

Agência Brasileiro-Argentina de Contabilidade e Controle de Materiais Nucleares

Agencia Brasileño-Argentina de Contabilidad y Control de Materiales Nucleares

## **ABACC: STRUCTURE & ACTIVITIES**

MARCO MARZO DEPUTY-SECRETARY

**ABACC 30 YEARS – FORMAL MEETING OF THE CONFERENCE OF DISARMAMENT** 

9 MARCH 2021



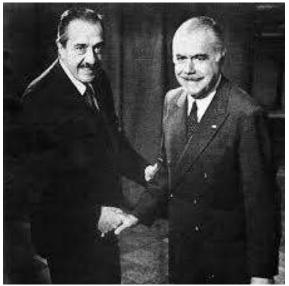
#### Nuclear Background in 70's & 80's

- Domestic nuclear programs not under international safeguards
- Developments on uranium enrichment in Argentina (1983) and Brazil (1987)
- Both countries considered in a nuclear race



# **Bilateral Initiatives (1980-1991)**

- 1979: Diplomatic resolution of controversies on utilization of hydric resources of Plata Basin
- 1980: Agreement between Brazil and Argentina on the peaceful uses of nuclear energy
- 1985: Formation of the Permanent Committee on Nuclear Policy
- 1983: Election of President Raúl Alfonsín in Argentina
- 1985: Election of President José Sarney in Brazil





# **Confidence Building Process (1985-1991)**

- Technical visits to nuclear facilities not under international safeguards (1987 – 1990)
- Formation of Working Groups on several nuclear sectors
- Many bilateral declarations at Head of State level on using nuclear energy exclusively for peaceful purposes:
  - Iguazu Falls (1985), Brasília (1986), Viedma (1987),
    Iperó (1988), Ezeiza (1988), Iguazu Falls (1990)



## **Confidence Building Process (1985-1991)**

 Visit of President Sarney to the Diffusion Enrichment Plant in Pilcaniyeu, Argentina (July 1987)





 Visit of President Alfonsín to the Centrifuge Enrichment Plant in ARAMAR, Brazil (April 1988)



## **Bilateral Agreement**

Signature of the Agreement between **Argentina and Brazil** for the Exclusively Peaceful Uses of **Nuclear Energy** Guadalajara, Mexico, **July 1991** 



- Countries committed to use nuclear materials and facilities exclusively for peaceful purposes
- ABACC created to administer the SCCC
- Ratified in 12 Dec. 1991



## **Mission of ABACC**

- To verify that all nuclear materials in all nuclear activities are used exclusively for peaceful purposes
- To apply the Common System of Nuclear Materials Accounting and Control (SCCC)
- ABACC started its activities in April 1992



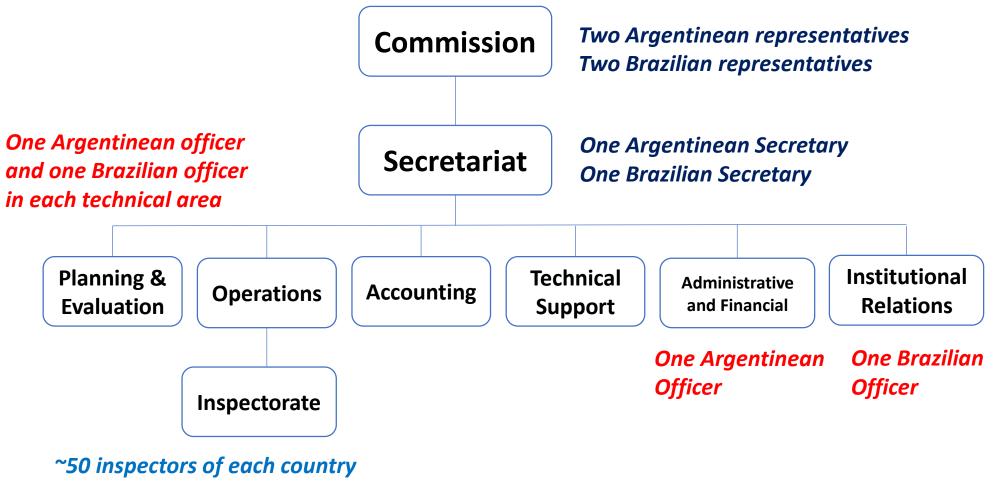


## **A History of Success**

- South Common Market created in 1993
  - ABACC is still the only official agency of both countries
- Trade went from US\$1.5 billion to US\$30 billion
  - Brazil, the main trade partner of Argentina
  - Argentina, the third trade partner of Brazil
- ~3 million Argentineans visit Brazil annually
- ~1 million Brazilian visit Argentina annually
- Mutual confidence: enhancing national, regional and international security



#### **Structure of ABACC**



Non permanent staff members



# Advantages of the ABACC's Inspectorate

- Cross inspections: Argentinean inspectors inspect Brazilian facilities and vice-versa
- Each country appoints inspectors for approval by the ABACC Commission
- The Secretariat selects inspectors with the best expertise to inspect a given facility: enhancing the effectiveness
- The inspector performs the activities on behalf of his/her country: high sense of responsibility
- Solving a problem or an anomaly is very straightforward and fast



## Nuclear Facilities (as of Feb. 28, 2021)

2

Pilcaniveu

	TYPE OF FACILITY	ARGENTINA	BRAZIL	TOTAL	
	<b>Conversion &amp; Fuel Fabrication</b>	9*	2	11	
NPPs Angra 1 & 2	Uranium Enrichment Plants	2	3	5	NPPs Atucha 1 & 2
	<b>Power Reactors</b>	5*;**	3*	8	-
	Research Reactors, Critical Units, Subcritical Units	6*	7*	13	
Enrichment Plant LEI	Others (R&D Facilities, Storages, LOF)	28*	10**	38	NPP Embalse
	Total	50	25	75	
	* One facility under construction;	** One designed facility			Enrichment Plant

**Enrichment Plant INB** 



# **Some Figures on ABACC's Activities**

• Nuclear Materials under safeguards:

From 1300 SQs in 1994 to 3900 SQs in 2021

- 3200 inspections performed, including 250 Unannounced Inspections
- ≈ 120 inspections annually
- Inspection effort: ≈ 1000 inspector.days
- 2021 Budget: US\$4.5 million



## **Verification Activities**

- Accountancy measures: Using last international standard on equipment
  - Non-destructive measurement systems
  - Samples collection and analysis



Containment & Surveillance: Latest generation Systems









## **Quadripartite Agreement**

- Signed in Dec. 1991 and ratified in March 1994
- ABACC and the IAEA shall be guided by the following principles:



- The need to reach independent conclusions
- The need to coordinate their activities to avoid unnecessary duplication of ABACC's safeguards
- ABACC and the IAEA shall work jointly according to compatible safeguards criteria of the two organizations



## **Cooperation ABACC & IAEA**

- Excellent coordination of activities at operational level
- Joint inspection procedures
- Agreed safeguards approaches
- Coordination on equipment procurement
- ~40 procedures for common use of equipment



#### **Cooperation ABACC & IAEA**



#### Visit of IAEA Director General Hans Blix in 1997

Visit of IAEA Director General Mohamed ElBaradei in 2007





Visit of IAEA Director General Yukya Amano in 2016



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#### THANK YOU