

**Answers to questions raised by Poland in the frame of the Public Consultation
for the EIA LTO Doel 12**



Reminder of the ongoing procedure : The project of the Belgian State is to extend the lifetime of the Doel 1 and Doel 2 nuclear power reactors by ten years. In order to be executed, this project must be authorized by several authorities: the Belgian State and the safety authority.

The current consultation procedure concerns the authorization to be granted by the Belgian state. The outcome of this authorization process is a law allowing the lifetime extension.

Besides the law that allows the lifetime extension, there is a separate independent procedure with the safety authority where, in the framework of the periodic safety review, the long term operation is assessed and the necessary modifications need to be approved.

The operation conditions and thus the safety rules to be followed to operate the reactors lies within the responsibility of the Safety Authority.

Questions from Poland

1. **Topic:** Spent fuel and components

Reference: P1

Question :

Whether the Belgian Party prepared the plans of long-term storage of spent fuel and components (i.e. e.g. steam generator or pressure tank of the reactor), that will be disassembled at decommissioning of the reactors in 2025?

Answer :

ONDRAF / NIRAS has the legal mandate to make an inventory of radioactive waste and nuclear liabilities every 5 years. This includes estimates of future waste arising from decommissioning of nuclear power reactors, for which processing schemes and disposal concepts are defined. Before the start of decommissioning activities, the operator must document the decommissioning project in two reports: (i) a final decommissioning plan, to be submitted to the waste management organisation (ONDRAF / NIRAS) ; and (ii) a decommissioning safety report, to be submitted to the safety authority (FANC).

Link : <https://fanc.fgov.be/nl/system/files/2020-02-05-axe-2-table-dossier-demantelement-rapport-periodique-rapport-final-nl.pdf>

2. **Topic:** Emergency scenarios

Reference: P2

Question :

Whether any emergency scenarios, in which despite the presence of the Filter Containment Vent (FCV) system it is possible to damage the containment, were identified? If so, whether the radiological effects for the adjoining countries were estimated?

Answer :

The severe accident presented in the Environmental Impact Report : Doel Nuclear Power Station for the LTO of Doel 1 and Doel 2 (§ 3.4.7.1) is the envelope scenario, of which the radiological effects were

determined for the neighbouring countries. At further distance, these consequences are lower and result in negligible doses.

3. **Topic:** Emergency scenarios

Reference: P3

Question :

Whether any emergency scenarios considering the interferences between both Doel units were analysed?

Answer :

Yes, emergency scenarios considering the interferences between both Doel units have been analysed. All the first level systems are not physically separated but all systems are studied for mutual interactions (e.g. High Energy Line Break) so that internal accidents have no impact on those systems.

4. **Topic:** Emergency scenarios

Reference: P4

Question :

Whether any accidents at the Doel NPP took place within the last 5 years? If so, please describe the type of accident, type of implemented protection measures and effects for the environment resulting from these events, including in context of effective dose to the population inhabiting the areas located in the lowest distance from this nuclear power plant.

Answer :

The events that happened were notified to the Safety Authority, see for example <https://fank.fgov.be/de/notsituationen/ines-skala/ereignisse-die-den-letzten-12-monaten-belgien-auf-der-ines-skala>.

There were no accidents. There were some INES 0 and INES 1 anomalies and incidents but these never had any impact on the safety of our staff or the population.