Parliamentary Assembly
Assemblée parlementaire
https://pace.coe.int

COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

Resolution 2241 (2018)[1]

Nuclear safety and security in Europe

Parliamentary Assembly

1. Many States in Europe produce nuclear energy: with 184 reactors in operation in 2018, 17 European countries are home to 41% of the world's nuclear "fleet". An additional 15 reactors are under construction, including the first-ever floating nuclear power plant. This energy choice has been polarising public opinion for decades, given the secrecy surrounding the operation of nuclear facilities and the risk of dramatic consequences in case of accidents.

2. Nuclear safety concerns have been looming ever since the Chernobyl accident in 1986 and further escalated as a result of the Fukushima accident in 2011. Moreover, due to recent terrorist attacks in France and Belgium, greater attention is being paid to the security of nuclear infrastructure, given that nearly all nuclear plants currently in operation were designed and built in an era when security concerns were of a different nature. Because the consequences of a nuclear accident – be it due to a malevolent act or a system failure – can be so widespread and very serious, the European public needs reassurance that the authorities in charge of nuclear safety and security are protecting the population effectively.

3. The Parliamentary Assembly welcomes the efforts of its member States and of the competent international organisations towards the continuous strengthening of reference standards for nuclear safety and security through technical, regulatory and legal frameworks. It believes that greater harmonisation of these standards to upgrade the overall nuclear safety and security levels across Europe is necessary and should involve all States, including those that are phasing out nuclear energy and those that are building new nuclear facilities.

4. The Assembly notes that many of Europe's nuclear facilities are rapidly ageing: in 2018, 82 out of 184 reactors had been in operation for thirty-five years or more, and roughly one in six reactors is more than forty years old. Even when the facilities are properly maintained, the overall condition of these reactors is gradually deteriorating, increasing the probability of serious incidents and accidents. The Assembly views independent oversight and periodic safety reviews as crucial to maintaining public trust in nuclear safety and believes that the frequency of safety reassessment should be increased for reactors which are more than forty years old.

5. The Assembly is concerned about the fact that there was no meaningful public consultation prior to the construction of the bulk of the European nuclear "fleet". It also points out that present generations have to bear the brunt in terms of operational safety and security risks, as well as the cost of decommissioning, nuclear waste processing and long-term waste disposal. The Assembly is convinced that the key challenge from a political angle is to provide adequate information to the public without undermining security and to achieve a democratic consensus over the strategic orientations and the desired level of nuclear safety and security. European countries should work together to ensure greater transparency and improved communication concerning the nuclear energy challenge.

6. As many nuclear power plants in Europe operate in close proximity to large cities and densely populated areas, including those beyond national borders, the Assembly considers that European States should provide unquestionable and "reasonably achievable" protection to these strategic objects, where

1. *Assembly debate* on 10 October 2018 (34th Sitting) (see Doc. 14622, report of the Committee on Social Affairs, Health and Sustainable Development, rapporteur: Ms Emine Nur Günay). *Text adopted by the Assembly* on 10 October 2018 (34th Sitting).

appropriate in close co-operation with the neighbouring countries concerned, especially for old and dilapidated plants. It believes that emergency preparedness capacity and contingency plans should be enhanced across Europe, in particular in cross-border situations; they should be based not only on minimalistic technical considerations but also on socio-economic imperatives, realistic scenarios of meteorological conditions, local specificities and lessons drawn from recent major nuclear accidents (such as Chernobyl and Fukushima).

7. Regarding the construction of new nuclear power plants in Europe, the Assembly urges the States concerned to ensure that heightened safety and security requirements are fully taken into account regarding design, operational principles, regulatory measures, external protection arrangements and emergency preparedness plans. Regarding the nuclear power plant in Ostrovets (Belarus), under construction just 45 kilometres from Vilnius, the capital city of the neighbouring State of Lithuania, the Assembly recalls its Resolution 2172 (2017) on the situation in Belarus, in which it deplores the lack of respect for international nuclear safety standards and major incidents on the construction site. In light of the latest developments, notably the national stress test report (comprehensive risk and safety assessment) and the related peer review mission, the Assembly urges the nuclear regulatory authorities of Belarus not to issue an operational license for the Ostrovets plant before:

7.1. the recommendations of the European Nuclear Safety Regulators Group (ENSREG) peer-review report on the Belarus stress test (adopted by ENSREG on 2 July 2018) are fully implemented;

7.2. seismic resistance of the nuclear power plant, in particular as regards systemic safety functions and the spent fuel pool, is reinforced;

7.3. the Ostrovets reactors' protections against a crash of a heavy commercial airplane are enhanced (as has been done for the same reactor design in Finland);

7.4. incident notification measures in respect of neighbouring communities and countries are improved, and emergency management agreements with the neighbouring countries, in particular Lithuania, are concluded, such as on the basis of the Melk protocol regarding the nuclear power plant in Temelín, on the border between Austria and the Czech Republic;

7.5. the assessment of the Ostrovets site is fully completed in line with international requirements, including the Convention on Nuclear Safety, the Convention on Environmental Impact Assessment in a Transboundary Context ("Espoo Convention") of the United Nations Economic Commission for Europe (UNECE) and the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters ("Aarhus Convention"), and a full scope International Atomic Energy Agency (IAEA) site-evaluation mission (Site and External Events Design Review Service, SEED) has been carried out for the nuclear power plant site in a comprehensive manner.

8. Regarding the proposed plans by Turkey and the Russian Federation for the construction of the nuclear power plant of Akkuyu in the province of Mersin (Turkey), situated just 85 kilometres from the border with Cyprus and in very close proximity to other neighbouring countries, the Assembly expresses its deep concern regarding the construction of this nuclear power plant in an earthquake-prone region of Turkey, in accordance with European Parliament Resolution (2016/2308(INI) of 6 July 2017. It therefore asks the Turkish Government to join the Espoo Convention and to take into account all concerns expressed also by its own citizens asking it to consult with neighbouring countries according to the International Convention on Nuclear Safety.

9. The Assembly recommends that the competent authorities of all Council of Europe member States with nuclear facilities on their territory:

9.1. enhance the frequency and transparency of periodic safety reviews for nuclear installations, in particular as regards reactors which are more than forty years old;

9.2. strengthen the independence and capacity of national nuclear regulators;

9.3. reassess, and where necessary reinforce, the physical protection of reactors and spent nuclear fuel pools;

9.4. investigate the cases of drone overflights above nuclear infrastructures and take measures to prevent such overflights from reoccurring;

9.5. extend the safety perimeter and reinforce protections against unauthorised access to nuclear plants;

9.6. provide adequate information to and ensure transparency towards the local population, including in cross-border areas, about the relevant nuclear safety and security guarantees, radiological emergency management plans and any new measures taken in that respect;

9.7. consider early decommissioning for the potentially most vulnerable nuclear plants where investment in safety and security upgrades would, in view of the risk analysis, exceed reasonable amounts;

9.8. improve and consider unifying the nuclear liability regime to increase the coherence of applicable international legal norms and enhance financial security limits for cross-border compensation of damages in case of nuclear accident.

10. The Assembly also invites the European Commission to extend the safety perimeter requirements beyond five kilometres around nuclear power plants, where evacuation, sheltering or iodine prophylaxis may be required in case of nuclear accidents, so as to better take into account the experience of the Fukushima accident and public expectations in terms of radiological protection.

11. Finally, the Assembly calls on the International Atomic Energy Agency to show greater openness to developing contacts and providing essential information to the representatives of national parliaments and regional parliamentary assemblies on the various aspects of the nuclear energy sector that fall within its competence.