CSA Group

N286-12

Management system requirements for nuclear facilities

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Preface

This is the second edition of CSA N286, *Management system requirements for nuclear facilities*. It supersedes the previous edition, published in 2005 under the title *Management system requirements for nuclear power plants*. The scope of this edition expands beyond nuclear power plants to include nuclear facilities as defined by this Standard.

Users of this Standard are reminded that civilian nuclear facilities in Canada are subject to the provisions of the Canadian Nuclear Safety and Control Act and Regulations. The Canadian Nuclear Safety Commission (CNSC) can therefore impose requirements additional to those specified in this Standard.

In addition, other national or international standards or guides may be used, where applicable, within this management system.

This Standard was prepared by the Drafting Task Force on Management System Requirements for Nuclear Facilities and was overseen by the Subcommittee on Management System Requirements for Nuclear Facilities, under the jurisdiction of the Technical Committee on Management Systems and the Strategic Steering Committee on Nuclear Standards, and has been formally approved by the Technical Committee.

Notes:

(1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

(2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*

(3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*

(4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for interpretation" in the subject line:*
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(b) provide an explanation of circumstances surrounding the actual field condition; and
(c) where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.
Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at* ***standardsactivities.csa.ca****.*

(5) *This Standard is subject to periodic review, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to* ***inquiries@csagroup.org*** *and include "Proposal for change" in the subject line:*
(a) Standard designation (number);
(b) relevant clause, table, and/or figure number;
(c) wording of the proposed change; and
(d) rationale for the change.

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Management system requirements for nuclear facilities

0 Introduction

Note: *The information in Clause 0 is informative.*

0.1 Background

This Standard identifies management system requirements for nuclear facilities. It integrates the requirements from management system standards for health, safety, environment, security, economics, and quality.

The CSA N-Series of Standards provides an interlinked set of requirements for the management of nuclear facilities. CSA N286 provides overall direction to management to develop and implement sound management practices and controls, while the other CSA nuclear Standards provide technical requirements and guidance that support the management system.

CSA N286 is based on a set of 12 principles. The principles are supported by generic requirements (Clause 4). The Standard then presents the specific requirements (Clauses 5 to 9) that are applicable to the life cycle of nuclear facilities.

While this edition of CSA N286 was being planned, it was recognized that many of the same management system requirements apply not only to each life-cycle phase of a nuclear facility but also to all aspects of the management of the facility, including health, safety, environment, security, economics, and quality. It was also recognized that life-cycle phase activities may be delegated to suppliers and, therefore, the requirements of this Standard apply to these suppliers. In addition, a graded approach, commensurate with risk, may be defined and used when applying the requirements of this Standard.

Before this Standard was drafted, two preparatory activities were undertaken that included an industry scan of applicable reference documents and a condition assessment to determine the impact and value of a management system that integrates the requirements from management system standards for health, safety, environment, security, economics, and quality. The conclusion of the industry scan was the trend in standards to move towards a more holistic approach of management, with the focus on providing direction to top management for creating purpose and commitment, capability, process definition and control, performance monitoring, and continual improvement. The conclusion of the condition assessment was that most nuclear facilities were being required to carry programs to comply with as many as ten different management, management system, or quality assurance standards. Most of these standards were directed at the same purpose, but requirements were not harmonized. This led to the conclusion that a single standard would be more effective with the purpose of establishing a management system standard that integrates the requirements from management system standards for health, safety, environment, security, economics, and quality. This edition both permits and recommends that organizations develop a single management system that integrates all management system requirements for health, safety, environment, security, economics, and quality (including quality assurance).

During the preparation of this Standard, stakeholders indicated that safety needs to be strongly emphasized. As a result, a new principle was established: "Safety is the paramount consideration, guiding decisions and actions; supported by requirements (see Clause 4.2)."

This edition continues the approach taken in CSA N286-05 to only state requirements a single time, recognizing that

(a) there is a requirement to document and implement the management system;
(b) work is accomplished through adherence to management system documents that detail requirements and acceptability of the work, and that there is objective evidence of successful completion;

(c) the technical requirements of codes, standards, acts, regulations, licenses etc. are addressed in the management system and are not replicated in this Standard; and
(d) competency is a common industry term that requires a worker to be both qualified and capable to perform the work.

0.2 The management system

The management system brings together in a planned and integrated manner the processes necessary to satisfy the requirements that must be met to achieve business success and sustainability. Figure 1 shows a simplified model of a management system.

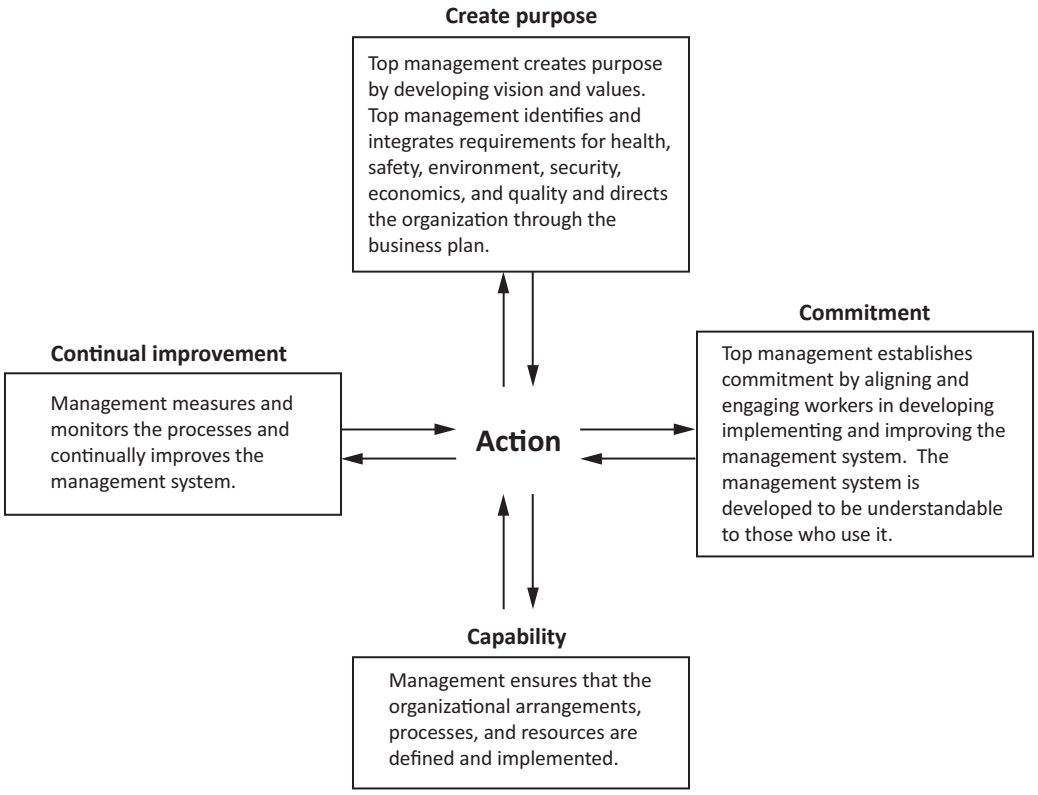

Figure 1
Simplified model of a management system
(See Clause 0.2.)

1 Scope

1.1

This Standard applies to the top management with overall accountability for the nuclear facility.

1.2

This Standard integrates the management system requirements for health, safety, environment, security, economics, and quality.