

MEDICAL ISOTOPE PRODUCTION IN ARGENTINA: STATUS OF THE CONSTRUCTION OF RA-10 RESEARCH REACTOR

The RA-10 Multipurpose Argentine Nuclear Reactor Project is located at the Ezeiza Atomic Center, near Buenos Aires city. The construction license for this facility has been granted by ARN in 2014 and the building has started in 2016. This modern reactor is conceived as a multipurpose facility suitable for radioisotopes production, materials and fuel irradiation and neutron techniques applications. The planned expansion of radioisotopes production will put the National Atomic Energy Commission in the ranking of large-scale producers in the global market. Neutron techniques will allow the developing of fuel elements for research reactors and biotechnology and radiopharmacy studies among others. Argentina leads the OPAL Project, which follows the technological evolution of research reactors for the production of radioisotopes, like the one that was built in 2007 in Australia. The RA-10 is a 30 MW power reactor. The reactor design is open pool type and fuel elements with low enrichment low-enriched uranium. The initial operation license is planned for the second half of 2020. To calculate the radionuclide discharges, the ARN uses optimized discharge values following the philosophy of “as low as reasonably achievable concept”. The producer has the responsibility for evaluating the necessary improvement in engineering to minimize them.

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