

**RAPORTEURS' REPORT THE NETHERLANDS**  
**ENSREG NATIONAL ACTION PLANS WORKSHOP**

**1.0 ASSESSMENT OF THE STRUCTURE OF NATIONAL ACTION PLAN**

**1.1 Compliance of the national action plan with the ENSREG Action Plan:**

National Action Plan for the follow-up of post Fukushima Daiichi related activities (NAcP) contains a compilation of all the major conclusions and recommendations contained in the 'Netherlands' National Report on the Post-Fukushima Stress Test for the Borssele Nuclear Power Plant', observations from the peer review process by the ENSREG group, also taking into account the Final Summary Report of the 2nd Extraordinary Meeting of the Contracting Parties to the Convention on Nuclear safety.

**1.2 Adequacy of the information supplied, taking into account the guidance provided by ENSREG.**

The Netherlands' NAcP has four main parts, in compliance with ENSREG-guidance. The first two parts present the national (Dutch) positions on international post-Fukushima observations collected by ENSREG and/or CNS.

The third part presents actions that are specific for the Netherlands and that have not been inventoried by ENSREG and/or CNS, in particular a decision that all licensees with nuclear installations have undertaken a Complementary Safety Assessment (stress test) to assess the robustness of their facilities. This applies to waste management facilities, research reactors, nuclear research laboratories, and the enrichment plant. The fourth part presents details about all post-Fukushima actions and their planning in the Netherlands.

In the presentation at the Workshop, it was shown that a number of relevant measures, in particular regarding bunkered safety systems and severe accident management, had already been taken in the last decades, beginning in the 80s.

**2.0 ASSESSMENT OF THE CONTENT OF NATIONAL ACTION PLAN**

**2.1 How has the country addressed the recommendations of the ENSREG Action Plan?**

Proposed measures addressing site of Borssele Nuclear Power Plant are being implemented by the EPZ N.V. Elektriciteits-Produktiemaatschappij Zuid-Nederland EPZ - licensee of the Borssele NPP. Measures of general nature, such as the amendment of the nu-

clear legislation, off-site emergency preparedness, international cooperation, etc. will be implemented by the state administration, especially Dutch RB.

The Netherlands' NAcP is written as a "stand alone" document and information contained is presented for maximum clarity in the form of tables.

ENSREG recommendations as well as the recommendations from the Peer Review Country Report of The Netherlands are well covered in the NAcP, although regarding the latter, there is a small number of cases where this does not become fully clear from the NAcP alone (for example, regarding the review of the maintenance schedule for equipment related to AM (Peer Review Country Report 4.3). However, these points were clarified during the workshop.

## 2.2. Schedule of the implementation of the NAcP

The implementation of improvement measures identified on European and National level in the aftermath of Fukushima is clearly scheduled. A number of measures are already implemented whereas all other measures will be completed by 2016.

Any problems that may affect implementation of the Action Plan will be considered case by case between the license holder and regulatory authority. If the measure included in the Action Plan is to perform study or analysis, new measures may be identified based on its results.

## 2.3 Transparency of the NAcP and of the process of the implementation of the tasks identified within it

The Netherlands' NAcP informs comprehensively on enhancement of nuclear safety in the Netherlands, in particular on the NPP Borssele.

The Plan has been made available to the general public and the Parliament in English, together with a summary in Dutch. The Parliament and the public will be regularly (at least once per year) informed on progress made in NAcP implementation also in future.

## 2.4 Commendable aspects (good practices, experiences, interesting approaches) and challenges

The NAcP describes specifically the status of identified issues and the proposed actions. Some of the measures are already implemented since they were proposed before the Fukushima events on the basis of Periodic Safety Review results, e.g. bunkered safety systems, alternative UHS, filtered venting system, PARs, or SAMGs for all operational regimes including shutdown conditions use of Probabilistic Safety Assessments in NPP operation as a risk monitor.

The specified timeframe to implement all the improvement measures until end of 2016 is ambitious and commendable. The license holder will report in three month intervals on the progress of NAcP implementation.

The regular and comprehensive information of the parliament can be seen as a good practice, as well as the inclusion of other nuclear facilities than NPPs in the national stress test.

Within the frame of the ongoing PSR and NAcP also the possibilities for in-vessel retention of molten core are investigated. Finding a solution constitutes a challenge, in view of the design characteristics of the Borssele NPP. It is suggested that NL takes note of progress made in this area in other countries and solutions already adopted.

### 3.0 PEER-REVIEW CONCLUSIONS

The Netherlands' NAcP informs comprehensively and well understandable on how the Borssele NPP in the Netherlands is about to implement various observations and conclusions according to the National assessments, the recommendations and suggestions of the European Stress Tests and the conclusions of the CNS process.

The NAcP follows the structure proposed by ENSREG and covers all aspects specified in the ENSREG Action Plan. An additional topic, in particular a decision that all licensees with nuclear installations other than NPP have to undertake a Complementary Safety Assessment (stress test) to assess the robustness of their facilities is added. This applied to waste management facilities, research reactors, nuclear research laboratories, and the enrichment plant. Among many other good practices a long term practice of Periodic Safety Reviews and a comprehensive practical use of Probabilistic Safety Assessments have been pointed out during the workshop discussion.

Within the frame of the ongoing Periodic Safety Review and the NAcP also the possibilities for in-vessel retention of molten core are investigated. Finding a solution constitutes a challenge, in view of the design characteristics of the Borssele NPP. It is suggested that the Netherlands takes note of progress made in this area in other countries and solutions already adopted.

The implementation of improvement measures is clearly scheduled. Progress will be reported by the licensee in three month intervals. The timeframe to implement all the improvement measures until end of 2016 is ambitious and commendable.

Regular information of Parliament as well as inclusion of the other nuclear facilities in the stress test exercise can be also seen as good practices.