



IAEA

60 Years

Atoms for Peace and Development

Nuclear Installation Safety

PEER REVIEWS

ISCA | Independent Safety Culture Assessment

Why is this important?

Lessons from the accidents at Chernobyl and Fukushima Daiichi concluded that the lack of a strong nuclear safety culture was a significant contributing factor to their cause.

The International Nuclear Safety Group (INSAG) stated that “Safety culture is a necessary characteristic to reach safety in nuclear installations and therefore it must be possible to assess its status in order to improve it and maintain it in optimal levels.” INSAG also recognized that the safety culture of an organization shapes underlying behaviour, which can have a direct impact on the overall safety of a facility.

The IAEA defines a strong safety culture as “the assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance.”

Assessing safety culture can identify vulnerabilities in attitudes, beliefs, values, behaviours and shared understandings across the facility that could directly impact its level of safety. Safety culture assessments can identify blind spots, lack of management commitment, communication issues, acceptance of poor conditions and poor compliance with standards and procedures. Experience shows that a group is seldom aware of their safety culture issues until a safety culture assessment reveals it to them.

The Independent Safety Culture Assessment — **ISCA** — peer review programme developed by the IAEA provides a window into the organization’s safety culture characteristics, shared values and basic assumptions. The findings of the ISCA can be used to further develop and strengthen the organization’s culture for safety.

What do I need to know?

ISCA can be requested either as a stand-alone service or as part of an Operational Safety Assessment Team (OSART) peer review. An ISCA peer review can aid in improving nuclear safety by helping to identify strengths and weaknesses among technical, human, organizational and cultural interactions and interconnections. ISCA can provide insight into how and why people behave within organizations the way that they do, and thus either positively or negatively impact its safety culture. The peer review provides the organization with the opportunity to better understand and fully address root causes of safety culture issues once they’ve been identified. The ISCA methodology is based upon the IAEA safety standards.

What actions are recommended?



Member States desiring an ISCA peer review mission should send a request to IAEA Division of Nuclear Installation Safety.



Member States should ensure proper resources are available to assist in preparation before the mission commences.



Member's States are encouraged to share the final ISCA report publicly.



For a list of IAEA safety culture training and workshops scheduled, check the current online IAEA Meeting Schedule.

How is an ISCA peer review mission conducted?

The ISCA peer review team uses a range of tools to systematically collect a wide variety of organizational data (interviews, comprehensive surveys, focus group interaction, document reviews and observations). This multidimensional data is then analysed and consolidated into an “image” of the organization’s culture, which is then compared to the IAEA safety culture framework. Meetings with senior management are held to discuss the findings, insights and recommendations. A follow-up mission is conducted 18 to 24 months from the initial ISCA peer review mission to review progress in the implementation of the ISCA findings, insights and recommendations.

Who should request this service?

Member States with existing nuclear installations can request this service separately, or in conjunction with an OSART peer review.

Who conducts this service?

ISCA missions within OSARTs are conducted by a minimum of two safety culture experts. For stand-alone ISCA missions the number of safety culture experts depends upon the size of the organization.

What is the duration of the average ISCA peer review mission?

ISCA missions last on average from two to three weeks.

What pre-planning is required?

As a high degree of interaction with plant management and personnel is required, IAEA works with senior management in advance of the ISCA mission to establish a project plan that covers timing, duration and engagement of plant employees required to complete the safety culture assessment.

Resources

OSART Independent Safety Culture Assessment (ISCA) Guidelines

http://www-pub.iaea.org/MTCD/Publications/PDF/SVS-32_web.pdf

Leadership and Management for Safety (IAEA Safety Requirements No. GSR Part 2)

<http://www-pub.iaea.org/MTCD/publications/PDF/Pub1750web.pdf>

Email: Operational-Safety.Contact-Point@iaea.org

Visit: <https://www-ns.iaea.org/home/ni/dir-ni-message.asp?s=2&l=16>

