | **3.1, 3.2** | OPG, NB Power, Bruce Power, CNL | The inclusion of the concept of “Just Culture” in this document is inappropriate. Just Culture is an aspect of overall safety culture. The CNSC already has a REGDOC related to safety culture and any guidance related to culture should be part of that document (REGDOC 2.1.2) to prevent conflict or confusion. In addition, Just Culture incorporates more than just the aspects referenced in this REGDOC, which, could lead to further confusion.Furthermore, processes allowing personnel to raise safety concerns freely exist outside the human performance program. Clarification is requested to acknowledge that the licensee may have these processes outside of the human performance program. | Remove reference to “Just Culture” in this document. Potential for conflict or confusion with existing REGDOCs. | **MAJOR** | Defining a culture that is separate from Nuclear Safety and Security Culture (NSSC) introduces inconsistencies in alignment and implementation in practice. Organizationally there should only be one culture.If there are unique aspects of "Just Culture" that need to be implemented, it is not clear what those are or how they are different from NSSC. |
|  | **3.1**  | OPG, NB Power, Bruce Power, CNL | REGDOC 2.2.1 v.2 uses the terms “barriers” and “defences”.  Only one of the terms should be used to avoid confusion. | Consider standardizing to the use of ‘defence in depth’ in REGDOC 3.6.Reference: CNSC REGDOC 3.6, Glossary of CNSC terminology – “defence in depth (défense en profondeur)… » | Clarification |  |
|  | **3.1.1**  | OPG, NB Power, Bruce Power, CNL | REGDOC 2.2.1 should be clear that the human performance program must be implemented **as part of** the management system, not “**using** the management system”. | This should be clarified as “implemented **as part of** the management system”. | Clarification |  |
|  | **3.1.1** **bullet a** | OPG, NB Power, Bruce Power, CNL | The REGDOC states the licensee shall document the strategy and practices of their systemic approach for managing human performance by describing the goals and scope of the strategy and practice. Does this mean the development of a 5 year plan or live document since goals and scope are dynamic? | Suggest making the following change to bullet (a):The licensee shall document the strategy and practices of their systemic approach for managing human performance by describing: a. the goals and scope of the ~~strategy and practices~~ **human performance requirements**  | Clarification |  |
|  | **3.1.1** **bullet c** | OPG, NB Power, Bruce Power, CNL | The bullet states “how the licensee supports workers in day-to-day work”. It is not clear what is meant by “support”. The impact to the licensee could be significant depending on the intent.The impact of implementation will not be known until the statement is clarified. | Clarify the intent of bullet c under 3.1.1? | Clarification |  |
|  | **3.1.1Paragraph 2 of Guidance** | OPG, NB Power, Bruce Power, CNL | It is not practical to specify the departments, processes, procedures and work tasks to which the program applies as this would lead to endless changes to the document. This also contradicts the statement made in section 2 that the human performance program is overarching.  | Suggest removing guidance to specify the departments, processes, procedures and work tasks to which the program applies. | **MAJOR** | As written, this guidance would require that the program document be updated anytime the licensee makes changes to their departments, processes, procedures and work tasks. This would be an increase in administrative burden with no benefit to nuclear safety. |
|  | **3.1.1 Guidance, bullet 2** | OPG, NB Power, Bruce Power, CNL | Regarding the content “identifying any performance indicators and how this data is analyzed”. It appears the intent of this point is to have performance indicators and to periodically use them to look for trends (and then act on them). The wording of “how this data is analyzed” is problematic as it suggests the CNSC is looking for documentation on how we would physically do the analysis of the data. The intent should be to see there is data and there is something being done with it, not how we get to that outcome.As written, the requirement to document how data is analyzed will be challenging to do and could be subject to frequent changes as technology for trending and artificial intelligence improves. | Amend the 2nd bullet on page 4 of the document (in section 3.1.1 guidance) to read:* identifying any performance indicators and ~~how~~ **the need to periodically analyze** this data ~~is analyzed~~
 | Clarification |  |
|  | **3.1.2Guidance, 3rd bullet** | OPG, NB Power, Bruce Power, CNL | Clarification is required with regards to using a systemic approach when analyzing, recording and evaluating the HTO factors associated with work that went well. | Suggest adding example of what this will look like when implemented (i.e. lessons learned, post job briefs, self-assessments,..)Suggest adding guidelines with regards to frequency; will licensees have the flexibility to set their own frequencies? | Clarification |  |
|  | **3.1.2Examples** | OPG, NB Power, Bruce Power, CNL | Clarification is required to establish the list of examples provided will not be used for compliance verification.  | Suggest adding a note stating that this list of examples is not meant to be used as compliance verification. | Clarification |  |
|  | **3.1.2**  | OPG, NB Power, Bruce Power, CNL | REGDOC 2.2.1 should emphasize that human performance programs must address human factors, not human performance directly.“The licensee shall implement a systemic approach to managing human performance that supports safe and effective work for all workers.”re: “managing human performance”It is unclear how exactly a licensee’s program is expected to manage human performance. Generally individual performance is managed by each worker’s direct supervisor. It would not be practical to reassign this responsibility to a central department nor duplicate that effort. As such, it may be the intent of this REGDOC that a human performance program would actually focus on addressing ***human factors*** which are precursors to human performance. However, this is not explicitly stated. | Rephrase this clause to emphasize improvements to human factors, not direct management of human performance. | **MAJOR** | Duplication of effort would detract from efficiency, but more importantly, human performance controls consisting mainly of supplementary oversight and human performance tools would be substantially less effective than addressing underlying human factors. |
|  | **3.1.2**  | OPG, NB Power, Bruce Power, CNL | REGDOC 2.2.1 should delineate process safety and personnel safety.“The licensee shall implement a systemic approach to managing human performance that supports safe and effective work for all workers.”re: “safe and effective work”This section glosses over an important distinction between process safety and personnel safety. While both are important, the programmatic controls applicable to process safety will often differ from the controls applicable to personnel safety. | The REGDOC should clarify whether a licensee’s human performance program should have a mandate to support process safety, personnel safety, or both. In any case, the program’s practices should in fact support the stated goals. It may be useful to refer to Todd Conklin’s work in this regard, in particular critiques of the Heinrich triangle. | Clarification |  |
|  | **3.1.2**  | OPG, NB Power, Bruce Power, CNL | The draft REGDOC 2.2.1 is focused on investigation, but should also emphasize improvement initiatives resulting from such investigation.This section provides some examples of processes supporting this goal. While this list is good, it emphasizes investigation, analysis and assessment without much in the way of intervention. | The following missing elements should be added:* Identifying potential improvements, including both organizational changes and engineering changes
* Evaluating such improvements on their relative merits
* Nominating meritorious improvements for implementation
* Supporting organizational and engineering changes with human factors and performance expertise
* Reviewing the effectiveness of implemented improvements
 | **MAJOR** | A human performance program focused on investigation without intervention cannot improve human performance. |
|  | **3.2.2** | OPG, NB Power, Bruce Power, CNL | Clarification is required on how licensees can consider work as it was done in practice. | Suggest adding examples of ways licensees can consider work as it was done in practice. | Clarification |  |
|  | **3.2.2list of processes for learning related to human performance and safety****3rd Bullet**  | OPG, NB Power, Bruce Power, CNL | The third bullet currently states that Licensees’ processes for learning related to human performance and safety should include training for all personnel on the aims of learning and improving work and what this means for their roles.The term “all personnel” should be replaced with “**applicable** personnel” as not all personnel require this training.  | Suggest the following change:training for all **applicable** personnel on the aims of learning and improving work and what this means for their roles | Clarification |  |
|  | **3.2.2list of processes for learning related to human performance and safety****5th Bullet**  | OPG, NB Power, Bruce Power, CNL | The fifth bullet currently states that Licensees’ processes for learning related to human performance and safety should include using the principles of a just culture in conducting event analyses and disciplinary measures.Disciplinary measures are not defined in human performance program. Does this mean we might need to include roles into human performance (Human Resources for example). | Suggest deleting the following:“using the principles of a just culture in conducting event analyses and disciplinary measures” | Clarification |  |
|  | **3.2.2** | OPG, NB Power, Bruce Power, CNL | This section deals with various topics. The second paragraph is about analyzing past performances while the rest is about Organizational learning goals and processes. | Suggest clarifying the text if the intent is to link analyzing past performance as a learning tool to achieving the goals listed above.  | Clarification |  |
|  | **3.2.2**  | OPG, NB Power, Bruce Power, CNL | Sections 3.1.2 and 3.2.2 should be reformulated to clarify each section’s distinct requirement. In the present draft, they appear to overlap significantly.It is unclear how the requirement in 3.2.2 differs from the requirement in 3.1.2 – it would seem necessary that data gathering, assessment and other investigative methods are necessary to manage human performance as described in 3.1.2. Furthermore, section 3.1.2 already includes example processes for investigating events and organizational learning. | It is suggested to reformulate the core requirements of the REGDOC such that they are mutually exclusive. | **MAJOR** | Lack of clarity in requirements will lead to confusion and inability to implement effectively, which will contribute to churn and a fundamental inability to achieve CNSC requirements. |
|  | **Glossary** | OPG, NB Power, Bruce Power, CNL | The term “humans, technology and organization (HTO)” is used without fully explaining it or defining it in the glossary. | Add a definition of ‘HTO’ to the glossary or other explanation. | Clarification |  |
|  | **Glossary**  | OPG, NB Power, Bruce Power, CNL | REGDOC 2.2.1 v.2 now defines the term “program” as “A group of related management system elements, such as policies, processes and procedures that are managed in a coordinated way”, and notes this will be added to REGDOC 3.6. This update to REGDOC 3.6 will substantively alter the meaning of REGDOC 2.5.1 Part A (Human Factors Engineering Program Plan), driving a requirement for programmatic implementation, rather than project-specific HFEPPs as is currently the standard practice for some Class I nuclear facilities. This is because HFEPPs written as individual project plans cannot be considered as management system elements per the new definition. | Consider the impact on REGDOC 2.5.1 and determine whether an expedited revision or other interim clarification is required. | **MAJOR** | The implied change to REGDOC 2.5.1 impacts other licensee programs. |
|  | **General** | CNA | Recognition of a risk-based graded approach. The Canadian nuclear regulatory system is designed to use a risk-based graded approach to regulation but in this document and many others, the CNA would argue that a risk-based graded approach is not fully applied. There is a need to include language allowing licensees to take a risk-based approach to the application of the requirements of the REGDOC which should include consideration of the size of the organization and the risk/hazards of the activities being undertaken. The document should provide guidance on implementation of a graded approach to the measures suggested under a human performance program. Recognition and effective use of a risk-based graded approach to regulation is going to be increasingly important as the nuclear industry moves forward with new advanced reactors. |  |  |  |
|  | **General** | CNA | Integration of human performance requirements with the Management System. The document does not acknowledge integration into existing management systems that already incorporate human performance measures. This has the potential to cause confusion, overlap and increased administrative burden. |  |  |  |
|  | **General** | CNA | Duplication, overlap, and/or compatibility with other REGDOCs – This REGDOC needs to clarify how it will interact with other related REGDOCs such as REGDOC-2.1.1, Management System, REGDOC-2.1.2, Safety Culture, and REGDOC-2.5.1-General Design Considerations: Human Factors. There is a high potential to confuse the requirements of this REGDOC with other REGDOCs if the duplication, overlap and/or interactions are not clearly identified. |  |  |  |
|  | **General** | CNA | Inclusion on Just Culture – Further to the previous bullet, the inclusion of the concept of ‘Just Culture’ in this document is inappropriate. Just Culture is an aspect of overall safety culture. The CNSC already has REGDOC-2.1.2; any guidance related to culture should be part of the safety culture document to prevent conflict or confusion. In addition, Just Culture incorporates more than just the aspects referenced in this REGDOC, which could lead to further confusion |  |  |  |
|  | **General** | CNA | In addition, our review of REGDOC 2.2.1 also identifies sections of the document requiring further clarification. These are noted in our detailed comments. As REGDOC 2.2.1 is written, it creates a verycomplex set of interactions between all aspects of industry programs and activities which in turn creates significant uncertainty and the need for significant resources that may result in the costs to implement the REGDOC outweighing any potential safety benefit realized.Hence with this remaining uncertainty, it is difficult to assess the overall impact of this REGDOC, identify all compliance challenges or to propose all suggested changes. |  | Clarification |  |
|  | **General** | **Cameco Corporation** | Cameco Corporation (Cameco) participated in the industry discussions on draft REGDOC-2.2.1, Human Performance (the Document) and supports the themes identified by licensees in such discussions. These themes are the need for a graded, risk based-approach; integration of human performance into the management system; overlap with other REGDOCs; and, inclusion of Just Culture. In general, Cameco is concerned that meeting the requirements of the Document would create a significant regulatory burden without any apparent safety benefit. The following submission summarizes Cameco’s other main concerns with the Document. |  |  |  |
|  | **General** | **Cameco Corporation** | The Document uses a “one size fits all” model to manage human performance when licensed facilities have very different hazards, activities, and complexity all of which affects the nature and extent of the influences on each worker and the relationships among workers, technology, and the organization. The draft REGDOC also contains mixes messages on the expected level of detail required. For example, section 2 states a “human performance program provides an overarching view of the factors that influence human performance”. However, Section 3.1.1 states the human performance program document scope down to the level of “processes, procedures, and work tasks.” This is a completely unrealistic level of detail and would be impossible to keep up to date while creating an endlessly changing program document with a significant administrative burden with little to no safety benefit. The scope of human performance requirements must be limited based on risk and the applicable human factors - which the Document does not reinforce. For example, section 3.2.2 it states that training should include “all personnel;” however, with a graded, risk-based approach it would be more appropriate to have training for “applicable personnel.” |  |  |  |
|  | **General** | **Cameco Corporation** | Many licensees integrate human factors and activities effectively into various programs in management systems. As such, human performance requirements must be implemented as part of the management system and not by “using the management system” as currently set out in 3.1.2 of the Document. Related to the previous comment, human performance requirements achieved through integrating human performance concepts as part of the management system facilitates a licensee’s ability to apply a risk-informed approach to address factors that affect human performance. Although Guidance in 3.1.1 uses “roadmap” or “overview” as an alternative for a standalone program, the requirement for a “documented program” means that licensees are expected to create a new document and potentially a new department or group and identify a member of top management to be responsible for the “program” when there is no apparent value or safety benefit to doing so. Cameco recommends deleting all references to “program” from the Document to make it clear that additional documents may not be required to address factors that affect human performance. |  |  |  |
|  | **General** | **Cameco Corporation** | The draft REGDOC proposes to define the term “program” as “A group of related management system elements, such as policies, processes and procedures that are managed in a coordinated way,” and notes this will be added to REGDOC 3.6. The implication of this change on other REGDOCs that use this term is not clear because “program” has been interpreted as a distinct document. If there is a need to define the term “program,” then it would be more appropriate to do this through appropriate consultation associated with a revision to REGDOC-2.1.1, Management System. Section 3.2.1 requires that a member of top management be identified as responsible for the human performance program. This is inconsistent with other REGDOCs, which merely state that responsibilities are assigned in line with the management system, while a few REGDOCs (e.g., radiation protection, security) refers to “senior management.” This level of specificity is unwarranted and should be removed. |  |  |  |
|  | **General** | **Cameco Corporation** | Cameco strongly opposes the introduction of ‘just culture’ to a human performance REGDOC. The concept of ‘just culture’ is an aspect of safety culture and introduction of this concept outside of safety culture introduces inconsistencies and potential for conflict. In addition, ‘just culture’ incorporates more than just the aspects referenced in this REGDOC. To assign subculture designations to different functions or activities serves no purpose and will not only create confusion as well as inconsistent and duplicative REGDOCs, but also will not contribute to safety. |  |  |  |
|  | **Section 2** | **Marcel DevosProdigy Clean Energy** | Previous concerns with the requirement for a discrete program called "the Human Performance Program" overseen by a specific department in the organization appears to have been resolved with a definition of the term "Program" that has been provided in the Glossary. That is, the licensee is expected to present the various coordinated 'elements' within their management system to demonstrate requirements have been met. This means that Top Management may organize these elements as appropriate such that the objectives of Human Performance are achieved and monitored on an ongoing basis. Glossary: It is not clear why a new term "Just Culture" needs to be introduced into the Canadian Regulatory Framework. How is it any different from "Safety Culture" which, by definition, has the same expectations of human behaviour in the conduct of activities? Suggest deleting this term entirely as it is confusing and instead tying human performance to strong safety and security culture traits. The requirements articulated in this document appear to be clear and straightforward and their tie to safety and security is clear. The guidance would benefit from the addition of information on tools or methods that have resulted in acceptable outcomes. Even experienced organizations will struggle to understand "what good looks like". |  |  |  |
|  | **Anticipated impacts of REGDOC 2.2.1** | **Marcel DevosProdigy Clean Energy** | It is fully understood that it is not the regulator's role to prescribe specific methodologies that are acceptable to use to meet the objectives in requirements and guidance. However, it is important to note that the guidance that has been provided is not sufficient if faced with the prospect of having to build these programmatic elements from first principles. Even evaluating existing programs in a large organization could prove daunting. What specific skills and training are necessary to be qualified to lead this type of internal assessment effort? So although the requirements in this REGDOC are certainly necessary to improve human performance in the conduct of activities important to safety, security and environmental protection, it is not clear how it would be consistently implemented in different sized organizations with different levels of complexity. Suggest that rolling this REGDOC out will require a series of educational workshops for practitioners to understand how to achieve strong outcomes. |  |  |  |