

ARGENTINA

NUCLEAR REGULATORY AUTHORITY

(ARN)

28/05/06

**SCOPE OF THE LICENSING TASKS FOR
ATUCHA II NUCLEAR POWER PLANT:**

**DESIGN, CONSTRUCTION, ASSEMBLY,
PRELIMINARY TESTS AND STARTUP.**

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Bases for Philosophy Governing the Licenciability

It was defined in the follow documents:

- ✓ Protocol of Understanding on the Basic Licensing Concept and Some Safety Subjects for the Atucha II Project; November 10th, 1977.
- ✓ Minutes of a Meeting in order to clarify some doubts on the protocol understanding signed on November 10th, 1977; September 21st, 1978.
- ✓ Protocol of Common Understanding; July 7th, 1979.

Bases for Philosophy Governing the Licenciability

Definitions and Concepts applied during 1977/1994 in Nuclear Safety of Design of a PHWR for Atucha II NPP

1. Full compliance of ICRP 26 recommendations.
2. Full compliance of IAEA safety codes and guides.
3. Commitment to achieve a given result from an overall risk analysis.
4. Compliance of deterministic design criteria for events of non-stochastic nature, e.g., third party interference.

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5. The Argentine authority is not using the “maximum credible accident” concept; i.e., in spite that the PHWR-KWU model’s safety features are not able to cope with an accident arbitrarily defined as maximum and credible, this would not automatically mean that that model is not licenceable by the Argentine authority.

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6. Nevertheless, the Argentine authority requires that a comprehensive and detailed risk analysis shall substantiate the reasonability of the hypothesis used in the design. The analysis's bases, format and expected results (or results under which the model would be licenceable) may be agreed upon with representatives of the Argentine authority at your earliest convenience. The input to the risk analysis shall be a group of initiating events which also be agreed upon with the Argentine authority ; LOCA event shall interalia be taken into account in that analysis.

Atucha II NPP Project

Description

- ✓ The Argentine Government has made the decision to complete the construction and proceed to the commissioning of the Atucha II NPP. This process is ongoing under the direct responsibility of the State enterprise Nucleoeléctrica Argentina Sociedad Anónima (NASA), as the Owner organization.
- ✓ The Nuclear Regulatory Authority of Argentina has the responsibility for the licensing process. In order to do that we would like to make a new assessment of the documentation related to the construction license. This new assessment includes the re evaluation of the PSAR, specially those chapters related to safety systems, in order to verify the degree of fulfillment the updated applicable codes and standards, assuring the actual international safety targets.



Atucha II NPP Project

Description

- ✓ Atucha II NPP belongs to a second generation reactor type PHWR with 745MW(e) power installed. All the nuclear area is based on the prototype reactor MZFR 56 MW (e) which was placed in operation at the Nuclear Research Center in Karlsruhe (West Germany) in 1966. Also it was designed on the bases of Atucha I NPP with 354MW (e) (1969). The secondary and auxiliary systems were designed in a similar way as Konvoi PWR plants, from Germany (around 1989).
- ✓ The Construction License was issued on 14th July 1981; the construction was delayed up to now. The project has been working on several activities related to maintain the already installed equipments and those stored, as well as documentation related to detail engineering and Preliminary Safety Analysis Report (PSAR).



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Atucha II NPP Project

Description

- ✓ PSAR has been prepared in accordance with the US Regulatory Guide 1.70, Revision 3, November 1978, and basically fulfills the requirement on Safety Analysis Reports laid down in the IAEA Safety Guide N° 50-SG-G2.
- ✓ The actual status of the construction reached an estimated overall completion of 81%. The schedule for accomplishing the remaining work is about 54 months after restarting.