RAPPORTEURS' REPORT - HUNGARY

ENSREG NATIONAL ACTION PLANS WORKSHOP - 2015

1.0 ASSESSMENT OF THE STRUCTURE OF NATIONAL ACTION PLAN

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

The structure of the Hungarian National Action Plan (NAcP) is compliant with the provided ENSREG guidance. The NAcP includes an update of the National Stress test report as well as of ENSREG compilation of recommendations and of the country peer review report. The findings from the follow-up plant visits are also addressed. Furthermore, the actions which were identified in the 2nd Extraordinary Review Meeting (ERM) of the Convention on Nuclear Safety (CNS) have also been considered.

2015 update:

No changes.

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

The content of the Hungarian NAcP follows the ENSREG guidance very closely and includes an introduction together with four parts I-IV in accordance to guidance. The introduction chapter gives an overview of the whole work which has been performed in connection to stress tests together with a short description of the tasks which will be performed by the authority during the implementation of the actions decided. The information provided in the NAcP is therefore adequate and is considered to be consistent with the ENSREG guidance.

Part IV in the NAcP presents the actions described in Parts I-III in a table format together with the deadlines for their implementation. The table also provides references to the identifiers used in the ENSREG and CNS 2nd ERM recommendations, to the related chapters in the Hungarian national report TSR (Targeted Safety Re-assessment) as well as in the authority resolution ordering their implementation.

2015 update:

The report has been supplemented with a new part (V) in which the progress of the tasks is described.

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 Hungarian authority required a detailed implementation action plan from the licensee which included the detailed description of each action, the schedules of their planned implementation and the final deadlines thereof. After reviewing the plan, the authority ordered the implementation of the actions in an authority resolution on December 17th 2012.

2015 update:

No changes.

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. The implementation of the last actions is planned before the end of 2018. However, it should be mentioned that for some actions the deadlines were brought forward.

2015 update:

Substantial progress has been made for actions identified in the NAcP from 2013. No actions have been removed or added to the plan. Many actions have been completed before the deadline. However, a few of the actions are delayed due to change of technical solution content. The delayed actions are dealing with reinforcement of 400/120 kV substations (11), new fire brigade barrack instead of reconstruction (2), Construction of a new Backup Command Centre (49) and Air-conditioning and power supply of Protected Command Centre (48). Two actions (2 and 3) have been modified due to change of technical content.

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

The regulator informs 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. The NAcP as well as previous reports are accessible on the regulator's website; in English as well as in the national language.

Due to prolonged implementation periods, the supervision over the execution of actions is divided into two basic groups: One group of supervision is directed to modifications which are nuclear safety related. If approval is required for a certain modification, then the supervision

should be performed in line with Governmental decree which includes licensing procedure, inspection and evaluation and if appropriate enforcement. The other group of supervision is directed to evaluation of performed studies, analyses, assessments, etc., i.e. actions which are not related to any modifications.

In order to facilitate the tracking process of the implementation of the action plan, the licensees has to prepare progress reports every six months. The reports should present the progress in the implementation of each action individually including the difficulties, decision points, any change in the schedule as well as any such issue that may have effect on implementation. The progress of the implementation of actions is also supervised by the authority in the frame of comprehensive and targeted inspections. These inspections are integrated to the yearly inspection plan of the authority.

2015 update:

The revised NAcP has been published on the HAEA website.

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

The nuclear safety requirements for nuclear facilities will be reviewed based on the lessons learned from the Fukushima accident.

The implementation of the actions will be followed up by the authority through progress reports every six months prepared by the licensees and which will include the progress in the implementation of each action individually. The progress of the implementation of actions will also be supervised by inspections which are integrated to the yearly inspection plan of the authority. The scope of the supervision of the execution of the actions will depend on the type of actions that will be taken, i.e. if the action includes any modifications or not. Due to prolonged implementation periods for the actions listed in the NAcP, this type of supervision is relevant and might be of interest for other parties.

The implementation of improvement measures is clearly scheduled with the specified timeframe to implement all the measures until the end of 2018.

Hungary has fully integrated the IAEA nuclear safety fundamentals and standards as well as WENRA reference levels into the nuclear safety legislation.

The issue of prevention of containment overpressure has been considered and different solutions have been discussed. Based on the latest analyses results, the recommended action is focused on long term cooling of the containment. For this purpose an active cooling system will be installed.

A challenge for the authority is to verify that the external containment overpressure protection is suitable and that the modifications will not impair any existing safety functions and will satisfy the nuclear safety principles.

2015 update:

A good practice that could be mentioned is the development of severe accident simulator for Technical Support Centre staff and Main Control Room Staff. Another good practice is the construction of a Backup Command Centre which is located outside the nuclear power plant and constructed with high security requirements.

2.5 Technical basis related to main changes and relevant outcomes of studies and analysis

The technical basis leading to the main changes identified in the NAcP is dealing mainly with two actions. In the first case (action 2), a new fire brigade barrack will be constructed instead of reinforcement of the old building. In the second case (action 3), the reinforcement of medical and laboratory building will be performed instead of new or reinforced demineralized water tanks.

Regarding relevant outcomes of studies and analysis, three actions can be mentioned. One action (9) dealing with automatic shutdown due to seismic event has been revisited. The second action (28) is dealing with PSA for closed reactor states under 150 °C primary circuit temperature where measures should be taken after 2 weeks. The third action (30) is dealing with long term depressurization of containment where the feasibility study has among others shown that the filtered venting is not necessary.

3.0 PEER-REVIEW CONCLUSIONS

The Hungarian NAcP from 2013 provided clear and comprehensive information on how the safety of their NPPs will be improved following the recommendations and suggestions of the European Stress Tests and the recommendations from the CNS. The structure of the Hungarian NAcP was compliant with the provided ENSREG guidance. The same applied for the content of the report which follows the ENSREG guidance very closely. The information provided in the NAcP was adequate and covers all aspects specified in the ENSREG Action

Plan. The implementation of improvement measures was clearly scheduled with the specified timeframe to implement all the measures until the end of 2018.

In the updated NAcP from 2014, substantial progress has been made for actions identified in the NAcP from 2013. No actions have been removed or added to the plan. Many actions have been completed before the deadline. However, there are some actions which are delayed and some actions which have been modified mainly due to change of technical content.

The challenge for the actions which are still not completed is connected to management of delays, public procurement and the Hungarian authority to keep track of actions. As good practices identified during the implementation process, one can mention the development of a severe accident simulator for Technical Support Centre staff and the new backup command centre which is located outside the nuclear power plant and constructed with high security requirements.