## **National Report: Argentina**



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# Independent regulatory body

- Is an independent regulatory body in place?
- Yes
- In 1994 the Executive Power transferred the Authority for regulation of nuclear activities from the Regulatory Branch of CNEA to the National Board on Nuclear Regulation (ENREN) through the Decree No 1540/94. This decree also created a state company (Nucleoeléctrica Argentina SA, NASA, owner of the nuclear power plants).



## Independent regulatory body

• In April 1997, Act No 24804; "National Law of Nuclear Activity" [1] was passed, proclaiming (in its Article 7) the creation of the Nuclear Regulatory Authority (ARN). This authority is in charge of nuclear activity regulations and control concerning radiological and nuclear safety, safeguards and physical protection, giving, in addition, advice to the Executive Power on subjects of its competence.



## Legal and regulatory framework

 Is 'decommissioning' included in the national legal and regulatory framework?

• The regulatory standards establish a Lisensing System. One of its main requirements is that the construction, commissioning, operation or decommissioning of a significant nuclear installation shall not start without the corresponding licence, required by the Responsible Organisation and issued by the Regulatory Body.



## Legal and regulatory framework

- Four main standards issued by the Regulatory Authority are applicable to the decommissioning stage of nuclear installations in Argentina.
- One of them is specific and the other three have general requirements for the licensing of nuclear installations and for the radiological or waste safety.



#### License / authorisation

- Does the RR have a valid license or other official form of authorization from the regulator?
  They are not specific for RR:
- 1. "Licensing of Relevant Nuclear Installations" 1, AR 0.0.1, Rev.1, 1997.
- 2. "Basic Standard for Radiological Safety", AR 10.1.1, Rev.2, 1999.
- 3. "Decommissioning of Nuclear Power Plants", AR 3.17.1, Rev.1, 1995.
- 4. "Radioactive waste management", AR 10.12.1, Rev.0, 1999.



#### Decommissioning planning / implementation

- Is a decommissioning plan available?
- Yes
- The following tasks are currently in progress:
- A) Planning and costing out the decommissioning of Argentine research reactors. Works have started with RA-1 reactor at Constituyentes Atomic Center. And they have included its radiological characterization and a first estimate of the radioactive wastes generated by its dismantling.



### **Decommissioning planning / implementation**

- A preliminary planning for RA3 and RA6 research reactors.
- Dismantling of plant for treatment of liquid waste



#### **Decommissioning cost calculation / funding**

- Has a decommissioning cost calculation been carried out?
- No Is funding secured? No
- The Trust Fund to meet decommissioning expenses of each nuclear power plant would be set up in accordance with Decree 1390/98, regulatory of Act 24804, the Nuclear Activity Law, if the operation of the nuclear power plants is privatised and it would be funded with contributions of the operating company.



#### **Decommissioning cost calculation / funding**

- As the operation of the nuclear power plants were not privatised, the responsibility to finance the decommissioning of NNP's is assumed by the National Government with its own funds.
- It should be noted that at present the privatisation of the operation of nuclear power plants is not contemplated.
- The same situation is for all the nuclear facilities.



- What aspects of decommissioning have you successfully addressed to date?
- Dismantling of RA-2 Critical Facility at CNEA Constituyentes Atomic Center, 1984-1989. The building that housed the reactor is now open for unrestricted use.
- Dismantling of the internal parts of the tank, nuclear and conventional instrumentation of RA-3 radioisotope production reactor at CNEA Ezeiza Atomic Center, 1988-1990. These tasks were part of the program to increase the power of said reactor which is at present in operation.



- Removal and repair of internal parts of CNA I reactor due to the breakage of R06 fuel channel in 1988. Removed elements have been stored at CNA I controlled area.
- Decontamination of several components, as for example, main pumps and heat exchangers at CNA I, as well as development and use of remote and cutting techniques.



- Preliminary Planning for Research Reactors throughout the operational lifetime.
- Treatment of structural components (metals and no metals)
- Characterize structural components ,valves, flanges, and other contaminated materials.
- •Selecting Decontamination Techniques and evaluation of the secondary waste generated.



- What aspects of this work would you share with others to help them addressing similar problems?
- Aspects like:
- Characterization, descontamination technics.
- Preliminary planning
- Quality assesment
- Waste management



## Issues / Challenges

- What issues / challenges do you have to develop / implement your decommissioning plan
  - Technical activities are in progress
  - Regulatory : Some revisions must be done
  - Administrative: Revisions of the documents, organization and responsabilities.

