

Remote Regulatory Inspection

Regulatory Inspection is one of the core processes of AERB to independently assess the safety status of the Nuclear, and Radiation Facilities (NRF) and their compliance to the safety & regulatory requirements, and licensing conditions by observing the in-field status of plant systems, structures, and equipment, work practices, and records at the Site. AERB conducts routine (safety & security) inspections to cover all the activities of the licensee in compliance with the regulatory requirements. These regulatory inspections are carried out by inspectors stationed at headquarters in Mumbai and at regional centers located in Delhi, Kolkata, and Chennai.

The regulatory inspection programme faced a major challenge during the COVID-19 pandemic, which restricted the movement of people across the country. In last week of February 2020, AERB took the first step by deciding not to send inspectors who have known medical issues. Subsequently, in March 2020 as the travel restrictions were imposed, Top Management of AERB suggested to identify alternative means for conducting inspections.

As an interim measure, AERB developed remote regulatory inspection process to continue its regulatory oversight over the licensed activities/facilities. This remote inspection involves (1) assessment of the activity/facility by the facility itself as per the self-assessment checklists specially developed by AERB, (2) review of self-assessment reports by an inspection team for identifying the need for additional / supporting submissions (including records, documents, photographs, videos on sample basis) from the facility, (3) video conferencing with the licensee to verify certain compliances, as necessary, and (4) issuance of inspection report after review of the evidences and submissions. The checklists developed for the remote regulatory inspections contain the checks done by the AERB inspectors at site during routine regulatory inspections. With the introduction of self-assessment by the licensee using checklists for various plant systems, functional areas and activities etc.; responsibility for safety by the licensee gets reinforced and will certainly help in developing a better safety culture.

Being very light on resources, such remote inspection was introduced during for work from home. Subsequently, AERB has established all necessary infrastructural support by setting up a remote inspection center with audio visual systems and secured video conferencing facility for carrying out remote Inspections simultaneously at multiple facilities.

Although AERB was one of the pioneer among regulatory bodies in quickly responding to Covid-19 challenges through introduction of remote inspections, it had conducted special or surprise inspections at Radiation Facilities as necessary by sending inspectors from RRCs and HQs after taking all required protections. AERB posted Site Observer Teams (SOTs) at four sites where nuclear power plants are under construction and in operation. These SOTs were visiting site on regular basis with due approval of respective authorities after taking appropriate protective measures.

Certain key lessons were learnt from the experience of regulatory oversight of Nuclear and Radiation Facilities (NRF) during pandemic situation. The remote regulatory inspection has its own limitations. While it is more suitable for inspections of facilities with low hazard potential and less security concern, onsite presence is essential for more secured and some high hazard facilities. Also, unannounced inspections and reactive inspections require physical presence at site. However, remote inspection can be suitably integrated into the AERB's inspection programme of the NRFs using a graded approach to optimize resources.

Chairman, AERB inaugurating the Remote Inspection Centre at Niyamak Bhavan-B, AERB in presence of Executive Director, AERB and Heads of all Technical Divisions of AERB.



