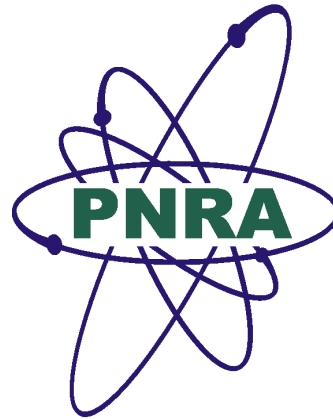


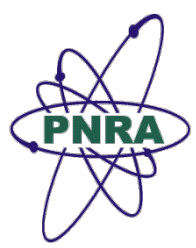
Nuclear and Radiation Safety and Security Related Regulatory Challenges due to the COVID-19 Outbreak



**64th REGULAR SESSION OF THE IAEA GENERAL CONFERENCE
SENIOR SAFETY AND SECURITY REGULATORS' MEETING**

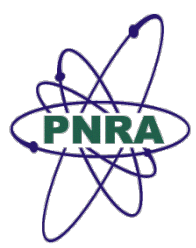
September 24, 2020

Pakistan Nuclear Regulatory Authority



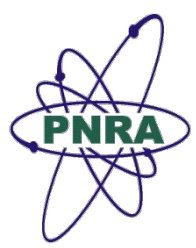
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Introduction

- Pakistan experienced its first case of COVID-19 at the end of February, 2020
- Initial COVID-19 cases were having foreign travel history and were quarantined at borders
- Government announced nationwide lock down on March 21, 2020
- All educational institutes were closed and online educational activities were promoted
- The lockdown was eased down gradually with time as the number of active COVID-19 cases decreased and remained relatively low in the country



Statistics of COVID-19 in Pakistan

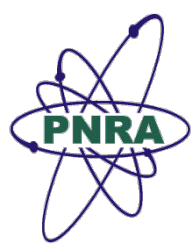
(Ref: www.covid.gov.pk)

Daily Tests and New Cases Distribution (March-August)



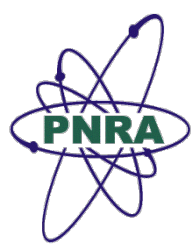
Statistics as of September 07, 2020

COVID-19 Cases	Recoveries	Active Cases	Deaths
298,903	286,016	6,542	6,345



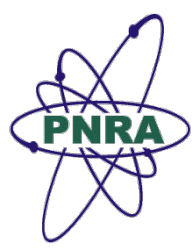
General Measures taken by PNRA during COVID-19 Outbreak

- Working hours were reduced and only essential tasks were performed with minimum manpower after adopting necessary protective measures (masks, disinfectants, temperature monitoring, social distancing, etc.)
- Outstation travel (official or private) was restricted (only allowed in case of any emergency)
- After travelling outstation, 14 days quarantine and testing SOP was followed for joining the office
- A COVID-19 Management Committee was established to oversee the overall situation within PNRA



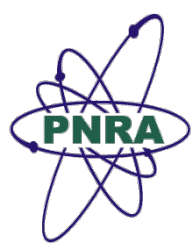
Current Situation at PNRA

- Normal office timings and attendance has resumed
- Necessary preventive/protective measures and protocols as instructed by Government are still being followed for carrying out day to day activities
- After travelling outstation, quarantine time is reduced to 07 days followed by examination SOP (tests only conducted in cases with symptoms)



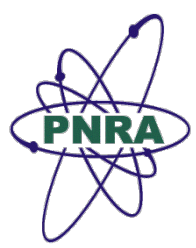
Regulatory Challenges due to COVID-19

- Inspection & Enforcement
 - Reduced inspection and enforcement activities
- Other Core Regulatory Functions (Review & Assessment, Licensing and Regulatory Framework)
 - Delay in schedules (licensing, review, etc.)
 - Face to face meetings were curtailed to the extent possible
- Training activities, drills and exercises
 - Training courses, drills and exercises postponed



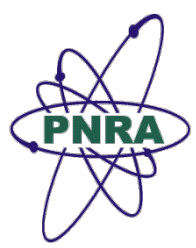
Measures to address Regulatory Challenges (1/7) (Inspection and Enforcement - NPPs)

- Inspection plan for **Nuclear Power Plants (NPPs)** modified to focus on important activities (routine inspections suspended)
- For **under construction NPPs**, PNRA inspectors after following quarantine protocols, resided at site (K-2/K-3) to witness ongoing construction and commissioning activities
- PNRA officials worked remotely and minimized travel to site unless critical or already posted as a Resident Inspector
- Any necessary inspection/surveillance visits were carried out with necessary protective measures



Measures to address Regulatory Challenges (2/7) (Inspection and Enforcement - NPPs)

- Reduction in number of control points for regulatory inspections without compromising regulatory effectiveness and keeping in view the graded approach to minimize possible exposure of PNRA inspectors during COVID-19 Pandemic
- More focus was given to selection of "record points (R-points)" instead of "witness points (W-points)" keeping in view the graded approach
- Reactive inspections remained continued



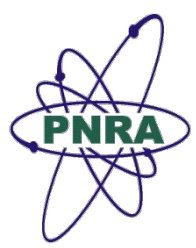
Measures to address Regulatory Challenges (3/7) (Inspection and Enforcement – RFs)

- Inspections of **Radiation Facilities (RFs)** were suspended since various radiation facilities were not functional due to lock down whereas inspections were not possible due to travel restrictions and avoiding unnecessary interaction with people
- Directives issued to importers of radiation sources for submission of quarterly sale/stock report of imported radiation equipment/sources
- A questionnaire prepared and sent along with License Renewal Notices (LRNs) to radiation facilities containing category-I to III sources to keep track the radiation safety/security status during COVID-19 pandemic situation
- Record point inspection (R-point) conducted for facilities containing category-I to III sources



Measures to address Regulatory Challenges (4/7) (Review & Assessment, Licensing and Regulatory Framework)

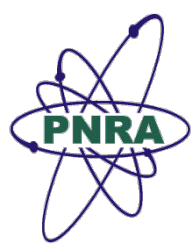
- Review & Assessment, Licensing and Regulatory Framework remained in progress with reduced pace utilizing minimum manpower
- Online meetings (video conferences, tele-meetings, etc.) were conducted with licensees to resolve issues (e.g. licensing review meetings, etc.), which took more time than planned earlier
- However, if physical presence was necessary, SOPs were followed strictly for conducting face to face meetings



Measures to address Regulatory Challenges (5/7)

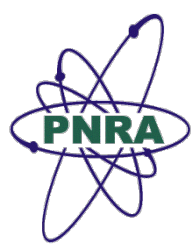
(Training activities, drills & exercises)

- Training courses were initially suspended
- Later on online training courses were conducted through video conferencing
- Drills and exercises were postponed and are now being planned with due consideration to protective measures against Covid-19



Measures to address Regulatory Challenges (6/7)

- PNRA ensured that necessary and essential elements remain available for effective preparation and response against threats during pandemic situation:
 - Arrangements have been made for in-house stay of emergency response teams
 - Testing of crucial response equipment remained continued
 - Availability of dedicated transport for employee movement
 - Availability of response, contingency plans and procedures
 - Use of electronic means for communication, information dissemination and remote assistance
 - Utilization of online available training courses for manpower capacity building
- IT System has been upgraded to ensure safe and secure online communication



Measures to address Regulatory Challenges (7/7) (Directives issued by PNRA to Licensees)

- PNRA communicated following directives to licensees for effective preparation and response against COVID-19 pandemic situation:
 - Availability of response, contingency plans and procedures for emergency management activities
 - Identification of critical functions and ensuring that such functions are performed for ensuring safety and security
 - Outage management with focus on managing contracting activities and workforce at NPPs
 - Use of electronic means for information transmission and promoting less paper environment

Thank You

