**RADIOLOGICAL PROTECTION**

**Radiation Dose contorl**

**PERFORMANCE OBJECTIVE**

Individual dose and collective radiation dose are measured accurately and are maintained as low as reasonably achievable.

**Strength RP.2-1**

**Radiation protection personnel implemented a new methodology for controlling of the lower limit for the equivalent dose of the eye lens implemented by the IAEA Safety Standard GSR Part 3 Radiation Protection and Safety of Radiation Sources, as well as the European Directive 2013/59/EURATOM.** The limit for the equivalent dose for the eye lens exposure was reduced from 150 mSv/year to 20 mSv per a single year. Until now there is no~~t~~ a detailed IAEA guideline how this lower limit is to be controlled. The worldwide experience concerning the eye lens exposure monitoring in nuclear power stations is relatively limited.

To fulfill the new requirement, in 2015 radiation protection personnel performed a study for the monitoring of equivalent eye lens dose and analyzed the possible ways how to implement the new limit. Based on the study, the staff adopted a new methodology for the assessment of the equivalent eye lens dose. This methodology is based on:

* Correlation between the effective whole body external exposure and the equivalent eye lens exposure was established.
* The associated dedicated software, SEOD, for the personal dosimetry was updated.
* Application of pertinent dosimeters in the event there is an indication that the equivalent eye lens dose limit is approached was implemented.

As a result, the site is able to comply with a new regulatory requirement and it is among the first NPPs in the world. The organization has a simple and reliable method for eye lens dose control. The developed methodology could provide a standardized eye lens exposure assessment worldwide.