

CNEA Legal Framework

National Law N° 24 804 - Decree 1390/98 - Annex I

Is responsible for determining the procedure for decommissioning nuclear power plants and any other relevant radioactive facilities.
 Is responsible for deactivation and decommissioning of all relevant radioactive facilities in the country at end of life.

Legal Regulatory Framework

Art 24804. Nuclear Activity Law, sets forth in article 16 (b) that the Nuclear Regulatory Authority is authorized to grant licenses for the decommissioning of nuclear activities.
 The above mentioned Law and Decree 1390/98, whose Annex I regulates said law, establish among other things, CNEA's liability as responsible organization for defining the manner in which nuclear plants shall be decommissioned and also the liability of the agency that operates such reactors.
 The Responsible Organization, holder of the Decommissioning License, is responsible for planning and providing the resources required for the safe decommissioning of the nuclear power plant.
 The Decommissioning Program shall consider the necessary institutional arrangements and foresee appropriate radiological protection in each stage. the Regulatory Authority's prior approval is required to implement the program.
 The Decommissioning Program shall include all necessary steps to ensure an appropriate radiological protection with minimum surveillance after decommissioning.

CNEA Activities

None of the 28 nuclear installations in Argentina is undergoing decommissioning. Though there is no definite date for the decommissioning of the installations, the Radioactive Waste Management Strategic Plan has estimated decommissioning dates for nuclear power plants, installations that will generate the greatest volume of waste during their dismantling.

Work in Progress

Nevertheless, planning stages prior to decommissioning have been started with the criterion of prioritising those activities in order to evaluate and characterize the amount of radioactive waste that the facilities will generate during their dismantling.

Decommissioning Planning Improvements in the Last Three Years

The CNEA has considered the Decommissioning activities in its Strategic Plan

- A programme for the next ten years must be performed taking into account budget and human resources
- This programme has three scenarios:
 - A) Preliminary Decommissioning Plan for Research Reactors and Critical Facilities
 - B) Structural components
 - C) Nuclear Power Plants

Objective: is to achieve in a reasonable time, the technical capability required to evaluate and decide on the best alternative for the Decommissioning of a given Nuclear Facility.

A) Preliminary Decommissioning Plan for Research Reactors and Critical Facilities

UNIT	TYPE	FUNTIONING	LIFE CYCLE PHASE	OPERATOR
RA-0	U235 20% 1Wt	1970-	OPERATION	CORDOBA UNIVERSITY
RA-1	U235 20% 40kwt	1958-	OPERATION	CNEA
RA-2	U235 U 90% 1Wt	1966-1983	DISASSEMBLED	-----
RA-3	U235 20% 5Mwt	1967-	OPERATION	CNEA
RA-4	U235 20% 1Wt	1971-	OPERATION	ROSARIO UNIVERSITY
RA-6	U235 20% 0,5 MWt	1982-	OPERATION	CNEA

B) Structural Components

During the operation and maintenance of NNP's and Research Reactors many structural components, valves, flanges, pipes, bars were storage and must be processed in order to reduce the activity and the amount of waste.

1) Procedure for Treatment:

- Reduction of size
- Classification of different types of materials
- Classification of pipes, bars, sheets.
- Characterization.
- Decontamination.
- Storage, reuse or free release.

2) Process Consists of:

- Planning the Characterization and defining requirements
 - Performing Sampling and Measurements
 - Analyzing the Data
 - Documenting the Results
- Most of the mechanical techniques are adaptation of industrial technologies which are used for the pipes, bars, sheets
 Hydraulic and manual shears are used for different types of sheets
 Mechanical saws (various types) for pipes and bars

3) Decontamination of metallic structures:

- Chemical Immersion with concentrated or diluted chemical reagents, electrochemical Method, Mechanical Method and Ultrasonic Bath method are testing

	RA-0	RA-1	RA-3	RA-4	RA-6
1. Facility Description					
1.1 Physical description of the site and facility					
Location	done	done	done	done	done
Significant changes (date)	done	done	done	done	done
Facility description (reactor, plan view)	done	done	done	done	done
Description of the reactor building and surrounding areas	done	done	done	done	done
Tasks and services provided by the reactor	done	done	done	done	done
1.2 Operational history		Until 2001			
Actual hours		done		done	
Average Power		done		done	
KWh		done		done	
Comments		done		done	
1.3 Systems and equipment				done	done
List and details				done	done
Location by sector or area				done	
1.4 Inventory of radiological and hazardous materials					
Core	done	done	done	done	done
Control	done	done	done	done	done
Start up source	done	done	done	done	done
Storage of spent fuel elements	done	done	done	done	done
Areas that may present some kind of contamination or activation	done	done	done	done	done

Classification, Size Reduction and Decontamination

