



Comisión Nacional de Energía Atómica

CHALLENGES OF NEW NATIONAL ORGANIZATIONS FOR RADIOACTIVE WASTE MANAGEMENT

Report from Argentina

Elvira Maset

National Program for Radioactive Waste Management
National Atomic Energy Commission

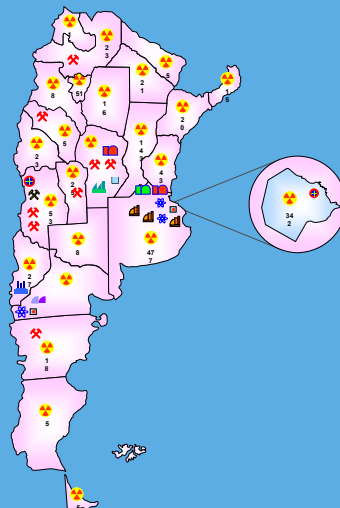
Technical Meeting on the Establishment of a Radioactive Waste Management Organization

Paris, France
7 - 9 June, 2010



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NUCLEAR ACTIVITIES IN ARGENTINA



- NPP UNDER CONSTRUCTION
- NPPs IN OPERATION
- NUCLEAR RESEARCH CENTERS
- RESEARCH REACTORS
- RADIOISOTOPE PRODUCTION PLANT
- NUCLEAR FUEL FABRICATION PLANT
- D2O PRODUCTION PLANT
- UO2 PRODUCTION PLANT
- URANIUM ENRICHMENT FACILITY
- URANIUM MINING AND MILLING FACILITY
- CLOSED URANIUM MINES
- MEDICAL CENTERS
- RADIOACTIVE MATERIAL USERS



SOURCES OF WASTE AND SPENT FUELS

➤ NUCLEAR POWER PLANTS

- Atucha I (350 MWe)
- Embalse (600 MWe)
- Atucha II (700 MWe), under construction

➤ FUEL CYCLE

- Uranium mining and milling
- UO₂ conversion and sintering
- Fuel elements manufacturing

➤ NON FUEL CYCLE

- Research and production reactors
- Radioisotopes production
- Medical applications
- Radioisotope industrial uses
- Research & Development activities



LEGAL FRAMEWORK

➤ **National Constitution:** Prohibit the import of radioactive waste (1994)

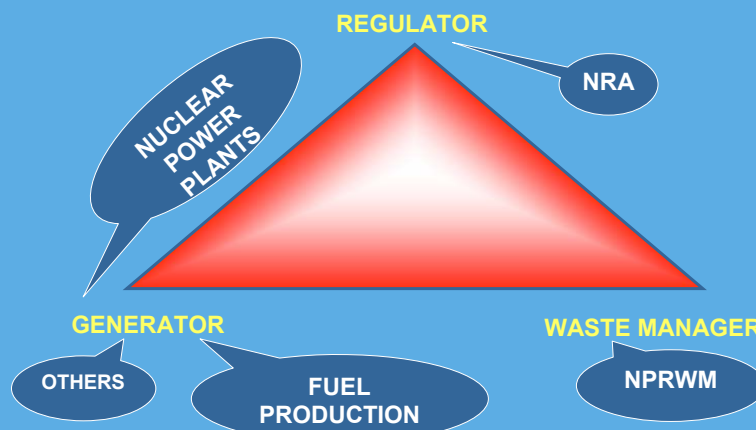
➤ **Law N° 24.804:** “Nuclear Activity Law” (1997)

➤ **Law N° 25.018:** “Radioactive Waste Management Regime” (1998)

➤ **Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.** (Enforced since June 2001)



RADIOACTIVE WASTE MANAGEMENT SYSTEM Responsibilities Division



NATIONAL PROGRAM FOR RADIOACTIVE WASTE MANAGEMENT Context

- Implemented in CNEA organization since 2003
- Eight Annual Reports were presented to the National Congress and three National Reports to the Joint Convention
- Increase in human resources and in budget for current expenses and projects
- Governmental decision of no privatization of NPP's
- Support of the Government to the nuclear energy since 2006
- Last version of Strategic Plan for Radioactive Waste Management was issued in 2006 (including Atucha II NPP)
- Decision of closure of existing disposal systems
- Necessity of a new site for final disposal of LLW, ILW and VLLW



FACTORS AFFECTING PUBLIC AND POLITICAL ACCEPTANCE

- Federal government and legislative framework distribute responsibilities in the decision making process among national, regional and local governments
- Many Provincial Constitutions were reformed in the 90's in order to prohibit radioactive waste repositories or the import of radwaste, also many municipalities have been declared "non nuclear territories"
- Public opinion towards nuclear power generation is improving because of governmental support, climate change and increase in energy demand
- Very strong opposition to nuclear waste disposal by environmental groups and NGO's, influenced by international antinuclear movement
- Difficulties in the implementation of a specific Social Communication Program.



ARGENTINA - Challenges

- Approval of the Strategic Plan for radioactive waste and spent fuel management
- Integration of the funds for Radioactive Waste Management and Final Disposal is delayed and a revision is under discussion
- Developing stakeholder involvement in a program for radwaste management
- Obtaining public acceptance of a site for repositories
- Decision on reprocessing by 2030



ARGENTINA - Challenges

- Transport of radioactive waste through national territory
- Implementation of a program to improve the characterization of the radwaste generated and in transitory storage by the power plants, as well as the improvement of the corresponding registration system



CONCLUSIONS

JOINT CONVENTION IS AN IMPORTANT TOOL TO FACE CHALLENGES:

- ✓ Helps to get political and public acceptance
- ✓ Contributes to clarify concepts and improve transparency
- ✓ Upgrades the knowledge about waste management in other countries
- ✓ Lessons learned are shared in a horizontal way
- ✓ Incentives continual improvement in safety in each contracting party



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**THANK YOU
FOR YOUR ATTENTION!**

maset@cnea.gov.ar

pngrr@cnea.gov.ar

www.cnea.gov.ar