WUA - 1486694-2024 Vienna, 05.11.2024
France, Fifth PSR for 900 MW nuclear reactors

Nuclear Safety Authority, ASN
15 Rue Louis Lejeune,
92120 Montrouge, France

Dear Sir or Madam,
We hereby submit the statement of the Vienna Ombuds Office for Environmental Protection on the occasion of the public participation process regarding the fifth Periodic Safety Review (PSR) of the 900-MW nuclear power plants (NPPs) in France. In the event of a serious accident of one or more of the 32 large scale NPPs, a risk for Vienna and Austria cannot be ruled out entirely. Therefore, we see ourselves as concerned public:

- The available documents indicate that many components installed at the reactors were designed for a service life of 40 years. During the PSR, extensive modernization is planned to ensure continued safe operation to reach a reactor/component life of 60 years. How are components addressed that cannot be replaced? This is especially relevant for components on the primary side of the reactor, where the core is situated. For example, the reactor pressure vessel: What measurement methods are used to assess whether the component in question still meets the necessary safety requirements?

- Regarding ageing, one explicit goal of EDF is not only to maintain the safety level of the installed components and systems, but to reach the safety level of the newest NPP design in France, the EPR. How can this be achieved, when many systems and components at the 900-MW reactors are already approximately 40 years in operation and are subject to natural material degradation? Could you elaborate on which new safety systems can be integrated into the older reactor design and for which this is not feasible?

- A key focus of the fifth PSR is about the defence mechanism against natural hazards like earthquakes, or extreme weather events. For extreme and very unlikely events (maybe even above the design threat) the EPR possesses systems like the core catcher. This system prevents severe consequences, such as corium release to the environment, in case of a core meltdown. How is it planned for the 900-MW reactors to achieve a comparable safety level regarding extreme natural hazards that threaten core integrity?

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- Regarding external threats, the war in Ukraine has shown the vulnerability of nuclear facilities. It became apparent that when nuclear power plants are situated in military warzones, even accidental hits can cause considerable damage. While a war within EU countries is unlikely, are there any plans to enhance the security measures of these reactors as part of this PSR or in future reviews?

For the Vienna Ombuds Office for Environmental Protection

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