

## Joint Convention

### Questions Posted To Argentina in 2009

Q.No 1	Country Australia	Article Planned Activities	Ref. in National Report Section K.3.1 page K-4
Question/ Comment	A site for a waste repository must be approved by the provincial government in the location selected. In the event that no provincial government gives approval, what options, if any, does the national government have for siting a facility?		
Answer	According to the current legal framework, no option is available for siting a final disposal facility without the provincial government approval.		
Q.No 2	Country Australia	Article Planned Activities	Ref. in National Report K3.1
Question/ Comment	What is the process for investigating possible locations for low, intermediate and high level radioactive waste repositories?		
Answer	<p>The process for investigating possible locations for radioactive waste repositories was defined by taking into account geological and social criteria to exclude inconvenient areas, as well as by defining regions of different priority.</p> <p>During de '90s the Nuclear Regulatory Authority performed some feasibility studies on granitic geological formations defining the main radiological and safety criteria for a deep geological repository. In addition, CNEA and IAEA participated in a Technical Cooperation Project named GEOLOGY OF REPOSITORIES FOR HLW DISPOSAL (1997 to 2001), which resulted quite useful to help us define selection criteria and the process to be followed to get a proper site. These criteria and process, although intended for HLW, can be adapted to LILW repositories after the introduction of the needed changes.</p>		
Q.No 3	Country Ukraine	Article General	Ref. in National Report Section B-10
Question/ Comment	<p>“In the case of gaseous discharges, their liberation is performed in compliance with the activity measurements and restrictions imposed by the Operating Licenses”.</p> <p>What kinds of methods are used to measure total activity of released gaseous radioactive materials?</p>		
Answer	<p>In general, all gaseous discharges are measured in the chimney before its release in the atmosphere and the discharge limits are established by radionuclide and not as total activity. The methods used are germanium detectors for the detection of noble gases and aerosols, INA detectors for detection of iodine and liquid scintillation equipment for H-3 as well as the detection of C-14.</p>		
Q.No 4	Country Ukraine	Article General	Ref. in National Report Section B-14
Question/ Comment	<p>Dose limits for workers are as follows:</p> <ul style="list-style-type: none"> <li>- The effective dose limit is 20 mSv year. This value shall be considered as the average in 5 consecutive years (100 mSv in 5 years), not exceeding 50 mSv in any single year.</li> <li>- The equivalent dose limit is 150 mSv year for crystalline and 500 mSv year for skin.</li> </ul> <p>Why equivalent dose limit for hands and feet is not determined? As example, how is dose limited for hands of the personnel that works with radiopharmaceuticals?</p>		

Answer Equivalent dose limit for feet and hands was implicitly set in 500 mSv/year, following the ICRP Recommendations.  
Dose limits for the personnel's hands working with radiopharmaceuticals is set in 500 mSv/year.

Q.No	Country	Article	Ref. in National Report
5	Ukraine	General	

Question/Comment What methods of internal dose calculation are used for uranium recovery facility personnel?

Answer In the uranium fuel cycle facilities, internal dosimetry is carried out by taking into account a thorough assessment in: the radiological characteristics of the work place, the workers' practices and the monitoring of uranium in urine. Eventually, if necessary, uranium measurement is performed in lungs with Whole Body Counter as well as in mucus and feces.

Q.No	Country	Article	Ref. in National Report
6	United Kingdom	General	Section B - 3, B-3 & Section F - 3, F.2

Question/Comment Provision of financial resources is essential to implementing the Strategic Plan.  
(1) What organization has responsibility for implementing the procedure to obtain and manage the financial resources for the Strategic Plan?  
(2) When will the procedure come into effect?

Answer (1) CNEA administers the funds provided by the State for the radioactive waste management as long as the National Congress enacts both the regulations for the fund integration stated in Article 13 of the Law N° 25018 and a law regulating its administration and control.

(2) It is not possible to establish the timeframes associated to the reglamentation of Law N° 25018.

Q.No	Country	Article	Ref. in National Report
7	United Kingdom	General	Section B - 3, B-3

Question/Comment Developing an information registry and preservation system is good practice.  
(1) How will and when will this be implemented?  
(2) How will the system be maintained to provide a continuing up-to-date resource for the future?

Answer (1) A system for registering and preserving information has been implemented since 1998 which is applied to AGE. In spite of being under improvement, this system gives us the possibility of informing the requesting agencies (such as ARN, National Congress, and so on) about RW inventories.

(2) It is a regulatory requirement that the system shall be kept in a complete and actualized version during the entire facilities life time.

Q.No	Country	Article	Ref. in National Report
8	United Kingdom	General	Section B - 3, B.3

Question/Comment (1) What is the indicative timeframe for implementing the National Radioactive Waste Management Program?  
(2) What are the important milestones that have been identified to allow assessment of progress?

Answer (1) The National Radioactive Waste Management Program (PNGRR), implemented since 2003, is an organization depending on CNEA.

(2) The main milestones proposed in the Strategic Plan (PEGRR) by the PNGRR are as

follows: the date when the siting for the L&ILW repositories shall be approved, the date when the Low Level Waste Repository shall start operation, the date when the Intermediate Level Waste Repository shall start operation in the same site, the date when decision shall be taken about reprocessing of spent fuels, the date when the deep geological repository shall start operation. All these milestones are proposed in the PEGRR. However, the approval by the National Congress is still pending.

Q.No	Country	Article	Ref.	in	National	Report
9	United Kingdom	General	Section B - 4, B.4 & Section F – 14, F.4			

Question/  
Comment (1) How is the population considered when assessing the collective dose?  
(2) Does collective dose assessment only apply to a critical group (Section F - 14, F.4) or to a wider population within a fixed distance of a nuclear facility or some other population?

Answer (1) The population considered when assessing collective dose is the world's population.  
(2) Collective dose assessment doesn't apply to a critical group.

Q.No	Country	Article	Ref.	in	National	Report
10	United Kingdom	General	Section B - 5, B.4.1			

Question/  
Comment (1) How will a period of institutional control of 300 years be maintained given the uncertainties in societal changes over such a timescale?  
(2) Does this not impose a burden on future generations to maintain effective controls over a disposal facility and how will this be managed?

Answer (1) We consider that an institutional control over such a long period of time is feasible, especially if passive control methods are applied.  
(2) A 300-year period was proposed as a first conservative-approach, in which passive institutional control was included. A regulatory requirement is not to impose an undue burden to future generations.]

Q.No	Country	Article	Ref.	in	National	Report
11	United Kingdom	General	Section B - 7, B.4.3 & Section K – 10, K			

Question/  
Comment (1) Can you please explain why has it become necessary to extend the institutional control period?  
(2) How long is the extended institutional control period?  
(3) Can you please identify the historical wastes that are causing re-evaluation of the institutional control period?

Answer (1) Extension of the institutional control period is being considered because of the preliminary results of the safety re-assessment of the AGE.  
(2) Definitive conclusions are not available yet. Hence for the time being it is not possible to anticipate the extension period.  
(3)The historical wastes disposed of in trench 1 consist of contaminated structural wastes coming from the dismantling of old nuclear facilities and from the replacement of components, some of which are contained in drums and others in plastic bags. Other wastes come from operational and maintenance activities in NPPs, part of which are immobilized.

Q.No	Country	Article	Ref.	in	National	Report
12	United Kingdom	General	Section B - 9, B.4.3			

Question/  
Comment The type and volume of wastes for disposal might affect the selection of a site for a geological disposal repository.  
Given that a decision on reprocessing has not yet been made and Atucha II will generate additional wastes, what waste inventory is being considered as a design basis for the Deep Geological Repository?

Answer The type of radioactive waste to be disposed of at a geological repository is high level

radioactive waste coming from reprocessing of spent fuels.

The design and building of a Deep Geological Repository will be based on the data obtained from a deep geological laboratory. According to the PEGRR, the installation of this laboratory will be after 2030. At present, the tasks related to this subject are only of preliminary character. The activities carried out are related to the identification at national level of favorable geological formations.

Q.No 13	Country United Kingdom	Article General	Ref. in National Report Section D - 1, D.2.1 & D.2.2 & Section K
Question/ Comment	(1) Pool storage of spent fuel - has there been any problem with corrosion of spent fuel or any resulting radioactive contamination of pool water. (2) If so, what remedial action has been taken? Is the project noted under item I intended to inform remedial action for research reactor fuel?		
Answer	No problems of corrosion of spent fuels from NPPs have occurred.		
Q.No 14	Country United Kingdom	Article General	Ref. in National Report Section D - 5, D.4.1 and D.4.2
Question/ Comment	No data is presented on activity of Co-60, Cs-137 or actinides in the wastes listed in Tables 4.1 and 4.2. (1) Can you please provide details of the activities of these radionuclides? (2) Can you please identify any other radionuclides contained in the wastes and their activities?		
Answer	The way in which these inventories are to be presented in the next report is being reconsidered. This is because some of them correspond to variable operational values, depending on the conditioning campaigns. At present NPP wastes inventory is being reevaluated by applying the scaling factor method.		
Q.No 15	Country United Kingdom	Article General	Ref. in National Report Section E - 9, E.2.2.6
Question/ Comment	ARN has a broad set of sanctions available if an operator fails to comply with licence conditions. (1) Is there a limit set on the maximum fine that ARN can impose? (2) In the cases of serious non-compliance, does ARN have the power to prosecute the operator to seek a higher penalty through the court?		
Answer	(1) The National Law on Nuclear Activities N° 24804, does not establish a maximum fine limit. (2) In the cases of serious non-compliance, ARN could consider the suspension of a license, permit or authorization or their revocation (Law N° 24804, article 16, section g). In addition to that, according to the article 16 section f) of Law N° 24804, ARN must bring " <i>civil or criminal lawsuits at the competent courts when there is non-compliance from licensees or authorization or permit owners ruled by this Act...</i> "		
Q.No 16	Country United Kingdom	Article General	Ref. in National Report Section E - 19, E.3.3
Question/ Comment	Inviting international experts to review the possible contamination of underground waters near the Ezeiza Atomic Centre is a good means of reassuring the public on the safety of drinking water. Has the experts' report been published and if so what is the reference?		
Answer	Yes, that report is available in the ARN's web page. You can find it in the following link: <a href="http://www.arn.gov.ar/M-Ezeiza/OIEA-REPORT.pdf">http://www.arn.gov.ar/M-Ezeiza/OIEA-REPORT.pdf</a> (only Spanish version available)		
Q.No	Country	Article	Ref. in National Report

17	United Kingdom	General	Section E - 21, E.3.3.4
Question/ Comment	The approach to quality management audits is consistent with good practice and has clearly identified areas for improvement. What action has been taken to deal with the deficiencies identified in the audits undertaken in 2006 and 2007?		
Answer	The deficiencies identified in the audits are intended as non-compliances. In that sense, ARN analyses each non-compliance to look for its root cause and take a corrective action in order to eliminate the root cause. After the due date for implementing the corrective action, ARN verifies the implementation and assesses the effectiveness of the taken action. Some deficiencies were related to human resources, as for example the increase of senior experts who apply for retirement, and the difficulties to find young professionals with competences in nuclear and radioactive subjects. The action taken by ARN was to increase the personnel and train them progressively according to each role profile. In other cases, ARN has decided to contract external support as international experts, and make agreements with international qualified Institutions.		
Q.No 18	Country United Kingdom	Article General	Ref. in National Report Section F - 4, F.2
Question/ Comment	What is the anticipated timescale for a decision by the Secretary for Energy on approval of the Strategic Plan?		
Answer	The participation of the Secretary for Energy in preparing the Law Project to approve the Strategic Plan has already been solved in a favourable way without any objections.		
Q.No 19	Country United Kingdom	Article General	Ref. in National Report Section F - 12, F.3
Question/ Comment	What are the acceptance criteria set by the Regulatory Authority (ARN?) for transport and interim storage of conditioned wastes?		
Answer	For transport of Radioactive Waste, the requirements are the same as the IAEA Transport Regulations as well as interim storage during transport.		
Q.No 20	Country United Kingdom	Article General	Ref. in National Report Section F - 15, F.4.1
Question/ Comment	What is the basis and justification for the cost of 10,000 US dollars per man-Sievert applied in optimisation?		
Answer	By taking into account that the quantities for alpha values widely accepted ranged from 1,000 to 25,000 US dollars per man.Sievert, ARN adopted the value of 10,000 US dollars per man.Sievert.		
Q.No 21	Country United Kingdom	Article General	Ref. in National Report Section F 20, F.5.2
Question/ Comment	What is the system that has been developed to communicate protection measures to the public? Has its effectiveness been tested through exercises?		
Answer	The system developed to communicate protection measures to the public is based on agreements with local radio stations. That agreement consists in that the broadcasting will communicate messages elaborated by ARN's experts responsible for the emergency response to the public. Periodic exercises are performed to evaluate the quality of the information provided by the broadcasting and, the correct reception of that information by the public. Besides, the broadcasting personnel participate in training courses jointly with the rest of the organizations involved in the exercises.		
Q.No	Country	Article	Ref. in National Report

22	United Kingdom	General	Section G - 5, G.2.3
Question/ Comment	What were the safety consequences arising from the two events assessed as relevant in the Probabilistic Safety Assessment of Spent Fuel Dry Storage System?		
Answer	<p>As a result of the different cases analyzed, two significant events were identified:</p> <ul style="list-style-type: none"> <li>-Falling of a grid loaded with 60 SF with cladding damage.</li> <li>-The cell gate was partially opened when the pool shielding cover was removed.</li> </ul> <p>For the first event, considering release of all the gaseous contents in 1 hour, the maximum dose determined at 500 m was of <math>6 \times 10^{-8}</math> Sv.</p> <p>To prevent second event occurrence, there exists an interlock. It is controlled by a radiation detector inside the transference cell. This device works in the following way: a high radiation level detection doesn't allow the opening of the cell door although if it were wrongly requested. So, this event would occur only if simultaneously occur human mistake and interlock failure.</p>		
Q.No 23	Country United Kingdom	Article General	Ref. in National Report Section G - 5, G.2.4
Question/ Comment	What are the problems with the existing facility for storage of spent fuel and, what remedial action has been taken to reduce the problems?		
Answer	<p>The tube system of the wet storage facility (DCMFEI) has the following inconveniences:</p> <ul style="list-style-type: none"> <li>- Difficulty to attain an adequate flow of water through all the tubes</li> <li>- Difficulty to implement a good water chemistry control</li> <li>- Surface corrosion has been observed in several SF plates</li> <li>- Difficulty to make an in-situ observation of the conservation state of the spent fuels.</li> </ul> <p>These difficulties will be solved in a pool-type wet storage facility according to the FACIRI design.</p> <p>The difficulties of the DCMFEI may have an impact on the safety management after a few storage decades.</p>		
Q.No 24	Country United Kingdom	Article General	Ref. in National Report Section H-3, H.1.6, Section K - 9, K.3.2
Question/ Comment	What dose and/or risk criteria are applied when assessing safety in the pre-operational, operational and post-operational phases of a final disposal facility?		
Answer	<p>The criteria and objectives used to consider individual and societal risk in environmental risk management are established in the regulatory standard AR 10.1.1 "Basic Radiological Safety Standard" and are the same for preoperational, operational and post operational phases of a final disposal facility. (see ARN website: <a href="http://www.arn.gov.ar/normas/index.htm">http://www.arn.gov.ar/normas/index.htm</a>)</p>		
Q.No 25	Country United Kingdom	Article General	Ref. in National Report Section H - 5, H.2.3
Question/ Comment	<p>The probabilistic safety analyses undertaken for Embalse Nuclear Power Plant appear to have been thorough. Both analyses identified events, largely of low probability, that could lead to uncontrolled potential emissions. What action has been taken to further reduce the probability of these events?</p>		
Answer	<p>With the results of the probabilistic safety analyses, Embalse NPP has performed several corrective actions with the aim of reducing the probability of reactor fuel damage and, as a consequence of that, reducing the probability of radioactive emissions into the environment. The corrective actions involved from design changes, so as to include redundancy in critical components, up to the incorporation of additional emergency procedures.</p>		



Q.No 26	Country United Kingdom	Article General	Ref. in National Report Section K - 2 H, K.3.1
Question/ Comment	<p>FACIRI is stated to be a new interim storage facility.</p> <p>(1) When will this facility become operational?</p> <p>(2) Can you please explain why was it necessary to undertake 'an exhaustive evaluation of the condition of the stainless steel covers of the ditches at the FACIRI, ... for sake of potential improvements and repairs.'?</p> <p>(3) Can you please explain what is meant by 'ditches'?</p>		
Answer	<p>(1) The operator expects preliminary operational tests to be performed in the FACIRI in 2010, and to get the Operation License in 2011.</p> <p>(2) As explained in section G.2.4, the FACIRI pools have a containment system consisting of a double stainless steel lining: the external lining, which coats the concrete walls, and the internal lining, in contact with pool water.</p> <p>When the internal lining was mounted into the pit, there were some weaknesses in the control of the supplier work. Later on, some easily visible surface imperfections were indicated as starting points of lining material deterioration.</p> <p>The paragraph written in section K.3.1 '<i>An exhaustive evaluation of the condition of the stainless steel covers of the ditches at the FACIRI has been performed, for the sake of potential improvements and repairs</i>' meant that a detailed assessment of the status of the internal lining has been performed and subsequently, actions are in progress for repairing the detected defects.</p> <p>(3) 'Ditches' is not the proper word to refer to the holes of the FACIRI pools. 'Pits' could be the proper word.</p>		
Q.No 27	Country United Kingdom	Article General	Ref. in National Report Sections K - 5, K - 6 & K - 7, K.3.1
Question/ Comment	<p>The planned research and development studies are wide ranging but clearly aimed at specific questions in the three principal areas of pre-disposal, final disposal and spent fuel management.</p> <p>(1) What is the overall budget for the R &amp; D studies?</p> <p>(2) What is the planned timescale for completion of the R&amp;D plan?</p> <p>(3) How will be outputs from the R&amp;D studies be integrated into other activities within the Strategic Plan?</p>		
Answer	<p>In 2008 necessary activities were ordered and identified, in a R&amp;D plan for a triennium, so as to fulfill the PNGRR objectives. At that time, some of these activities were carried out and others needed to be started. The activities were separated in three different areas: pre-disposal, final disposal and spent fuel management.</p> <p>At present each activity is being analyzed in order to become a project or to be incorporated into another one, so as to know costs, time and human resources to be involved, and taking into account internal capacities of CNEA as well as of other institutions.</p> <p>Once completed, the results of the Plan will be incorporated into the PEGRR for approval of the budget. Meanwhile some activities are being carried out as permanent study lines using PNGRR funds.</p> <p>The outputs from the R&amp;D studies will be used in order to have technical data previously to each investment activity or to improve radioactive waste management technologies.</p>		
Q.No 28	Country United Kingdom	Article General	Ref. in National Report Section K - 9, K.3.2
Question/ Comment	<p>(1) What radionuclides were found in higher than expected concentrations at the Trenches 1 and 2 at the Ezeiza Management Area?</p>		

- (2) What concentrations were found?  
 (3) Can you please describe the action being taken to reduce the concentrations in the environment or to limit future releases?

Answer

- (1) At the end of the sixties, Trenches 1 and 2 were thought as semi contention systems for the final disposal of solid wastes. In the First National Report said systems are described. Downstream of the South extreme of T1 within Ezeiza Atomic Centre site, tritium and uranium were detected in the phreatic stratum in higher than expected levels.  
 (2) Concentration levels of the above stated radionuclides are directly related to the stratum hydric refill caused by rainfall. Detections can be performed when the stratum rises up to near the deeper sector of T1 and their values vary within time, according to the meteorological conditions and the season of the year.  
 (3) At present, natural attenuation tests are being performed near trenches, where radionuclide migration has been detected so as to know and predict their evolution to decide whether it is necessary to take corrective actions.

Q.No	Country	Article	Ref. in National Report
29	United Kingdom	General	Section K - 9, K.3.2

Question/  
 Comment (1) What evidence is there for a 'natural hydrogeological boundary within the site'?  
 (2) How has it been demonstrated 'with certainty that there exists no impact whatsoever beyond the Ezeiza Atomic Centre limits'?

Answer

- (1) The hydrogeological studies performed as part of the environmental characterization of the site clearly prove the collector nature of Aguirre stream, which surrounds AGE and collects the underground waters draining from the trenches, as a consequence, acting as a natural hydrogeological boundary.  
 The environmental radiological monitoring realized by CNEA around the trenches, within a different distance downstream in and outside the site and in different parts of Aguirre stream, certainly proves that radionuclide migration covers a short distance from the trenches.  
 (2) ARN has its own monitoring wells outside AGE and in the surrounding area of the atomic centre and no significant values of the mentioned radionuclides have been detected so far.

Q.No	Country	Article	Ref. in National Report
30	United Kingdom	General	Section L - 29, L.1.6

Question/  
 Comment There is an emergency plan identified for Bariloche Atomic Centre (PG 12 S 100 Revision 4) but the centre is not mentioned in the report. What is the current operational status of this centre and what radioactive wastes does it produce?

Answer

Bariloche Atomic Centre is at present in operation. It counts on different R&D groups and a research reactor of 0.5 MW. In this atomic center, small amounts of low level wastes and spent resins of the research reactor are generated.

Q.No	Country	Article	Ref. in National Report
31	United Kingdom	General	Section L-31, L.2.2

Question/  
 Comment The 'trans-uranium shaft' is mentioned as one of the four disposal facilities to be evaluated in the second phase of assessment work at AGE but it does not appear to be listed in Table D.4.5, Section D-6.



Please could Argentina provide more information on the 'trans-uranium shaft' including the type and quantity of radioactive wastes emplaced in the facility.

Answer

The 'trans-uranium shaft' contains historical wastes coming from a reprocessing laboratory which operated during the sixties (PR1, mentioned in the First National Report). Taking into account that only 500 mg of Pu-239 was processed and that all structural material disposed of in this shaft was previously decontaminated, traces of this radionuclide are mainly expected to be found.

Q.No	Country	Article	Ref. in National Report
32	Australia	Article 4	

Question/  
Comment

Are there any spent fuel facilities that at the national level through legislation do not have regard to internationally endorsed environmental protection principles and security principles?

Answer

No, there are not any spent fuel facilities in this situation.

Q.No	Country	Article	Ref. in National Report
33	Czech Republic	Article 4	

Question/  
Comment

What are the plans with respect of the management of high- and intermediate level waste generated during the reprocessing of research reactors' spent fuel in the USA ?

Answer

The scope of Argentinean participation established in the contract performed in the frame of the Spent Nuclear Fuels from Foreign Research Reactors Acceptance Programme is concluded with the SF shipment to the USA. From that moment onwards, USA has become responsible for the SF and their safe management.

Q.No	Country	Article	Ref. in National Report
34	Czech Republic	Article 4	

Question/  
Comment

Can you describe advantages and disadvantages of national categorization system of radioactive waste?

Answer

The categorization of radioactive waste detailed in point B.4.1 of Argentine Third National Report was developed with the main objective of organizing the information introduced into the Convention. Nevertheless, this preliminary categorization system could be used as a basis for the design of the future final disposal facilities.

Q.No	Country	Article	Ref. in National Report
35	Czech Republic	Article 4	

Question/  
Comment

What method you will prefer for conditioning of spent resins and sludge?

Answer

Sludge is being conditioned in a cement matrix. Different alternatives are under evaluation for spent resins, including cement.

Q.No	Country	Article	Ref. in National Report
36	Czech Republic	Article 4	

Question/  
Comment

How you ensure that stored ILW will meet acceptance criteria for relevant repository?

Answer

ILW are being stored without conditioning in interim storage at the proper NPP's buildings. Once the acceptance criteria for the future repository are defined and approved, the ILW will be treated and conditioned in order to meet them.

Q.No	Country	Article	Ref. in National Report
37	Czech Republic	Article 4	

Question/  
Comment

Which documentation contains description of NORM management?

Answer Law N° 25018 states that CNEA is only responsible for the management of radioactive waste generated from nuclear activities carried out in Argentina.  
Another NORM different from the U mining is beyond the scope of this Convention (Section C1 of the Third National Report).  
PRAMU has drawn up documents dealing with mining tails management. Some of them are currently being developed.

Q.No	Country	Article	Ref. in National Report
38	Germany	Article 4	Sec. G.2.1

Question/Comment The Atucha I Nuclear Power Plant (CAN I) has two fuel storage areas for wet storage of spent nuclear fuel, known as Pool Building I and Pool Building II. Pool Building I comprises two decay pools P1 and P2 and a handling pool or work area with a designed storage capacity of 3,240 positions. Pool Building II contains four decay pools P4, P5, P6 and P7 with a designed storage capacity of 6,944 positions. The capacities of the four spent fuel storage pools in Pool Building II are increased by compact storage from 6,944 to 8,304 positions (estimated conclusion date March 2008). Was it necessary for maintaining criticality safety to take burnup credit of the spent fuel and/or neutron poisons into account?

Answer In accordance with the statement presented in page G-3 of the Third National Report, in the case of CNA I, it was not necessary to consider burn-up credit in the design to ensure criticality safety, because it is a PHWR whose fuel elements contain very low enriched U (0,85%) and the fuel storage pools are filled with light water. For the same reason it was not necessary either to use neutron poisons.

Q.No	Country	Article	Ref. in National Report
39	Australia	Article 5	

Question/Comment Are there any existing spent fuel management facilities in Argentina for which a Safety Assessment consistent with current international guidance is not available?

How does Argentina provide, at the national level through legislation, for the modification of existing facilities for protection of individuals and society giving due regard to current internationally endorsed criteria and standards.

Answer The Spent fuel management facilities are integrated into the operation of nuclear power plants. Their safety assessments are part of the PSA of each nuclear plant and are performed in accordance with international guidance.

ARN is responsible for the elaboration of standards and requirements and the verification of their compliance for modifications of existing facilities and the subsequent protection of individuals and society.

Q.No	Country	Article	Ref. in National Report
40	Australia	Article 5	

Question/Comment Is the Periodic Safety Review used to assess the safety in the existing facilities? If so, is there any guideline for this purpose?

Answer Indeed, the Periodic Safety Review is used to assess the safety in the existing facilities in every Operation License updating. However, there are not any specific guidelines for revisions. In general they imply the updating of documentation and procedures, the revision of previous safety evaluations and the implementation of new assessments required by ARN.

Q.No	Country	Article	Ref. in National Report
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41	Czech Republic	Article 5	
Question/ Comment	What is the planned solution in the NPP Atucha after 2015 for storage of SF? The available positions in the storage pools will be used up by March 2015.		
Answer	The planned solution to operate after 2015 consists of implementing a dry storage for the oldest spent fuel elements.		
Q.No 42	Country Czech Republic	Article Article 5	Ref. in National Report
Question/ Comment	What is the fraction of leaky spent fuel assemblies in NPP Atucha I and how are they managed in storage pools?		
Answer	<p>The global failure of SF (fabrication, mechanical interaction or operative problems) totals 161 SF out of 9850 SF, which would be a 1.63%. This rate is the result of each SF and not of each bar. Each SF has 36 bars. If the failure rate were counted for each bar, the rate would be much lower, that is, 0.5 per thousand.</p> <p>After the failed spent fuel is depressurized in the refueling machine, it is transferred to the pool, in a similar position to the rest of the SFs, since it does not release any more gas. Usually the failure is a puncture.</p>		
Q.No 43	Country Australia	Article Article 7	Ref. in National Report
Question/ Comment	Does Argentina consider burn-up credit in the design to ensure criticality safety? If so, is there any guideline for using burn-up credit in the design?		
Answer	<p>Argentina does not consider burn-up credit in the design to ensure criticality safety.</p> <p>In the case of NPPs in operation, it was not necessary to consider burn-up credit in the design to ensure criticality safety, because they are PHWR whose fuel elements contain very low enriched (0,85% in the case of Atucha I) or natural uranium (CANDU NPP in Embalse) and the fuel storage pools are filled with light water.</p> <p>Also, preliminary assessments indicate that criticality safety is widely fulfilled for the FACIRI design (see section G-5), considering stored MTR-research reactor fuel elements as “fresh”.</p>		
Q.No 44	Country Australia	Article Article 7	Ref. in National Report
Question/ Comment	What criteria are used in the Probabilistic Safety Analysis for Spent Fuel and waste Management Facilities?		
Answer	<p>For the PSA, what criteria and objectives are used for individual and societal risk in environmental risk management?</p> <p>The criteria used for risk consideration in the PSA is established in the Regulatory Standards AR – 3.1.3 "Radiological criteria related to accidents in nuclear power reactors" and AR – 4.1.3 "Radiological criteria related to accidents in nuclear research reactors". Besides, the criteria and objectives used to consider individual and societal risk in environmental risk management are established in the Regulatory Standard AR 10.1.1. - "Basic radiological safety standard" (see ARN website: <a href="http://www.arn.gov.ar/normas/index.htm">http://www.arn.gov.ar/normas/index.htm</a>)</p>		
Q.No 45	Country Australia	Article Article 9	Ref. in National Report
Question/ Comment	What are the requirements for ground water monitoring around the facility for Spent Fuel storage?		

Is there any guideline to deal with corroded/compromised spent fuel?

Answer

The facilities for Spent Fuel storage (located at NPPs sites and AGE) are under the Environmental Monitoring Program of the sites, which requires a periodic ground water monitoring to meet the Regulatory Standard AR 10.1.1.- “Basic radiological safety standard”. (see ARN website: <http://www.arn.gov.ar/normas/index.htm>)

There is no guideline available to control the corrosion of stored spent fuels. Nevertheless, periodic inspections are performed with the aim of assessing eventually corrosion process in spent fuels.

Q.No	Country	Article	u Ref.	in	National	Report
46	Canada	Article 11	H-3			

Question/  
Comment

The provinces appear to determine the specific environmental requirements.  
a) How is inadequate or inconsistent provincial control dealt with?  
b) Is there a federal standard or guideline that provinces can adopt?

Answer

In the case that a Province or a Council -within the scope of their legislative powers or their own control- issues an inconsistent or unreasonable rule, or exercises an inadequate control, it would be exceeding its genuine competence by contradicting principles or rights established in the Argentine Constitution. If any of these excesses should occur, federal legal actions could be taken.

Q.No	Country	Article	Ref. in National Report
47	Czech Republic	Article 11	

Question/  
Comment

There is no information about the periodicity of re-evaluation of the decommissioning plans. Please provide it.

Answer

As the decommissioning of any relevant facility is not foreseen in the near future, the periodicity of re-evaluation of decommissioning plans has not been established yet.

Q.No	Country	Article	Ref. in National Report
48	Czech Republic	Article 11	

Question/  
Comment

How is interlinked the minimalisation of RAW generation with dose reduction? Concentration (evaporation, compaction, ...) always leads to dose rise.

Answer

The reduction of radiation doses mentioned in Section H.1.2 is associated (for a specific stream of RW) to the generation of less volume of RW. Concentration (evaporation, compaction, etc.) consists of treatment options that are performed to reduce the volume of already generated radioactive waste and is not considered a minimization practice.

Q.No	Country	Article	Ref. in National Report
49	Czech Republic	Article 11	

Question/  
Comment

Does the last sentence in this chapter mean that for more than 10 years (the Act N ° 25018 was adopted in 1998) the generators of RAW in Argentina do not comply with the legal requirement to create the financial fund for the development of missing waste management facilities and are violating safety principle 7 para 3.29 of SF-1? Please provide explanation.

Answer

Since the fund integration mechanism has not been regulated and their Administration Law has not been implemented either, it is not possible to say that generators have not complied with their obligations since these have not been expressly stated.  
However, whereas the State continues to provide the funds to afford the activities that are part of the National Programme of Radioactive Waste Management, the generators pay for the waste management they produce. It should be taken into account that the major waste generators, that is, nuclear power plants, are owned by the State and operated by a state

company. Moreover, Law N° 25018 was enacted within the context of nuclear power plants privatization. At present amendments are being introduced according to the current circumstances.

Q.No 50	Country Ukraine	Article Article 11	Ref. in National Report Section B.4
Question/ Comment	What are the criteria for exemption of radioactive material from regulatory control?		
Answer	The exemption criteria, defined in the Regulatory Standard AR 10.1.1, "Basic Radiation Protection Standard", are introduced in page B-4 of the Third National Report.		
Q.No 51	Country Ukraine	Article Article 11	Ref. in National Report Para B.4
Question/ Comment	How is grounded (explained) the annual dose for the critical group due to effluent discharge? (0.3 mSv)?		
Answer	Dose constraint (0.3 mSv) is set as a fraction of the annual dose limit for the public (1 mSv).		
Q.No 52	Country Ukraine	Article Article 11	Ref. in National Report Para B 4.1
Question/ Comment	What is the basis for national classification of radwaste?		
Answer	The classification of radioactive waste detailed in point B.4.1 of Argentine Third National Report was developed with the main objective of organizing the information introduced into the Convention. Nevertheless, this preliminary categorization system could be used as a basis for the design of the future final disposal facilities.		
Q.No 53	Country Australia	Article Article 12	Ref. in National Report
Question/ Comment	Are there any existing radioactive waste management facilities in Argentina for which a Safety Assessment consistent with current international guidance is not available?		
Answer	The Radioactive waste management facilities located at NPPs are integrated in the operation of nuclear power plants. Their safety assessments are part of the PSA of each nuclear plant and are performed in accordance with international guidance. In addition to those facilities, a central storage for disused sealed sources is in operation at AGE where the safety assessment is carried out in accordance with international guidance. Regarding the disposal system, a safety assessment is being carried out that is also consistent with international guidance.		
Q.No 54	Country Canada	Article Article 12	Ref. in National Report H-13
Question/ Comment	Los Gigantes has more tailings than any other uranium mine and is cited as a management priority, yet no information is provided on what is planned for this site. Please elaborate on the long term plans for the Los Gigantes tailing site.		
Answer	Los Gigantes Industrial Mining Complex had an extremely low uranium grade (170 U g/mineral t). This complex lasted from 1982 to 1989. Although the largest amount of mineral of every industrial mining complex in Argentina was processed, only 207 U t were obtained due to the limited mineral grade. Since 1990, CNEA has been in charge of the facility safety and surveillance. It carries out the characterization of the area and of the solid and liquid effluents. It has also begun the management tasks. Already the initial foreseen tasks have been completed to a 70 to 75%. Currently a restitution project is being carried out by performing forced evaporation assays		

for the liquid wastes (they mainly have conventional contaminants) and engineering assays of tailing conditioning for the solid wastes.

Q.No 55	Country United States of America	Article Article 12	Ref. in National Report Section H.2.6, Page H-14 and H-15
Question/ Comment	The San Rafael Mining Industrial Complex has not been in operation since 1995, although it is not included in the Uranium Mining Environmental Restitution Project. Currently it appears that restarting production has been placed on hold pending the analysis of reclamation work. Please provide an update at the national presentation in May 2009, on the status of activities related to reclamation and restart of this mining complex.		
Answer	We will include this subject at the national presentation in May 2009.		
Q.No 56	Country Australia	Article Article 13	Ref. in National Report
Question/ Comment	The comment that the siting of facilities shall not require any additional authorization does not seem to fully address the requirements of the Article. Have the steps required under this Article been carried out and described in a previous report?		
Answer	<p>When will the funding referred to in the report be in place?</p> <p>It is important to remark that Article 11 of Law N° 24804 (Section L 10 of the Third National Report) fulfills the requirements set in Article 13 of the Joint Convention. The comment stating that the facility siting shall not require any additional authorization (Article 13, Law N° 24804, Section L10 of the Third National Report) refers to the existing facilities at the time when the above stated Law was enacted.</p> <p>The fund integration is primarily related to the actions and decisions corresponding to the scope of the Executive Power, and then to what the Congress states regarding the administration rules to be defined by law. Therefore still it is not possible to state the deadlines in which these decisions are to be achieved.</p>		
Q.No 57	Country Australia	Article Article 15	Ref. in National Report
Question/ Comment	Have the safety assessments required by this Article been carried out?		
Answer	At present the Article 15 of the Joint Convention is applied to the new facilities. As a requirement, safety reevaluations are performed in the facilities existing before said Article came into force.		
Q.No 58	Country United States of America	Article Article 16	Ref. in National Report Section H.2.4, Page H-7
Question/ Comment	Please describe whether the waste treatment described in the report is designed to prepare waste for extended storage or for ultimate disposal?		
Answer	The original purpose was to prepare waste for final disposal, but according to the decision taken by CNEA of ending the operational stage of the disposal systems located in AGE, the design of the plant foresees the treatment of the waste for final disposal and also for an extended storage period.		
Q.No 59	Country Australia	Article Article 18	Ref. in National Report
Question/ Comment	What is national policy in Argentina for "disposal" of radioactive waste?		
Answer	The Strategic Plan is based in technical, economical and societal considerations and defines the methodologies for treatment and the technological systems for final disposal for		



the different classes of wastes: for low and intermediate level wastes near surface repositories, for high level waste deep geological repository. The Strategic Plan is reviewed every three years and modifications based on the optimization of the waste management or other considerations may be introduced. The decision about the convenience of reprocessing the Spent Fuels shall be taken by 2030.

Q.No 60	Country Germany	Article Article 19	Ref. in National Report Sec. E.2.2.7
Question/ Comment	In E.2.2.7 it is stated that the state takes the responsibility for the management of radioactive waste and that the National Atomic Energy Commission (CNEA) is the responsible body. How is the independence of the CNEA from the Nuclear Regulatory Authority (ARN) as the regulator guaranteed?		
Answer	Regarding an effective independence of the Regulatory Body, technical and economical resources have been provided to carry out independent safety reviews and assessments. The members of the Board of Directors of ARN, including its president, are designated by the head of the Executive Power (the National President).		
Q.No 61	Country Canada	Article Article 20	Ref. in National Report E-3, F-4, H-3, K-10
Question/ Comment	Argentina's National Report states that the Strategic Plan has still not been approved. When will the Strategic Plan be approved?		
Answer	As established in Law N° 25018, Argentina's Strategic Plan for Radioactive Waste Management shall be approved by a National Congress law. For the time being, it is not possible to anticipate a date for the approval of the Strategic Plan.		
Q.No 62	Country Canada	Article Article 20	Ref. in National Report E-6
Question/ Comment	In practice which enforcement or 'sanction' options appear to be most effective in producing compliance?		
Answer	The enforcement action that has proven to be more effective in practice has been the warning that if the corrective actions required are not implemented, the Operation License will be suspended.		
Q.No 63	Country Canada	Article Article 20	Ref. in National Report E-19, K-8
Question/ Comment	A chemical toxicity issue with uranium in drinking water in the Province of Buenos Aires was identified but few details are given. What levels were reached and what was the final conclusion regarding risk to users?		
Answer	The studies and results can be found in several reports that are available at ARN's web page <a href="http://www.arn.gov.ar/M-Ezeiza/index.htm">http://www.arn.gov.ar/M-Ezeiza/index.htm</a> (most reports are available only in Spanish). It is stressed that the uranium was naturally present in the environment, and the maximum uranium concentration found is approximately twice the reference value given by the WHO, but below the national reference value for drinking water. There are several places in Argentina where natural uranium concentration largely exceeds the observed values in Ezeiza. The final conclusions of the international experts report can be found in Section E19 of the Third National Report.		
Q.No 64	Country Canada	Article Article 20	Ref. in National Report E-16
Question/	In Table 4 the manpower category with the highest activity is environmental control.		

Comment a) How much of a change is this with the past and is this category growing?  
b) Does this group look at non-radiological issues and, if not, who does and how is the total environmental picture integrated?

Answer a) Taking into account the Table 4 in the 2<sup>nd</sup> and 3<sup>rd</sup> National Reports, it can be noticed that the human resources from environmental control assigned to the regulatory control of radioactive waste are the same.  
b) No, non radiological issues are beyond the scope of ARN. The total environmental picture is integrated at provincial and national levels and involves several organizations.

Q.No	Country	Article	Ref. in National Report
65	Luxembourg	Article 20	Section E.3.2

Question/ Comment The report refers to a new Special Processes unit within the regulatory body. When and why was this unit put in place?

Answer ARN, by making use of its own faculties and on the base of the Nuclear Activity National Law N° 24804 (in force since April 1997), and its corresponding Decree N° 1390/98, has created the Special Processes Activity through an internal Resolution issued by the Director Board in 28th December 2005.

This new Department has the objective of developing all the regulatory activities necessary to grant the Construction, Commissioning and Operation Licenses, in the case of licensing new nuclear power plants (NPPs), and to inspect the refurbishment activities related to the licensing process of NPPs Life Extension.

The reasons for creating an ad-hoc group, such as Special Processes Activity, are based on the necessity of having a multidisciplinary group of experts fully dedicated to the licensing activities of the different projects: Licensing Atucha II, Licensing a Fourth NPP, Licensing CAREM reactor which is a prototype, Licensing the Life Extension of Embalse NPP and Atucha I NPP. Having this ad hoc group, all the regulatory activities related to the NPPs under operation are under responsibility of Nuclear Reactor Department and do not interfere in the licensing tasks.

Q.No	Country	Article	Ref. in National Report
66	Australia	Article 22	

Question/ Comment Does the regulatory authority prescribe the minimum qualifications for operators of Spent Fuel and Waste Management Facilities?

Is there any established process for the accreditation of operators of SF and RWM facilities?

Answer These requirements are available in [www.arn.gov.ar](http://www.arn.gov.ar) and are:- AR 0.11.1. Rev. 3 "Licensing of Class I facilities' personnel" - AR 0.11.2. Rev. 2 "Psychophysical aptitude requirements for specific authorizations" - AR 0.11.3. Rev. 1 "Re-training of Class I facilities personnel". 4. CNEA as the Responsible Organization must ensure the fulfillment of the regulatory standards and must therefore also evaluate the personnel's psychophysical aptitude by means of an organization appointed by the responsible organization and recognized by ARN that must have sufficient professional support for establishing psychophysical profiles of specified functions and evaluating psychophysical aptitude of applicants.

Q.No	Country	Article	Ref. in National Report
67	Luxembourg	Article 24	Section F.4.1

Question/ Comment Please describe control and monitoring of radioactive discharges from hospitals?

Answer For medical, research and industrial uses of unsealed sources, only the radionuclides and maximum activity allowed to be used are set in the Operation License. There are no requirements for effluent monitoring, just simple checks on discharge levels are performed.

Q.No	Country	Article	Ref. in National Report
68	Australia	Article 25	

Question/ Comment What is the frequency of emergency exercise at Spent Fuel and waste Management facilities?

Answer Emergency exercises at Spent Fuel and Waste Management facilities are performed once a year.

Q.No	Country	Article	Ref. in National Report
69	Czech Republic	Article 25	

Question/ Comment What is the periodicity for verification of internal emergency plans?

Answer Emergency exercises at Spent Fuel and waste Management facilities are performed once a year. In general, the periodicity for verification of internal emergency plans is every 5 years.

Q.No	Country	Article	Ref. in National Report
70	Czech Republic	Article 25	

Question/ Comment What is the relation between the Municipal Plan for Nuclear Emergencies and the Provincial Nuclear Emergency Plan and who approves the Municipal Plan?

Answer The Municipal Plan of Nuclear Emergencies is complemented by the Provincial Nuclear Emergency Plan, in order to improve the capacity of response in the case of a nuclear emergency.  
The ARN is the institution that approves the Plan for Nuclear Emergencies.

Q.No	Country	Article	Ref. in National Report
71	Australia	Article 26	

Question/ Comment What requirements are in place for relevant records regarding decommissioning to be kept?

Answer The responsible for a facility shall keep the relevant records in a complete and actualized version during the entire lifetime of the facility and until the decommissioning is completed.  
Physical Protection procedures as duplication of information and back-up in different medias, maintained in conditioned rooms (fire and rodent protection, etc.), shall be implemented.

Q.No	Country	Article	Ref. in National Report
72	Australia	Article 26	

Question/ Comment Does Argentina have any training and accreditation program and requirements for the decommissioning workers?

Answer Since the decommissioning of any relevant nuclear facility is not foreseen in the short term, the need to establish training and accreditation programs and requirements for decommissioning workers have not been defined yet.  
However, CNEA is implementing a training program that includes personnel training abroad, the organization of regional workshops in the country and the development of decommissioning techniques.

Q.No	Country	Article	Ref. in National Report
73	Canada	Article 26	F-22

Question/Comment: What compliance follow-up activities does ARN conduct after it issues a decommissioning licence?

Answer: ARN has not issued any Decommissioning License yet and it is not expected to emit such type of license in the medium term. Consequently, ARN has not defined either follow-up activities in detail for Decommissioning Licenses.

Q.No	Country	Article	Ref. in National Report
74	Korea, Republic of	Article 26	p.F-23 (F.6.4)

Question/Comment: Section F.6.4 states that a preliminary plan for decommissioning is currently in progress. Is the preliminary plan for decommissioning of the facilities carried out based upon any regulatory requirements or by the operator's voluntary studies?

Answer: The preliminary plan for facilities decommissioning is being carried out by following regulatory requirements and by taking into account the characteristics of the facilities.

Q.No	Country	Article	Ref. in National Report
75	Korea, Republic of	Article 26	p.F-21 (F.6)

Question/Comment: Are the records and information on the construction, operation of the nuclear facilities reserved and maintained for decommissioning?

Answer: If so, what kinds of records and information are to be reserved and maintained?

The responsible for a facility shall keep the relevant records in a complete and actualized version during the entire lifetime of the facility and until the decommissioning is completed. Physical Protection procedures as the duplication of information and back-up in different medias, maintained in conditioned rooms (fire and rodent protection, etc.) shall be implemented. The relevant records to be kept and maintained regarding decommissioning are: historic information of the facility operation, characterization and inventory of radioactive waste and other hazardous materials.

Q.No	Country	Article	Ref. in National Report
76	Luxembourg	Article 27	Section I

Question/Comment: Are procedures in place for dealing with detection of elevated radiation in metal scrap shipments from other countries?

Answer: Shipments from other countries (including metal scrap shipments) are monitored at the customs zones by trained personnel of border control organization. They have portable radiation detectors for detecting undeclared radioactive material. In the case of shipment from Argentina, a special portal equipped with radiation monitors was installed at the main terminal of the country. Furthermore, the main steel factories in Argentina are equipped with such special portal monitors, to prevent melting spent radioactive sources or metal scrap contaminated with radioactive materials.

Q.No	Country	Article	Ref. in National Report
77	Australia	Article 28	Section J.4

Question/Comment: Is there any incentive for users to manage disposal or storage of disused sources rather than allow ARN/CNEA to confiscate them?

Answer: There are not any special incentives. Users shall maintain disused equipments containing sealed sources in appropriate temporary storage until the radioactive material is transferred to CNEA as radioactive waste. In cases where severe non compliance of security is

detected, the regulatory authority supported by the Justice asks to confiscate the equipment which will be deposited at CNEA facilities. The license holder (or authorization) will have to pay a fine established by ARN plus the cost of confiscation.

Q.No	Country	Article	Ref. in National Report
78	Australia	Article 28	Section J.5

Question/Comment The National Report states: ‘Since 1991 and prior to IAEA-INFCIRC 225 / Rev. 4, the ARN is paying special attention not only to the early detection of potential sabotages to facilities containing nuclear materials, but also in case of robbery and theft of radioactive sources and the early detection of the generated fraudulent acts.’ Q. What is the special attention?

Answer As it is stated in Section J.5, special attention for early prevention or detection of malicious acts involves permanent contact and exchange of information between the ARN and the border control organizations, intelligence services and security forces.

Q.No	Country	Article	Ref. in National Report
79	Australia	Article 28	Section K.3.1

Question/Comment In relation to the Atucha I Nuclear Power Plant, the report states that ‘the available positions in the pools will be used up in March 2015, and on that date a new option must be available for the storage of spent fuel.’ Q. Do you anticipate any difficulties in establishing alternative options by 2015?

Answer There are not any foreseen difficulties. Options have already been established for storage after 2015.

Q.No	Country	Article	Ref. in National Report
80	Australia	Article 28	

Question/Comment What is national policy for management of disused sealed sources to ensure their safety and security and in a manner that does not impose an undue on future generations?

What options exist or are planned for disposal of orphan and other disused sealed radioactive sources where an option for return to the manufacturer does not exist – including legacy radium sources?

Answer Disused sealed sources must be transferred to the PNGRR. They are stored in a special deposit licensed by ARN that fulfils all the present requirements for safety, security and radiological protection.

In the future they will be disposed of in repositories according to their acceptance criteria and the classification of each disused sealed source (based on specific activity and type of radionuclide).

Q.No	Country	Article	Ref. in National Report
81	Australia	Article 32	B.4.3

Question/Comment Is the site selection process for the geological repository based on the FEPs (Features, Events, Processes) protocol, as recommended by ISAM? How will the spent fuel be ‘conditioned’ prior to final disposal in the deep geological repository?

Answer We are using (because the site selection process is in the initial phase) selection criteria related to geological and social factors defining exclusion areas as well as defining regions with different levels of priority. Up to now, we are not using FEPs protocol, recommended by ISAM, which is mainly related to near surface disposal.

At present, the spent fuels originated in the operation of nuclear power reactors are temporarily stored in installations designed for this purpose at the same NPP sites. MTR

type SF arising from research and production reactors (mainly from RA-3 reactor) are temporarily stored in pools, inside the same reactor installation and/or in the installation designed for this purpose existing at the Ezeiza Atomic Center. According to the *Strategic Plan for the Management of Radiactive Waste* issued by CNEA in consonance with the National Law N° 25018, the decision about the fuel cycle back-end strategy, reprocessing for reusing fissionable material, related to economical and political issues, or final disposal, should be taken by 2030.

Q.No 82	Country Czech Republic	Article Article 32	Ref. in National Report
Question/ Comment	What is the period for the strategic plan (PEGRR) review?		
Answer	As it is remarked in Section A.2., B.3 and L.1.3.2 of the National Report, the Strategic Plan is reviewed every three years.		
Q.No 83	Country Czech Republic	Article Article 32	Ref. in National Report
Question/ Comment	Will you please provide description of waste management in uranium mining facilities?		
Answer	The waste management of uranium milling and mining facilities is specific of each site. For some sites, as Malargüe, the description can be found in Section H.2.6 of the Third National Report.		
Q.No 84	Country Czech Republic	Article Article 32	Ref. in National Report
Question/ Comment	Is the Law No. 24253 from 12 November 1993 still in power? USSR did not exist at that time (1991).		
Answer	The Law N° 24253 refers to the Agreement between the Argentina and USSR on the cooperation in the pacific uses of atomic energy. The Agreement was signed in Moscow in 1990 and was approved in Argentina by Law 24253 issued in November 12 <sup>th</sup> , 1993. The Agreement entered into force in January 1 <sup>st</sup> , 1997, but with the Russian Federation instead of the former Soviet Union. This happened by virtue of a Protocol, signed in 2006 by the Governments of Argentina and Russia, and it was related to the validity of the agreements subscribed along with the former USSR. Therefore, the Agreement of Cooperation is still in force between Argentina and the Russian Federation.		
Q.No 85	Country Germany	Article Article 32	Ref. in National Report Sec. B.4.1
Question/ Comment	In B.4.1 it is stated that waste requiring isolation periods in excess of 300 years is to be disposed of in a geological repository. In K.3.1 it is stated that a near surface repository for intermediate level waste is planned. Is it to be understood the way that this is short lived waste and that the decay after 300 years leads to an end of the need of isolation?		
Answer	Yes, it is to be understood in this way. After 300 years of isolation the dose constraints established by ARN will not be exceeded.		
Q.No 86	Country Romania	Article Article 32	Ref. in National Report Section B
Question/ Comment	Which are the methods of treatment used for organics liquid wastes?		
Answer	So far, they have been stored without treatment. Some treatment methods are under evaluation but the decision has not been taken yet.		
Q.No	Country	Article	Ref. in National Report



87	Romania	Article 32	Section B
Question/ Comment	If the specific activity is used as criteria for classification of the radioactive waste, can the values of gamma/ beta/ alpha emitting radio nuclides activities be specified?		
Answer	<p>The classification of radioactive waste detailed in point B.4.1 of Argentine Third National Report was developed with the main objective of organizing the information introduced into the Convention. Nevertheless, this preliminary categorization system could be used as a basis for the design of the future final disposal facilities.</p> <p>In practice, the radiological characterization of radioactive wastes includes the specification of the main radionuclides activities.</p>		
Q.No 88	Country United States of America	Article Article 32	Ref. in National Report Section A.2, Page A-2
Question/ Comment	The Strategic Plan for Radioactive Waste Management as required by Act 25018 (1998) is updated every three years and submitted to the National Parliament for approval. As of December, 2007, this plan has yet to be approved. Please describe the challenges to and unresolved issues associated with the delay of approval. What are the expectations for approval and what alternatives are there for establishing a waste fund?		
Answer	<p>The Strategic Plan approval by Congress is primarily related to the actions and decisions corresponding to the scope of the Executive Power, and then to what the Congress states regarding the administration rules to be defined by law. It is still not possible to state the deadlines in which these decisions are to be made.</p> <p>For the same reasons, a deadline cannot be foreseen either for the fund integration. However, PNGRR actions are financed by the State government by including the expenses of PNGRR in the annual budget of CNEA.</p>		
Q.No 89	Country United States of America	Article Article 32	Ref. in National Report Section B.1, Page B-1
Question/ Comment	Argentina reports the national strategy of having a deep geologic repository operation by 2060. Please elaborate on the ten-year delay from the schedule in your Second National Report and its causes in your national presentation in May 2009.		
Answer	We will include this subject during the national presentation.		
Q.No 90	Country United States of America	Article Article 32	Ref. in National Report Section B.4.3, Page B-8
Question/ Comment	Argentina mentions several geological investigations on some preselected areas as potential sites for an intermediate-level waste repository. The repositories in France (L'Aube) and Spain (El Cabril) are mentioned as conceptual models. Technical assistance is being provided by Spain (ENRESA). Please elaborate on how these models are being incorporated into the LILW disposal approach.		
Answer	<p>Design criteria of El Cabril have been adopted. The main difference lies in the fact that low level wastes will be separated from the intermediate level wastes and will be placed in different repositories located in the same site. The repository of intermediate level wastes will be built by using an additional engineering barrier, since primary containers will be placed inside concrete containers.</p> <p>For the safety evaluation, engineering barriers have been used as contention system to prove the fulfillment of design aims. Geology is an additional barrier that was not considered for the evaluation.</p>		
Q.No 91	Country United States of America	Article Article 32	Ref. in National Report Section K.3.1, Page K-4
Question/	Section B.3 Radioactive Waste Management Policy requires development of a public		

Comment communications program. However, there are no examples of the actual extent of public participation, issues being addressed, or how conflicts are resolved. Please highlight experiences at the national report presentation in May 2009.

Answer This issue will be highlighted at the national report presentation.

Q.No	Country	Article	Ref. in National Report
92	United States of America	Article 32	Section B.4.1, Page B.5

Question/ Comment The third paragraph on this page refers to low level wastes requiring institutional controls for 50 years and medium level wastes requiring institutional controls for 300 years. What types of institutional controls are contemplated for these waste disposal facilities?

Answer A combination of both active and passive controls is contemplated for these waste disposal facilities.