

## Press Release

### **Completion of the 1st Topical Peer review on 'Ageing management of nuclear power plants and research reactors' under the EU's amended Nuclear Safety Directive**

The European Nuclear Safety Regulators Group (ENSREG) met on the 4<sup>th</sup> of October and approved the 1<sup>st</sup> Topical Peer Review Report "Ageing management of nuclear power plants and research reactors" and related country specific findings. The process will now continue with the establishment of national action plans addressing the peer review results.

Recognizing the importance of peer review mechanisms in delivering continuous improvement to nuclear safety, the amended Nuclear Safety Directive introduced a European system of Topical Peer Reviews (TPR) beginning in 2017 and every six years thereafter. Topical peer reviews are largely inspired by the stress tests undertaken after the Fukushima accident.

The 1st TPR covered the ageing management and was chosen on the basis of the age profile of European nuclear power plants. This review focused on the overall ageing management programmes and the application of these programmes to four selected systems, structures and components namely reactor pressure vessels, electrical cables, concealed pipework and concrete containment structures. Nuclear power plants and nuclear research reactors with a power equal to 1 MWth or more were within the scope of the TPR. Altogether 16 EU member states with Nuclear Power Plants and/or Research Reactors and 3 Non-EU member states (Norway, Switzerland, Ukraine) participated in this TPR.

The 1st TPR was prepared transparently by ENSREG with WENRA's (Western European Nuclear regulators Association) strong technical support. The TPR process and organization was described in the Terms of Reference (ToR)<sup>1</sup> and TPR's technical scope in the Technical Specifications (TS)<sup>2</sup>. Both the ToR and the TS were submitted to Public Consultation and a stakeholder engagement plan<sup>3</sup> was also developed. The process and its content were presented and discussed in a public meeting held in May 2018 and a public meeting will take place in Brussels the 22<sup>nd</sup> November to present the results of this peer review.

The main conclusion of the peer review is that Ageing Management Programmes exist in all countries for Nuclear Power Plants and no major deficiencies were identified in European approaches to regulate and implement Ageing Management Programmes at Nuclear Power Plants. However, the review identified areas where further work in participating countries would enhance their ageing management at the Nuclear Power Plants.

Based on the Topical Peer Review results, the ageing management programmes for Research Reactors are not regulated or implemented as systematically and comprehensively as for Nuclear Power Plants. This may be justifiable due to the variety of Research Reactor designs and

<sup>1</sup> [http://www.ensreg.eu/sites/default/files/attachments/ensreg\\_tpr\\_terms\\_of\\_reference\\_-\\_january\\_2017.pdf](http://www.ensreg.eu/sites/default/files/attachments/ensreg_tpr_terms_of_reference_-_january_2017.pdf)

<sup>2</sup> [http://www.ensreg.eu/sites/default/files/attachments/wenra\\_tpr\\_technical\\_specification\\_-\\_january\\_2017\\_1.pdf](http://www.ensreg.eu/sites/default/files/attachments/wenra_tpr_technical_specification_-_january_2017_1.pdf)

<sup>3</sup> [http://www.ensreg.eu/sites/default/files/attachments/ensreg\\_tpr\\_stakeholders\\_plan\\_-\\_january\\_2017\\_1.pdf](http://www.ensreg.eu/sites/default/files/attachments/ensreg_tpr_stakeholders_plan_-_january_2017_1.pdf)

their potentially lower risk significance compared to NPPs. However, the general conclusion of the review is that more systematic and comprehensive Overall Ageing Management Programmes should be implemented for the Research Reactors, in accordance with a graded approach and with the applicable national requirements, international safety standards and best practices. This requires further attention from both regulators and licensees.

The generic findings identified in this peer review were categorized to good practices and expectations ("*TPR expected level of performance*"). The review also highlighted challenges where further work at a European level is necessary.

The peer review met its generic goals and objectives set out in the Directive and in the TPR Terms of Reference. The peer review enabled countries to review their Ageing Management Programmes, share information and experience, and provided an open and transparent framework for participating countries to develop appropriate follow-up measures. It is an example of what can be achieved through regional cooperation, bringing together regulatory authorities, licensees and their experts to share knowledge and experience.

ENSREG calls on the national authorities of the countries which participated to this peer review to develop a national action plan ultimately by September 2019 addressing the findings of their self-assessment and those of the peer review and to ensure timely implementation of all safety improvement measures in accordance with their safety significance. ENSREG expresses its willingness to participate in the review of the national Action Plan. ENSREG considers that the TPR outcomes should also be exploited at WENRA's safety reference levels and by IAEA in its safety standards.

Detailed information on the outcome of this peer review can be found on the ENSREG Website<sup>4</sup> where the full report and an executive summary are published<sup>5</sup>.

## **Background**

This Topical Peer Review is the first in a series of peer reviews into nuclear safety in Europe that will take place every six years, in accordance with the EU's revised Nuclear Safety Directive.

The topical peer review exercise has been developed by the European Nuclear Safety Regulators Group (ENSREG), an independent, expert advisory group with members from all EU countries and the European Commission, with the technical support of the Western European Nuclear Regulators Association (WENRA). Public was consulted during the development of this topical peer review, as described in the stakeholder engagement plan developed by ENSREG.

As described in the Terms of Reference for the peer review, national self-assessment reports had to be published before the end of 2017, and the peer review process itself had to take place during the first half of 2018. The final TPR report will be published the 29<sup>th</sup> November 2018 on the ENSREG Website. In total 19 countries (16 EU countries, Norway, Ukraine and Switzerland) participated in this peer review exercise by submitting and publishing their national self-assessment reports, and by participating the peer review process. All national assessment reports were published on the ENSREG Website in January 2018.

More than 2300 questions were posed in the desktop review of the national reports. The Peer Review Workshop took place in Luxembourg from 14 to 18 May 2018 involving around 140 participants. The Topical Peer Review report was finalized after the workshop by the TPR Board with the support of the nominated experts and in consultation with the participating countries.

---

<sup>4</sup> <http://www.ensreg.eu/background>

<sup>5</sup> <http://www.ensreg.eu/eu-level-reports>