ES - Spain

RAPPORTEURS' REPORT SPAIN

ENSREG NATIONAL ACTION PLANS REVIEW WORKSHOP

1.0 ASSESSMENT OF THE STRUCTURE OF NATIONAL ACTION PLAN

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

The National Action Plan of Spain is fully compliant with the ENSREG Action Plan. It covers in appropriate details and in clear structure the implementation status of the ENSREG recommendations.

The actions related to the ENSREG and the CNS recommendations are covered both in integrated tables and in separate manner, to enhance the usability of the document.
The "generic" ENSREG issues are covered as an additional topic, and are marked as "TG".

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

Spain has followed the ENSREG guidance quite closely in its NAcP. The proposed outline was adopted by providing the chapters "Introduction" and "Overview" and by separating the third chapter of their NAcP "Content" into subchapters describing Topic 1-3 (Part I), Topics 4-6 (Part II), additional topics (Part III) and implementation (Part IV). Apart from the Part II section, these sections are quite compact, referring to the attachments concerning the detailed information. However, this approach doesn't hinder the usability of the document.

The four attachments provide detailed tables of actions and issues arising from

1) requirements of the National Regulator (CSN),
2) recommendations and suggestions of the ENSREG peer reviews,
3) ENSREG generic recommendations and suggestions, and
4) CNS 2nd EOM commitments and recommendations.

2.0 ASSESSMENT OF THE CONTENT OF NATIONAL ACTION PLAN

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

The Spanish Regulator CSN issued Complementary Technical Instructions (ITCs) – legally binding orders – to each licensee as conclusions of the stress test process, identify-

ing several requirements which were separated into generic requirements and plant specific requirements. The details of the ITCs are given in Attachment 1 of the NAcP.

The CSN divided its generic and plant specific requirements into three categories: general aspects, additional analyses and implementation measures (marked with codes G, A, and I, respectively).

All aspects from the "national action plan table 2012-10-16" from the NAcP guidance document, compiling the ENSREG and CNS recommendations and suggestions, have been covered. The aspects from the ENSREG compilation of recommendations and suggestions have been explicitly referenced to in the table of Attachment 3.

The section of "Part III, additional topics" covers such issues, which are not otherwise fully covered by the ENSREG and CNS recommendations, but are justifiable. CSN considered all relevant information which became available, e. g. the specific orders issued by the US NRC. CSN issued a specific ITC regarding the potential loss of large areas of a NPP, which issue is an interface between the safety and security boundary.

The regulator assists the licensees in carrying out the actions (e.g. on filtered venting of the containment).

2.2. Schedule of the implementation of the NAcP

The implementation of improvement measures identified at European and National level in the aftermath of Fukushima is scheduled in three terms: short (by the end of 2012), medium (by the end of 2014) and long (by the end of 2016).

The implementation of requirements formulated in the ITCs must be implemented at the latest by the end of 2016.

Large parts of the additional analyses are already finished in short term and just some will then be finished in the medium timeframe. After the completion of these analyses CSN will decide on the appropriateness of establishing further requirements. (NAcP, page 5, chapter 3.1.a).

The completion of the improvement measures is scheduled as follows:

- A minor part is already implemented. Most of them will be completed in the medium timeframe and some items are scheduled for long term.
- Some of the very important back fitting measures – like filtered venting, installation of PARs – are scheduled in the long term.

All operators but one intends to install filtered venting, for the last plant proposes that the filtering effect of its suppression pool is a sufficient alternative.

The developments in the actions of the licensees are required to be reported to CSN quarterly.

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

The NAcP informs comprehensively and well understandable how the NPPs in the country shall be improved in the aftermath of Fukushima according to the National assessments, the recommendations and suggestions of the European Stress Tests and the conclusions of the CNS process. The implementation schedules are clearly provided. The NAcP is accessible on the regulator's website.

A good example for public communication and participation is, that at each site with nuclear power plants a "Local information Committee" is established to inform at least annually the local authorities, NGOs, and the general public about relevant aspects concerning the operation and any other topic which could be considered of interest in respect to the concerned nuclear installations.

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

The NPPs conducted an "Individual plant examination for external events" (IPEEE) according to US NRCs methodology at the beginning of the 90's. After Fukushima Daiichi it has resulted in a requirement to reach a seismic conservative value for PGA of 0.3 g for two independent shutdown paths and other components relevant for accident mitigation. The implementation of these improvements and the margin analysis up to this high level of acceleration are seen as good practices.

Building a new and robust alternative on-site emergency management center and establishing a nationwide emergency support center, with capacity to deliver human resources and equipment to any plant in less than 24 hours, are good practices.

Testing of Turbine Driven Water Pumps and containment isolation under Station Black Out and loss of DC power conditions during each refueling outage are commendable practices.

In the category of "Additional topics" the coverage of the problem of losing large areas at a NPP is a commendable approach.

The fast schedule of additional analysis and the arrangements to keep track of the progress of the licensees by revising their report every 6 months is a good practice. The revised NAcP will be published by the regulator annually.

The specified timeframe to implement all the improvement measures until the end of 2016 is ambitious and commendable.

A challenge for Spain is the appropriate and timely implementation, in its regulation and practices, of the outcomes of the WENRA on-going review of the harmonisation of the reference levels in the field of external hazards.

3.0 PEER-REVIEW CONCLUSIONS

The NAcP informs comprehensively and in a well understandable way how the NPPs in Spain shall be improved in response to the lessons of the Fukushima accident, according

to the National assessments, the recommendations and suggestions of the European Stress Tests and the conclusions of the CNS process and other sources.
The NAcP follows the structure proposed by ENSREG and covers all aspects specified in the ENSREG Action Plan. An important additional topic: potential loss of large areas at a NPP – which is at the interface between safety and security –also was addressed.

The NAcP – along with all EU stress test documents – is accessible on the regulator's website.

At each site with nuclear power plants a "Local information Committee" is established to inform at least annually the local authorities, NGOs, and the general public about relevant aspects concerning the operation and any other topic which could be considered of interest in respect to the nuclear installations.

The implementation of improvement measures is clearly scheduled in three steps: short (until end of 2012), medium (until end of 2014) and long (until end of 2016).
Some of the actual modifications to be implemented are depending on the results of on-going analyses.
The timeframe to implement all the improvement measures until end of 2016 is ambitious and commendable. Nevertheless some measures scheduled for long term are crucial ones, like filtered venting and installation of PARs.
Several good practices could be identified in the NAcP of Spain, therein the issuance of specific Complementary Technical Instructions (ITCs) by the regulator; the maintenance of close co-operation between the regulator and the licensees to supervise the implementation of the action plan; the seismic margin analysis for 0.3 g, remote access to radiation data (including personnel dosimetry data) by bodies of emergency response organization and the buildup of alternate on-site emergency centers and a nationwide emergency support center.
The significance of the periodic safety review (PSR) process – which is also a tool for periodic license renewal in Spain – is further enhanced with the inclusion of severe accident management in the review.

A challenge for Spain is the appropriate and timely implementation, in its regulation and practices, of the outcomes of the WENRA on-going review of the harmonisation of the reference levels in the field of external hazards.

Spain has prepared a convincing and effectively controlled action plan to establish a higher level of safety for its nuclear power plants in the light of the Fukushima lessons.