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| WiN Brazil |
| Chapter president | Nelida Lucia del Mastro, PhD |
| Chapter board members | Brazilian Nuclear Energy Commission (CNEN), NPPs, universities, Latin American Section of the American Nuclear Society (LAS/ANS). |
| Number of members | 69 |
| Chapter accepted by WiN Global | The establishment of our chapter is in development |
| Nuclear power infrastructure | Number of NPP`s – in planning phase: 4; in operational phase: 2; in construction: 1; in decommissioning phase: 0At present, nuclear power plants Angra 1-with a generating capacity of 657 electric megawatts, and Angra 2-rated at 1350 electric megawatts are in operation. Angra 3, to practically be a replica of Angra 2, (incorporating the technological advances made since the construction of the latter) is also planned to generate 1405 megawatts.Eletronuclear is a nuclear power company established in 1997 for the purpose of operating and building thermal nuclear power plants in Brazil. A subsidiary of Eletrobrás, Eletronuclear is a government-controlled company that accounts for the generation of approximately 3% of electric power consumed in Brazil. By the interconnected electric power system, such power reaches the main consumer centers in Brazil.Number of Research Reactors/Reactors for medical isotope production: there are four research reactors and one national being planned to contribute to the demand of medical isotope production.  |
| Nuclear medical applications | There are almost 4.000 installations that use radioactive material, not counting the thousands of x-ray diagnostic facilities. Radiopharmacy is growing and there are 10 cyclotrons in operation and 4 under licensing.  |
| Waste management philosophy | Brazil constructed in the 90’ two repositories for low & intermediate level waste generated at the Goiania accident. The intermediate storage is made at the deposits at the CNEN´s institutes. A national repository is being planned. Wastes from NPPs are being temporarily stored at nuclear power plant sites remaining segregated from the natural environment. No plans for the high level waste so far.  |
| Research | Most of our members are connected to the CNEN. In order to promote nuclear education, CNEN supports several graduated/post-graduate courses (in association with local universities) held by its research and development institutes at master and doctorate levels with almost 500 students every year. A restrict selection process and the mentoring follow up made by CNEN researchers identify and encourage those fellows with great chances to ingress in a nuclear career at the industry or at the nuclear regulatory body. A good example is one of the units of CNEN located in Sao Paulo city: the Institute of Nuclear and Energy Researches (IPEN-CNEN/SP), associated to the University of Sao Paulo.  |
| Post-Fukushima | There was no shutdown in Brazilian NPPs due to Fukushima accident. Reports from CNEN and Iberia-American Forum of Regulatory, Radiological and Nuclear Organisms (FORO) that congregates Argentina, Brazil, Spain and Mexico ratified the evaluation conclusion from Eletrobras (govern owned utility responsible for the Brazilian NPPs) that Brazilian NPPs are safe against external events. Even though, some recommendations were made. The reports approved Eletrobras initiatives in adopting some improvements in order to protect or increase even more the available safety margins. Most of the recommendations are currently applied since 2011 when the Eletronuclear Response to Fukushima Plan was established.  |
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