

PEER REVIEWS

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assessments can aid in improving workplace safety, as they play a key role in developing and maintaining a high level of awareness of organizational strengths and weaknesses, and give insight into how and why an organization behaves in certain ways, and thus positively impact an organization's safety culture.

The ISCA review service is offered in the frame of an OSART mission and benefits for the synergy between the technical and the safety culture aspects of the safety review. The joint operational safety and safety culture assessment provides the organization with the opportunity to better understand the interactions between technical, human, organizational and cultural aspects, helping the organization to take

actions that fully address the root causes of any identified issues. Behavioural scientists are included as part of the OSART team skilled in conducting the ISCA.

## Safety culture assessment methodology

The ISCA methodology is based on a scientific approach to safety culture and follows the IAEA safety standards. This methodology is divided into two parts; a descriptive part that serves to describe cultural expressions and cultural themes and a behavioural part that evaluates the cultural conclusions in relation to the IAEA Safety Culture Normative Framework (see GS-G-3.5).



PEER REVIEWS



Nuclear Installation Safety

## INDEPENDENT SAFETY CULTURE ASSESSMENT REVIEW SERVICE (ISCA)

Regulators

Operating

The assessors apply six methods for the Reporting collection of data on the organizational culture. The first five are interviews, surveys, focus groups, document reviews and observations. In addition, the OSART team findings are reviewed to identify cultural aspects of the facts gathered. Each of the data sets obtained through the different methods are analysed separately to ensure the validity of the findings. When the cultural themes for each data set are identified, a descriptive overarching analysis is performed to conclude the image of the culture. The final step of the analysis is to compare the image of the culture with the normative IAEA framework for strong safety culture.

#### Follow-up activities

Eighteen to twenty-four months after the joint operational safety and safety culture assessment, a safety culture workshop is conducted in the frame of the OSART follow-up visit to allow the organization to present their action plan and self-assessment results.

#### Who benefits?

Nuclear power plants and nuclear utilities.

#### Team composition

The OSART Independent Safety Culture Assessment requires a minimum of two safety culture experts to be added to the OSART review team.

The safety culture reviewers/assessors must have formal behavioural/social science backgrounds and several years of experience in safety culture assessment. In addition, the assessors require good nuclear technology and nuclear organizational understanding.

#### Duration

Three weeks.

## Expected output

The results of an ISCA are presented as strengths and areas in need of attention. The results provide the organization with inputs for further organizational developments, rather than prescriptions for corrective actions. Ideally, the results serve as an eye-opener that starts a reflective process of learning, facilitating new ways of asking questions about how and why the organizational members act and think the way they do, and in the context of the OSART findings, what the cultural implications are for the safety performance of the organization.

Vendors

The preliminary results of the ISCA are firstly communicated to the plant management through an interactive workshop. A second workshop is held to finalize assessment results and achieve a shared understanding. The final results are summarized and issued as a part of the final OSART report.

In addition, a full ISCA report is drafted to provide clear and specific explanations so that the assessment findings are easily understood also for non-specialists. Quotes from interviews or focus groups, or examples from observation notes are used to exemplify the image of the culture. Care is taken to ensure that the anonymity of respondents is maintained.

## **Recommended frequency**

At the request of Member States

#### Assessment structure

Assessment of an organization's safety culture requires a high degree of interaction with plant management and personnel in order to surface meaningful data on how the organization thinks and behaves.

A structured ISCA plan is used to facilitate the administrative and logistical challenges arising out of the multi-step, multi-data gathering methodology applied. This standard plan establishes the timing, duration and engagement of plant employees required to complete the safety culture assessment.

#### Public outreach

The derestricted nature of the OSART report allows the regulatory body, politicians, nongovernmental organizations and the public to view and consider the summarized results of the ISCA.

# For further Information:

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