NUCLEAR SAFETY STANDARDS COMMITTEE

(NUSSC)

Report of the 33rd Meeting

2 to 5 July 2012

International Atomic Energy Agency
Vienna
SUMMARY OF CONCLUSIONS OF 33rd NUSSC/33rd WASSC MEETING ON DRAFT SAFETY STANDARDS REVIEWED

► NUSSC/WASSC concluded that DS407 Safety Guide on Criticality Safety, with NUSSC/WASSC comments implemented, (including simplification of the proposed title), can be submitted to the CSS.

► NUSSC/WASSC concluded that DS446 Safety Guide on Commissioning, with NUSSC/WASSC comments implemented, can be submitted to the CSS.

► NUSSC/WASSC concluded that DS450 Safety Requirements on Decommissioning of Facilities (GSR Part 6), with NUSSC/WASSC comments implemented including removing any suggestion that “entombment” is a strategy for decommissioning and ensuring proper allowance for flexibility in the time-frames (such as the usual need for a short transitioning period), can be sent to MS, after the approval of WASSC chairman.

► NUSSC/WASSC concluded that DS460 DPP Safety Guide on Communication can be sent to CSS. Duplication with work of the NEA Forum on Stakeholder Confidence should be avoided.

► NUSSC/WASSC concluded that DS462 Document Outline (review of several Safety Requirements documents) can be submitted to the CSS.

SUMMARY OF CONCLUSIONS OF 33rd NUSSC MEETING ON DRAFT SAFETY STANDARDS REVIEWED

► NUSSC concluded that DS430 Safety Guide on Design of Electrical Power Systems for NPPs should reflect the results of the Second CNS Extraordinary Meeting. Conference call will be organized to assess the consistency of the draft with the Meeting results. If there is no substantial need to change the draft, DS430 can be sent to MS for comments.

Volunteers to participate in the conference call shall inform the Secretariat.
NUSSC/WASSC JOINT SESSION - GENERAL ISSUES

Opening of the Meeting (Agenda Item 1) – Mr J. Lyons, DIR-NSNI, and Mr P. Hahn, DIR-NSRW, welcomed the NUSSC and WASSC Members to their 33rd Meetings. They made some remarks on issues that they considered important to be conveyed to the Committees.

Main events since the last NUSSC and WASSC meetings:

- Progress in the implementation of the IAEA Nuclear Safety Action Plan after the Fukushima accident: an International Experts’ Meeting in March 2012 (reactor and spent fuel safety), an International Experts’ Meeting in June 2012 (enhancing transparency and communication effectiveness in the event of a nuclear or radiological emergency). Forthcoming: Meeting on Protection against Extreme Earthquakes and Tsunamis (September 2012) and another one on Decommissioning and Remediation after a Nuclear Accident (in January 2013).

- CNS Extraordinary Meeting (EM), end of August 2012, on post Fukushima actions.


- INSAG: publication of INSAG 26 (Licensing the First Nuclear Power Plant). INSAG is also preparing a report on “leadership and management for safety”. The INSAG Forum will take place in September 2012 and will be on the evaluation of the progress of nuclear safety at the international level.

- Review services proposed by the IAEA: IRRS missions in Sweden, Greece, Slovakia and shortly Finland; OSART missions in China (Honghianhe), in France (Cattenom) and soon in Brazil, Mexico, Switzerland, Czech Republic, Bulgaria, India, France) as well as an expert mission to Korea (Kori).

- A new Section Head for the Research Reactors Section (Mr A. Shokr replacing Mr H. Abou Yehia).

- The contribution of NUSSC and WASSC on the consideration for the development of safety standards following the first lessons from the Fukushima Daichi accident. The discussion on DS462 DO is to that end very expected.

- The issue of the remediation of contaminated sites after an accident. To be discussed in detail at the Senior Regulators Meeting; in addition during this meeting, the DPP for the revision of the existing Safety Guide on Remediation Process for Areas Affected by Past Activities and Accidents Safety Guide (WS-G-3.1) is in the Agenda for discussion and approval to be forwarded to CSS.

Under Agenda Items 2 Chairman’s Remarks, 3 Adoption of the Agenda for the Joint Session, 4 Administrative Arrangements for the Meeting relevant decisions were agreed upon and information was provided on the past and future activities of NUSSC and WASSC.

NUSSC Chairman highlighted the items as follows (items cover also NUSSC Chairman’s introduction provided under 33 NUSSC Agenda Item N1.1):

- In terms of review of safety standards, only a few documents are on the Agenda. It was the same for the previous meeting. It is therefore expected that upcoming meetings could be busier.
• The revision of the definition of “nuclear installations” will probably generate an increase of the number of safety standards to be reviewed by NUSSC and WASSC.

• The accident at the TEPCO Fukushima Daichii Power Plant in Japan, still on-going and, will obviously have consequences on the safety standards elaborated by the IAEA. Even if drawing all the conclusions of this accident will take several years, it is important to start as of now to draw lessons in the safety standards that are under preparation and to identify the safety standards already published that need to be updated. A meeting of a NUSSC Working Group took place in January 2012 and enabled to review a table prepared by the IAEA linking the first lessons (106) from the accidents and the safety requirements published by the IAEA. The results of this review have been presented at the meeting of the Four Safety Standards Committees and then to the CSS in March 2012. The establishment of some 30 new requirements and the update of some 20 existing requirements have been proposed. The needs for evolution are shown in the DS462 DO which is on the agenda of the meeting. The mechanism for revision is “original” because this DO covers several safety standards and identifies the paragraphs to be revised or created. This might mean new modes of update. The Secretariat would like to forward this DO to the CSS for its endorsement during its October 2012 meeting.

• If a thorough examination has been conducted by the IAEA for the safety requirements, this does not apply to the safety guides. Only a preliminary macroscopic analysis has been conducting until now (see the NUSSC Working Group meeting). CSS in its letter dated 31 May 2012 to the IAEA DG, underlines the effort that should be taken in order to update the guides to handle simultaneously the evolutions of the safety requirements and the evolution of the requirements linked to the lessons learnt from Fukushima. The meeting will be the occasion of a first discussion with the IAEA on that matter.

• CSS in its letter dated 31 May 2012 to the IAEA DG clearly expresses the necessity to focus on clear actions:

In particular, the CSS members perceive and emphasize the necessity of staying focused on a few most significant issues that have already clearly emerged as lessons from the accident at TEPCO’s Fukushima Dai-chi Nuclear Power Plant. I would like to mention at least some of these:

• The further strengthening of defence-in-depth by better taking into account extreme natural hazards that may exceed the levels taken into account in the current design basis and in the current safety requirements. Such situations can result in the devastation and isolation of the site, an event of long duration, unavailability of numerous safety systems, simultaneous accidents at several plants including their spent fuel pools, and the occurrence of radioactive releases.

• The importance of means for maintaining containment integrity, which is critical as the last barrier to protect people and the environment against radioactive releases resulting from a nuclear accident and the importance of means for maintaining core cooling and spent fuel cooling as critical safety functions.

• The importance of harmonized approaches to support international trade, including for commodities and foodstuffs.

• The need for a justification process and optimization criteria for remediation and rehabilitation as well as advice on the transition from an emergency to a post-emergency phase.
Recently, a new Committee — Nuclear Security Guidance Committee (NSGC) — was established in order to advise the IAEA on the elaboration of security standards. The establishment of such a Committee, whose 1st meeting took place in June 2012, was recommended by the Task Force CSS-AdSec which has been functioning over several years. **In order to facilitate the management of the safety/security interface, a so called Interface Group (IG) will be established.** It will be composed of the four Safety Standards Committees Chairmen (NUSSC, RASSC, TRANSSC, WASSC) and the four NSGC representatives. The first meeting will be held at the end of September 2012.

WANO is participating as an observer for the first time in a NUSSC meeting. This follows the Memorandum of Understanding between the IAEA and WANO signed after the Fukushima accident.

This NUSSC Meeting, partially joint with WASCC, is the occasion to promote a collective discussion between NUSSC and WASSC (and eventually between the NUSSC and WASSC representatives from a same country). This also avoids the IAEA to have repetitive presentations and similar discussions on several documents for which both NUSSC and WASCC need to be consulted.

Mr G. Williams, Chair of the WASSC, reinforced the important role of joint sessions of Safety Standards Committees to construct common views and better utilize the resources of Member States and the Secretariat. He also referred to the successful experience of WASSC having joint sessions with RASSC. Finally, Mr Williams noted that with the change in the definition of “Nuclear Installation” to include predisposal waste management facilities in the definition, would imply also having most probably more joint WASSC and NUSSC meetings to discuss topics of common interest.

Under **Agenda Item 5.1 report from the previous meetings of the four Chairs** was provided. Since the last NUSSC meeting, two meetings of the four Committees’ Chairs took place, the first in February 2012 and the second in March 2012, just before the CSS meeting. During those two meetings, the issues discussed were:

- The methodology to identify and process the impacts of the first lessons from the Fukushima accident on the IAEA safety standards. In particular, the conclusions of the NUSSC Working Group in January 2012 and the WASSC WG report of October 2011 were discussed;
- The issues to study in priority during the new mandate of the CSS;
- The Terms of Reference and the modalities of work of the future Interface Group (IG). The four Chairs requested the IAEA to conduct a comparison of the Terms of Reference of the IG and of the four Committees in order to obtain consistency and to avoid any unjustified difference;
- The experience feedback on the preparation of BSS (GSR Part 3) on the co-sponsorship. The SPESS document shall be updated;
- The Chairmen underlined the benefits coming from the “overarching requirements” (formally established or to be established) in the identifications of the needs for evolution of the safety requirements due to the first lessons learnt from the Fukushima accident. They requested the IAEA to develop an electronic tool in order to “visualize” the links between the Safety Requirements and the Safety Guides;
- The benefit to define the modalities to know which version of the safety glossary (and thus which definition) was in force when a safety standard was developed. This reflexion follows
the discussions on the creation of new definitions (in the new BSS or SSR 2.1, etc.) or potential changes in definition (e.g. nuclear installation).

Main topics discussed at the 31st CSS Meeting (March 2012), first meeting of its fifth term (2012 - 2016) were presented under the Agenda Item 5.2 a:

- Designation of the new CSS president (D. Drabova – Czech Republic);
- Report on the CSS work during its previous mandate, including the definition of the long term structure of the safety standards, the task Force CSS-AdSec and the first actions taken following the Fukushima accident;
- Progress of the Nuclear Safety Action Plan following the Fukushima accident;
- Discussion on the impact of the first lessons drawn from the Fukushima accident on the safety standards, including the method followed and the progress in its implementation;
- Conclusions of the Task Force CSS-AdSec;
- Work done by NUSSC, RASSC, TRANSSC and WASSC since the last meeting;
- Priorities for the new CSS mandate (including the finalization of the General Safety Requirements, the improvement of the process of experience feedback from the application of safety standards, radon exposure, medical exposure, the application of the justification principle for exposure, the harmonization of criteria for exemption and clearance of radioactive material, the knowledge management, taking into account the human factor in the regulatory system, the interface safety/security, the recommendations for the PSA and the management of severe accidents…)

Concerning the Safety Standards, the CSS approved:

- The publication of:
- The DPPs on:
  - The Safety Guide on Radiation Safety and Regulatory Control for Consumer Products (DS458 DPP);
  - The Safety Guide on Management of Radioactive Residues from Mining, Mineral Processing, and other NORM Activities, revision of WS-G-1.2 (DS459 DPP);
  - The Safety Guide on Safety in Medical Uses of Ionizing Radiation (DS399 DPP);
  - The Safety Guide on Protection of the public against indoor exposure to natural sources of radiation (DS421 DPP);

More generally, the CSS thinks that all General Safety Requirements will most probably be published by the end of 2013 and that the Specific Safety Requirements will most probably be published by the end of 2015.
The information on the progress on the Review of Safety Standards was provided under Agenda Item 5.2 b.

Under Action 6 of the Action Plan, exchange of letters between the IAEA DDG and the CSS Chair at the beginning of summer 2011 confirmed the need for an action in terms of safety standards with the objective to have an inventory of Safety Standards to review by June 2012. Following the CSS meeting in March 2012, the CSS Chairman submitted a letter stating the progress. The progress made will again be reviewed after the CNS EM and the IAEA GC.

During its two previous plenary meetings and its sub-group meeting in January 2012, NUSSC examined the analysis conducted by the IAEA which consists of a list of lessons drawn from the Fukushima accident and of a “gap analysis” at the safety requirements level and a list of safety guides to be potentially updated or drafted.

Regarding the safety requirements, the inventory, resulting from the NUSSC work with the review by RASSC, TRANSSC and WASSC members, was presented to the CSS in March 2012. This resulted in the document DS462 DO as well as in the letter of the CSS Chairman dated 31 May 2012.

The IAEA also presented the CSS point of view as expressed in the letter.

Generally:

- 106 lessons were identified by the IAEA;
- No important gap was identified at the level of the 450 “overarching requirements”;  
- It was suggested to create 31 related requirements and to modify 20;
- The needs for additional requirements concern:
  - Situations involving long term loss of electrical power;
  - Identification of external events, including those that may affect the infrastructure around the nuclear installations.
  - To maintain at all times the information on key parameters characterizing the status of the installation.

During the meeting, the discussions were about:

- How the results of the meetings at the end of August and in September will be taken into account in the DS462 DO. For the IAEA, there are no a-priori reasons to think that it might be affected. Notwithstanding this, the text of the future requirements shall take into account the conclusions of those meetings;
- The potential consultation of MS in 2013 and the eventual adjustments of DS462 DO. The IAEA indicates that the process will be the same as for any other Safety Standard but that the DO is much more precise because it targets the issues that will have to be revised.

During the meeting, under Agenda Item 6, two presentations were given by NISA staff, namely Mr Maki from NUSSC and Mr Oue from WASSC. They covered:

- The state of the installations at the TEPCO Fukushima Daichii power plant;
- The measures adopted for the treatment/circulation of highly contaminated waters;
- The current actions to better characterize the state of the installations (endoscopes, robots…);
- The doses recorded for the workers (some 30 workers with doses higher than 100 mSv, 4000 with doses higher than 20 mSv and more than 17000 with doses lower than 20 mSv);
The investigations/approaches in progress to understand the causes of the accident. As of today, some 30 clauses that would have helped to better face the accident were identified.

- Stress tests in Japan (including an IAEA mission on that issue in January 2012);
- Solutions envisaged to withdraw the fuel stored in the pools of reactors 3 and 4;
- Solutions envisaged to manage the solid radioactive waste on site;
- The extent of contaminated areas around the site, the partial release of evacuation measures and the approach related to the decontamination of affected zones;
- The volume and the envisaged management of waste in the contaminated areas or coming from the decontamination operations;
- The reform of the Japanese institutions ensuring the oversight of nuclear safety (creation by the end of summer 2012, within the Ministry of Environment, of a Nuclear Regulatory Commission, composed of four Commissioners, one Chair, supported by MEXT, METI, NSC and JNES);
- Regulatory evolutions that happened in June 2012 (lifetime limit — 40 years — taking into account severe accidents, retroactivity conditions “backfitting rule”…) and to come in 2013, as well as new safety requirements to come, taking into account current NSC guides and the lessons from the Fukushima accident and IAEA safety standards.

Following questions, it is indicated that the stress tests are on-going on the installations for the spent fuel reprocessing but there are differences between stress tests for NPPs and for spent fuel reprocessing. The reprocessing plant is currently shut down. The Japanese representative indicates that the two main causes of the accident are an underestimation of the tsunami risk and the absence of “backfitting rule”.

**Agenda Item 7**

Following the Ministerial Conference in Vienna in June 2011, two main working areas appeared:

a) One presented to the Board of Governors and GC in September 2011 which is related to a set of actions concerning assistance missions and safety standards;

b) The other one, more focused on safety standards will have to be approved by the CSS.

The Action Plan of the IAEA described in the document GOV/2011/59-GC (55)/14 was approved during the 2011 GC. It defines a programme of work in order to reinforce safety globally. It sets up actions based on the Ministerial Declaration of June 2011, the conclusions and recommendations of working groups and the experience that they reflect, notably the INSAG letter-report (GOV/INF/2011/11) following the Ministerial Conference in June 2011, but also measures to facilitate consultations with MS.

The Action Plan contains 12 main actions, composed of various elements devoted to:

1) Safety assessments in the light of the accident at TEPCO’s Fukushima Daiichi Nuclear Power Plant (Undertake assessment of the safety vulnerabilities of nuclear power plants in the light of lessons learned to date from the accident);

2) IAEA peer reviews (Strengthen IAEA peer reviews in order to maximize the benefits for Member States);

3) Emergency preparedness and response;

4) National regulatory bodies (Strengthen their effectiveness);

5) Operating organizations (Strengthen their effectiveness);
6) **IAEA Safety Standards** (Review and strengthen IAEA Safety Standards and improve their implementation);

7) International legal framework (Improve its effectiveness);

8) Member States planning to embark on a nuclear power programme (Facilitate the development of the infrastructure necessary for Member States embarking on a nuclear power programme);

9) Capacity Building;

10) Protection of people and the environment from ionizing radiation (Ensure the on-going protection of people and the environment from ionizing radiation following a nuclear emergency);

11) Communication and information dissemination (Enhance transparency and effectiveness of communication and improve dissemination of information);

12) Research and development (Effectively utilize research and development).

Those 12 main actions are broken down into 39 sub-actions which lead to approximately 170 activities (i.e. approximately 650 tasks).

The IAEA established a team to coordinate and follow the progress of the action plan, within the IAEA and with other stakeholders (WANO, etc.). This team, led by Mr G. Caruso, is composed of staff from IAEA NS and NE Departments.

* Since the Action Plan has been launched, the IAEA has:
  - Developed a methodology for the stress tests, available for interested MS;
  - Organized support missions to Japan;
  - Organized dedicated meetings (International Expert Meeting – IEM) like the one in March 2012 on reactors and spent fuel safety (44 States and four International Organizations ~ 230 participants), the one in June 2012 on transparency and communication in the event of a nuclear or radiological emergency (53 States and International Organizations ~160 participants) or the one to be held in September 2012 on Protection against Extreme Earthquakes and Tsunamis or in April 2013 on effective nuclear regulatory systems…
  - Included a “Fukushima” module on IRRS and EPREV missions and reinforced the issue of severe accidents management in OSART missions;
  - Increased the publications related to the results of peer review missions;
  - Worked to reinforce the international capacities for response to emergency situations (RANET, JPLAN…);
  - Started the process of reviewing the safety standards;
  - Set up a formal cooperation with WANO (e.g. to better coordinate the OSART missions and the WANO peer review);
  - Reinforced its actions for countries embarking on a nuclear power programme.

At the meeting, Committee members discussed the following issues:
  - The updating of the IAEA Self-Assessment IRRS guide in order to include the Fukushima additions. The new version of the guide will be available for fall;
  - The modalities enabling to decide upon the need of an IEM;
- The provision of presentations delivered during IEM. It appears that as at the moment, those presentations are only available on a website where you have to pay.

- Presentations of the International Expert Meetings related to the Fukushima Dai-ichi Accident should be made available on the Internet and easily downloaded. **NUSSC and WASSC asked the Secretariat to clarify whether the presentations delivered during the IEM are available for interested person free of charge.**

The CNS 2nd Extraordinary Meeting will be held at the end of August 2012. This meeting will focus on the actions by the CPs following the Fukushima accident.

**Agenda Item 8 - Nuclear Security Committee**

Mr I. Barracough, Scientific Secretary of NSGC, made a presentation on the NSGC. In the Nuclear Security Series, several documents have already been published by the IAEA and some 20 documents are currently under preparation. Before publication, the documents were submitted for comments to the MS (120 days) and reviewed by the AdSec even though it was not strictly in its mandate. Moreover, the AdSec members are appointed personally and not as representatives of their country. In 2009, the Task Force AdSec-CSS was established and gave its conclusions at the end of 2011.

1. Based on these conclusions, the IAEA decided to establish the **Nuclear Security Guidance Committee (NSGC)** which held its first meeting in June 2012 (the next meeting is foreseen from 10-14 December 2012). The NSGC, where 53 MS are represented, is chaired by Mr G. Emi-Reynolds (Ghana).

   Its implication in the different steps of the preparation of a document (from the DPP till the publication) is largely similar to the Safety Committees for the safety standards. However, it does foresee a fast track option and the deletion of some intermediary consultation steps.

2. In order to facilitate the interface between the Safety Standards Committees and the NSGC, an **“Interface Group” (IG)** is going to be established and will be composed of the four safety committees’ chairs and four NSGC representatives. This group’s mandate will be to review draft DPPs in order to identify the Committee(s) (NSGC, NUSSC, RASSC, TRANSSC, WASSC) to be associated for the preparation of the document and to identify the leading Committee for that document. This work will be done on the basis of IAEA preliminary conclusions (to be confirmed or not).

   As of today, the IAEA has 55 DPPs available (in all collections) and all of them will be on the agenda of the first IG meeting (24-25 September 2012).

3. In terms of developing documents of the Nuclear Security Series, the following steps, besides the establishment of the Interface Group include: updating of the roadmap of the documents to be issued, the thoughts on the participation (as observers) of international organizations, the creation of a document similar to the SPESS one and the elaboration of a Security Glossary.

During the meeting, the discussions were about:

- The vocabulary used in the Safety Series and Security Series documents (safety Glossary and security glossary). It was noted that terminology used in different fields might not be the same and harmonisation was needed.

- The possibility of including “sensitive” information in the Security Series documents. The IAEA confirms that those documents, which are supposed to be public, should not include such information.
The role of the IG and the CSS in the validation of the Nuclear Security documents;

The fact that the IG members represent their committee and not their country. For the IAEA, the composition of IG could evolve over time, and finally be composed of the committees’ chairs;

The notion of interface between safety and security. The IAEA indicates that including cross-references does not constitute an interface. There is an interface when specific paragraphs are to be written about safety in a security document or vice-versa;

The fast track option for the lowest category (which would not be the equivalent of safety guides for safety standards). This process does not require the MS consultation and does not receive the approbation from NSGC;

The utilisation of the IAEA website for the NSGC and the possibility to have less access restrictions. The IAEA indicates that so far the protections will be kept but in the longer term, it will tend to get closer to the modalities of the other committees.

► NUSSC and WASSC took note with satisfaction of the establishment of a process for the elaboration of security series documents largely similar to the process in place for the safety standards and affirm their will to work in harmony with this committee.

► In addition to the two slides presented by the IAEA, NUSSC and WASSC would like to have a few-page document introducing the process of elaboration of a security series document and of documents which have interfaces between safety and security, as foreseen today. Of course, this could evolve depending on the experience.

► NUSSC and WASSC encouraged the IAEA to gather in a single document (SPRESS or other) the processes of elaboration of safety standards and of safety series.

► NUSSC and WASSC underline the importance to harmonize as quickly as possible the terminology. The actions in progress on the revision of the safety glossary must be the first step in that direction.

Agenda Item 9 Report on the Joint Convention Review Meeting and 2nd CNS Extraordinary Meeting preparation

The 4th JC RM was held in May 2012 and involved over 600 delegates from 63 Contracting Parties (CPs). Its preparation led to more than 3200 questions on the CPs’ national reports.

The IAEA — Secretariat of the Joint Convention — has made the Summary Report of the Review Meeting available via the following link:

http://goto.iaea.org/jointconvention

Improvements for future review meetings, as well as other arrangements to ensure continuity between review meetings, were identified through the deliberations and were approved at the Review Meeting. Proposals were agreed on enhancing the continuity of on-going dialogue between review meetings and on a mechanism to ensure coherence between the Joint Convention and the Convention on Nuclear Safety.

The CNS 2nd Extraordinary Meeting, as decided in April 2011 during the 5th RM of this Convention, will be held in August 2012. Over a period of 5 days, it intends to enhance safety through exchanges
on lessons learnt from the Fukushima accident as well as to look at the efficiency of the CNS. For the first objective, exchanges will take place around 6 topics (see CNS public web: http://www-ns.iaea.org/conventions/nuclear-safety.asp?s=6&l=41).

2. NUSSC/WASSC JOINT SESSION - REVIEW OF DRAFT SAFETY STANDARDS (DSs)

2.1 DS407 SG on Criticality Safety in the Handling of Fissile Materials in Facilities and Activities

The DPP for this guide was approved end of 2007. Consultation of MS took place by the end of 2010; it led to 600 comments. A consultancy meeting took place in June 2011 to handle those comments. The draft guide was reviewed again by the technical editors which led to its version 7.

Prior to the NUSSC, some 300 comments were formulated. A version (v8), taking into account those comments was put online a few days before the meeting. 80 % of those comments were accepted by the IAEA.

The IAEA indicates that the first lessons from the Fukushima accident and their impact on the requirements known as of today do not imply so far any change to the content of that guide.

During the meeting, Committee members discussed the following:

- The title of the document. It seems better to go back to the previous title (Criticality safety in facilities and activities handling fissile material) or to have a shorter one (Criticality safety in the handling fissile material).
- The second sentence under 1.1 should be deleted. The IAEA accepts that deletion.
- Definitions put as footnotes. The IAEA considers this acceptable and that there is no need to add those in the Safety Glossary.
- A few explanations on the passive/active systems or administrative provisions;
- Provisions mixing internal and external transport;
- Provisions specific to the manufacturing of MOX fuel appear to be insufficient for ENISS (§5.10). The ratio PuO2/total quantity of oxides will be inserted.

► NUSSC and WASSC suggest that the title becomes “Criticality safety in the handling fissile material”.
► NUSSC and WASSC draw TRANSSC attention to sections 5.73 to 5.75.
► NUSSC and WASSC agreed the document, with NUSSC/WASSC comments implemented, can be submitted to the CSS.

2.2 DS446 SG on Commissioning for Nuclear Power Plants

Mr Martynenko gave a presentation on the draft. The DPP for that guide was approved in the mid of 2010. The Member States’ consultation took place end of 2011. Prior to the NUSSC meeting, some 200 comments were expressed. The review by IAEA technical editors also took place. The comments
were largely accepted by the Technical Officer and a new version of the document was posted on the IAEA website before the meeting of the Committees.

During the meeting, the following exchanges took place:

- Follow-up on some comments;
- Comments that Germany didn’t submit in time, essentially editorial;
- Paragraph 2.3 that sets the objectives allocated to the start of testing, and in particular the last two bullets – it was agreed to merge the two bullets.

NUSSC and WASSC agreed that the document, with NUSSC/WASSC comments incorporated, can be submitted to the CSS.

2.3 DS450 SR on Safe Decommissioning of Facilities

Ms M. Wong, WES-NSNW, introduced the draft Safety Requirement on Decommissioning (DS450), addressing the suite of safety standards applying to decommissioning and the recent history of development of the revised Safety Requirements document.

Ms Wong highlighted the issues that were identified at a previous Technical Meeting held in January 2012 to gain feedback on the experience of applying the decommissioning safety standards, and the input from SSC’s members, on the following:

- **Decommissioning strategies**, in particular entombment, considered as a strategy in which all or part of the facility is encased in a structurally long lived material with no further decommissioning action. Notwithstanding this, entombment is not currently considered to be a justifiable option for normal planned shutdown. It could only be considered under exceptional circumstances for existing facilities;

- **Timeframes** for two relevant steps in the decommissioning planning: The first one related to the periodic review of the initial decommissioning plan by operator and reviewed by regulatory body, set in WS-R-5 to at least every five years or as prescribed by the regulatory body. The second one, related to the final decommissioning plan is submitted for approval within two years of the cessation of authorized activities, unless an alternative schedule is prescribed by the regulatory body; and

- **The Title of the document**

Ms Wong also informed the SSC’s on the comments received by from the SSC’s members: a total of 146 comments were received from Belgium, Germany, Spain, Ukraine, United Kingdom, USA and ENISS. From them 102 were accepted. Ms Wong informed SSC’s on the main topics identified in the comments and their resolution as:

- Redrafting of Safety Requirement 1 on radiation protection, to “Exposure during decommissioning shall be considered as an authorized planned exposure situation and the requirements of the Basic Safety Standards (BSS) shall be enforced during decommissioning”;

- Use of Terminology: as stated in the Safety Glossary, and there is no need to include a definitions chapter;

- Definition of “terminating the authorization” as “Termination involves the demonstration of compliance with the conditions of the authorization for decommissioning the facility,
removal of this authorization, and the release of the facility for restricted and unrestricted use.”

- The implementation of specified timeframes for conducting decommissioning actions is needed because it can impact on safety and furthermore, the regulatory body requires these timeframes to carry out inspections.
- Inclusion of the possibility of decommissioning a part of the facility (i.e., partial decommissioning).

After the presentation of the document, the following items were discussed:

- SSC’s members expressed its views that the simple title “Decommissioning” is preferred, instead of the recently amended title “Safe decommissioning of facilities”;
- “Entombment” should not be included as a decommissioning strategy but should be kept in the document as a “remediation option” or some type of option;
- There were agreements on keeping the timeframes in the document;
- Suggestions to address operational facilities at disposal facilities were received;
- Suggestions were received to avoid inconsistencies regarding the treatment of operational waste in the draft document;
- The revision of the initial Decommissioning Plan every five years was identified as best practice by several SSC members. Canada, Belgium, and Czech noted they are doing updating every five years.

The NUSSC and WASSC members agreed that the draft Safety Requirements, with the incorporated comments should be sent to WASSC (leading Committee) Chair for approval before sending it to Member States for comments.

- NUSSC and WASSC agreed that the document, with NUSSC/WASSC comments implemented, can be sent to MS, after the approval of WASSC Chairman.

3. NUSSC/WASSC JOINT SESSION – REVIEW OF DOCUMENT PREPARATION PROFILES (DPPs)

3.1 DS460 DPP Public Communication (Safety Guide)

This document is intended to facilitate the implementation of the requirement 36 of GSR Part 1 (“The regulatory body shall promote the establishment of appropriate means of informing and consulting interested parties and the public about the possible radiation risks associated with facilities and activities and about the processes and decisions of the regulatory body”).

Prior to the NUSSC meeting, more than 80 comments were formulated and some 15 comments were accepted by the IAEA. An updated version of the DPP was posted on the IAEA website a few days before the meeting.

During the meeting, the discussions were about:

- The use of the term “stakeholder” which is defined in the IAEA Safety Glossary;
- The concepts of transparency and openness to stakeholders;
- The title of the document, notably mentioning or not the regulator. After discussion the title would be “communication and consultation with interested parties”;
- The importance of communication and consultations directly conducted by the operator;
- The fact that this guide does not apply to communication during emergency situation. This is consistent with the Requirement of GSR Part 1. Moreover, the IAEA has also started actions related to communication in emergency situations (June IEM).
- Taking into account publications from OECD/NEA on that issue;
- The potential aspects related to the interface safety/security.

▶ NUSSC and WASSC agreed that the DPP can be sent to CSS.

3.2 DS462 Document Outline (DPP) Revision through addenda of GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4

This document follows the work started since the Fukushima accident in order to identify the necessity to revise some safety requirements and to create new ones. It is based on the “gap analysis” realized by the IAEA during 2011 and its review by the Committees, in particular by the NUSSC Working Group in January 2012. It suggests the update of 20 requirements and the creation of 31.

The IAEA indicates that all committees and the NSGC will be associated to the review of this document because it deals with requirements. WASSC already provided its inputs on the safety requirements for waste management (WASSC WG meeting in October 2012, Ref: WASSC 33 Report).

Prior to the NUSSC meeting, more than 24 comments, mainly editorial, and 15 were not accepted. The rest was integrated.

During the meeting, the discussions were about:
- The timetable foreseen by the IAEA, which could be a bit optimistic;
- The interface with other recommendations (safety guides) and their update. The IAEA indicates that the recommendations have to evolve if the requirements do so but that the recommendations could also evolve while the requirements won’t if it appears that some additional recommendations are needed;
- Glossary: the term DEC (design extension condition) is now used in SSR 2.1 while the Annex of the DPP often uses the BDBA (beyond design basis accident). The IAEA indicates that it will try to use the new terminology, notably in SSR 2.2. This issue will be checked on a case by case.

▶ NUSSC and WASSC approved the transmission of the DO to CSS. NUSSC and WASSC underlined that the schedule (new requirements discussed by the Committees in Oct/Nov 2012 and consultation by the MS starting Dec 2012) could be optimistic.

▶ NUSSC draws the IAEA attention to the need of using the term DEC and not BDBA while revising the requirements for nuclear installations;
Creation of a group of NUSSC volunteers to follow the development of revised Safety Requirements (under DS462) should be considered if consensus on the new/updated requirements is not achieved at next NUSSC meeting.

4. NUSSC/WASSC JOINT SESSION – MISCELLANEOUS

4.1 Draft Code of Conduct on the Transboundary Movement of Radioactive Material Inadvertently Incorporated into Scrap Metal and Semi-Finished Products of the Metal Recycling Industries

Mr. E. Reber introduced this initiative and indicated that the first thoughts on that issue started in 1998 after the incineration by accident of a radioactive source of Cs137 in Spain and as a consequence of this event, Spain established a national system addressing the potential presence of radioactive material in scrap metal. A conference in 2009 in Tarragona (Spain) has enabled to share the experience gained in this area. More recently, in January 2012 the IAEA Safety Guide SSG-17 (Control of orphan sources and other radioactive material in the metal recycling and production industry) was published.

In 2011, during the GC, it was agreed to continue the elaboration of a non-binding document on that issue, which had already been discussed during the 2010 GC. This Code would be the 3rd Code of Conduct after the one on Research Reactors (2004) and the one on the safety and security of radioactive sources (first published in 2001).

At the end of January 2012, an “open-ended meeting” enabled to finalize a project of code of conduct. It was submitted for consultation to MS in spring 2012 (the consultation will end in July 2012).

During the meeting, discussions were about:

- Taking into account comments transmitted by Russia in the past;
- The role of the Committees in the development of those codes;
- The difference between an IAEA guide and a code of Conduct. The IAEA indicated that a Code allows MS that wish to do so to make a commitment. As this is a Code of Conduct it won’t be submitted to the Committees for their approbation. The IAEA indicates that a Code does not replace a safety standard. It’s an intermediary step between a Convention (legally binding) and a safety standard;
- The fact that a formal commitment is expected for the application of a Code of Conduct but not for the application of a safety standard;
- Members of NUSSC and WASSC are invited to let their country know, if not done yet, about the consultation in progress of MS in order to have those comments expressed.
- NUSSC and WASSC commented on the potential benefits of the possibility to obtain from MSs, for safety standard, commitments equivalent to the ones for Codes of Conduct.

4.2 Progress Report on the Revision of the Safety Glossary

Mr. Delves presented this topic and indicated that the paper version of the IAEA Safety Glossary dates back to 2007. It intends to facilitate a uniform and consistent use of some terms within the safety standards and results in a bottom up approach. The Safety Glossary contains definitions and explanatory notes/examples. There are within the IAEA other safety glossaries but their application is less systematic. It also happens that the terms are defined in the Conventions with a different meaning from the one usually used by the IAEA (e.g. “nuclear facility” in the CNS and Joint Convention).
Several definitions, coming from the BSS revision or from the requirements on the preparation of/response to emergency situations or other reasons (e.g. “nuclear installations”, “siting”), are the reason for the update of the safety glossary, with from now on a “top down” approach, preferably carried by the publication of new safety requirements. It will also be important to progress in the harmonization of the terms used in the safety and security standards. The IAEA recalls that a definition needed for one guide but not made to apply to all safety standards must appear as a footnote in the guide in question. The insertion or the modification of a definition in the safety glossary must be validated during one of the Committees’ Chairs’ meeting.

The IAEA now promotes the use of an electronic version of the glossary, posted on the IAEA website which makes it easier than the paper format. Several persons insist on the benefit to keep stability in the definitions. When an update is available, the IAEA suggests that the Committees’ Chairs validate the new definitions. If an important revision of the glossary is prepared, it could be useful to involve the Committees. The IAEA specifies that there is no deadline for a future revision of the glossary and that it will probably not happen before the update of the requirements related to the preparation and response to emergency situations.
N1. NUSSC SESSION – GENERAL ISSUES

Under Agenda Item N1.1 Chairman’s introduction the Chairman mentioned:

- Technical Officers were requested to systematically include in their presentation an item on the potential implications of the Fukushima accident on the document presented.
- One of the draft safety guides, DS430, on electrical power systems, is in a “new” format with some recommendations in bold character and other in normal font, similar to what currently exists with safety requirements.

Under Items N 1.2 Adoption of the Agenda it was N 1.3 Approval of the Report of the 32nd Meeting, N 1.4 Actions of NUSSC Meetings, N 1.5 Dates of the next meetings and N 1.6 NUSSC Working Methods Issues relevant decisions were done and information was provided on the past and future activities of NUSSC.

N 1.7 Results of the IEC Meeting on Review of Fukushima Lessons Learned

Mr Jean-Paul Bouard (IEC) provided the presentation on the results of the SC 45A group meeting on Review of the Fukushima Lessons Learnt. The meeting was held in February 2012 in Karlsruhe. One of the bases for the discussions during that meeting was the “gap analysis” conducted by the IAEA on the lessons learnt from the Fukushima accident to be integrated in the safety requirements.

It appears that two standards from the IEC under development (wireless communication; computer system) need to be adjusted in order to incorporate the lessons learnt from Fukushima. Two other revisions of standards will be launched. Fourteen other standards have to be reviewed in order to confirm the need to update them. Finally, 10 proposals for new standards were issued. According to the rules of procedure of the IEC, the standards have to be approved by national committees. If the approval is obtained, then three years are needed to issue a new standard.

The need to identify the limited but exhaustive number of necessary systems in order to define the “hard core functions” (HCF) was underlined. But this seems to be dedicated to the management of severe accidents and the decision to use new means or existing means has not been made yet.

The meeting was also the occasion to identify other working areas, for example qualification of electrical equipment under severe accident conditions, design principles of control systems used in severe accidents.

N 1.8 Presentation on “Beyond Design Basis Analysis - Recent Developments in UK’s Approach”

This presentation follows the discussions started during previous NUSSC meetings, particularly the ones during the Working Group meeting in January 2012, which seemed to show misunderstandings/confusions on what are the safety analysis for severe accidents (and their difference with “design accidents”) and their link to the management of severe accidents.

In the UK, there are only a few paragraphs in the SAPs on severe accidents. It is thus foreseen "Fault analysis should be carried out comprising design basis analysis, suitable and sufficient PSA, and suitable and sufficient severe accident analysis". Those three analyses are complementary:

- DBA (frequency of accidents > 10^{-5}/year) enables to obtain a robust conception, with a tolerance for failures and with efficient safety systems/structures;
- The PSA enable to verify whether the global risk is acceptable and its contributors balanced, and to understand strengths, weaknesses and inter-dependencies in the overall design. They cover sequences up to approx. 10^{-7}/year;
The analyses for severe accidents aim at defining the modalities for the management of severe accident but improbable. They deal with the states (whatever accident did lead to that state) that could lead to a dose higher than 100 mSv off-site. Those states cover three types of configuration:

- High consequence scenarios of low frequency beyond the design basis;
- Design basis scenarios where the safety provisions are assumed to fail; and
- Scenarios traditionally not covered by UK safety cases such as malevolent acts, leading to high consequences.

The Office for Nuclear Regulation (ONR) representative underlined that the results of the European stress tests show two approaches (not exclusive of each other):

- One based on a robust qualification of equipment;
- The other based on diversification, redundancy and flexibility to adapt as equipment became available.

He also underlines that WENRA and the IAEA are mainly focused on the R&D aspects and managements of severe accidents but a little on the analysis of safety for severe accidents.

Following the Fukushima, ONR has decided to elaborate new SAPs and TAGs on the analysis and the management of severe accidents.

**N 1.9 Results of the EU Stress Tests**

The presentation was given by representative of the JRC from the EC. After having recalled the context of the stress tests, the installations, the process (the national evaluations, the review by the peers, etc.) as well as the resources devoted to it, the main conclusions presented, on the basis of the ENSREG report following the review by the peers.

A communication from the European Commission on those conclusions shall be issued in July 2012.

During the meeting, the following asked questions were about:

- The binding nature of the recommendations from the stress tests. The EC representative made clear that all recommendations should receive an answer from each safety authority.
- The future actions at the European level (the development of the European regulations, WENRA);
- The concepts of “extreme external event” or “hardened systems”/”bunkeried system”;
- The convergence of means materials to be implemented in different European countries for the same type of reactors;
- The scope of stress tests, in particular in the security area.

**N1.10 Approach of the Safety Assessment Section to the review of Safety Guides**

A presentation was made by the NSNI Safety Assessment Section on the review/update of the safety guides, notably in order to allow a first exchange with NUSSC.

This section has indeed in its area of competence some 15 safety guides which will probably receive an “impact” by the lessons from the Fukushima accident.
Generally, the IAEA approach could be:

- Conduct an exercise limited to the lessons drawn from the accident;
- To keep as a basis of the exercise the “gap analysis” developed for the safety requirements, to be updated if need be with the new available lessons (results of the European stress tests, CNS EM);
- Clarify the link between the new safety requirements or updated safety requirements and the safety guides and parts of the safety guides to review;
- Identify the best moment to make those recommendations evolve;
- Suggest new recommendations.

The IAEA also recalls that other documents, used for services for MS (generic safety assessment review, PSA review, accident management programme review…) are also to be updated.

During the meeting, the discussion was about:

- The interest of a several-step approach;
- The benefit of not limiting the reflexion to the Safety Assessment Section;
- The guides have to be revised, even though further lessons or good ideas might appear later on.

► NUSSC considers that the issue needs to be again on the agenda of its next meeting, without limiting it to the guides for which the drafting part is taken care by the Safety Assessment Section.
► NUSSC confirms that the recommendations might have to be updated or created either because new requirements have been created or existing requirements have been updated, or because, independently from the changes in the requirements, it appears that additional or more precise recommendations are needed.
► During its next meeting, NUSSC wishes to know whether new lessons from Fukushima have been identified since the beginning of 2012 (new information on the Fukushima accident, EU stress tests, CNS 2nd EM…).
► NUSSC wishes that until its next meeting, a preliminary exercise (prototype test) be conducted on the safety guides identified as high priority by the NUSSC Working Group during its January meeting. This will allow ensuring the feasibility of the methodology taking into account the current uncertainties on the future requirements.

N2. NUSSC SESSION – REVIEW OF IAEA SAFETY STANDARDS

N2.1 Status of Safety Standards

A presentation on the current status of development of the IAEA Safety Standards was provided by the Chairman of NUSSC and by the Secretariat.

N2.2 DS430 Safety Guide on Design of Electrical Power Systems for NPPs

The DPP for that document has been approved end of 2009. France (IRSN, EDF) participated in the elaboration of the document. Evolutions are linked to the publication of SSR 2.1, GS-R-3 and a better interface with the NS-G-2.1 guides. It takes into account the lessons from the Forsmark incident. Moreover, compared to the existing guide, the scope concerns all power supplies and not only emergency ones. Three consultancy meetings were organized as well as one Technical Meeting.
At that stage, according to the IAEA, it does not contain disposition specifically linked to Fukushima even though the diversity of power supply is underlined, as well as the eventuality of loss of all power supplies of a site.

Prior to the NUSSC meeting, approximately 200 comments were expressed. One third of the technical comments were accepted by the IAEA as well as ¾ of the editorial comments.

During the meeting, the following points were discussed:

- The use of portable electrical power source and connection possibilities on the site;
- The qualification of electrical equipment used in conditions in December;
- The principle of defense in depth in the guide, particularly in connection with the SSR 2.1;
- Classification of electrical systems, which seems heavily influenced by the approach of the US-NRC, and consistency with the DS367;
- The provisions related to the total loss of electrical power, especially in relation to the specifications WENRA for EU stress tests;
- The lack of precise safety requirements in SSR 2.1 on electrical systems, which were then considered systems support. There is no such explicit requirement on the resistance situation of total loss of power supplies;
- The degree of consideration of teachings known to date from the Fukushima accident and actions taken in Member States. The interface with the conclusions of the Extraordinary Meeting of the CNS is not to be overlooked. If these conclusions are major, their consideration may require several years but it would be a shame to wait to release a new version of the guide waiting.

► NUSSC concluded that DS430 Safety Guide on Design of Electrical Power Systems for NPPs should reflect the results of the Second CNS Extraordinary Meeting. Conference call will be organized to assess the consistency of the draft with the Meeting results. If there is no substantial need to change the draft, DS430 can be sent to MS for comments.

Volunteers to participate in the conference call shall inform the Secretariat.

N2.3 DS367 Safety Classification of Structures, Systems and Components in Nuclear Power Plants

The IAEA recalled the history of this document, whose DPP was approved in the mid of 2007. To elaborate this document, the IAEA has looked at more than 40 documents and concluded that the classification of safety was today largely used depending of the reactor technology (and of the country). Consultation with MS was launched at the end of 2009. In spring 2011, NUSSC did not approve the submission to the CSS in order to take into account the comments received by MS. The main reasons of this refusal were:

• Categorization of preventive safety functions and classification of related SSCs to be further discussed;
• Link between DID levels (prevention, control, mitigation) and SSCs classification (e.g. DID level 1) misleading;
• Recommendation/guidance to be consistent with current (best) practices;
• Number of proposed Safety Classes vs. national practices (3 instead of 4);
• To better include the concerns of the industry;
• Consistency of the classification of the electrical systems with IEC standards.
Since then the IAEA has organised two meetings (November 2011 and March 2012) involving the industry and regulators/TSO (Germany, Canada, Finland, France, UK and USA) in order to make progress on those issues. These meetings confirmed this interest in that guide as well as the necessity to have a TECDOC with it.

The IAEA also indicates that the issue of harmonization of safety classification is an issue raised by MDEP. An exchange between the MDEP and the IAEA took place in May 2012 and did not lead to any contradiction.

The IAEA intends to present a new version of the guide during the next NUSSC meeting.

► NUSSC invites the IAEA to continue its efforts on that guide and to integrate the conclusions of the CNS EM.

► NUSSC invites the IAEA to think about the benefit of having a second consultation with MS if the changes brought to the draft guide are significant compared to the previous version submitted for consultation.

N2.4 DS431 Digital Instrumentation and Control Systems

The IAEA indicates that it should have a well advanced version of that guide by the end of summer. It has not been approved by the IAEA Coordination Committee yet. There is still the pending question of the lessons learnt from Fukushima and their impact on the guide. It might be better to wait the June 2013 meeting to discuss the guide in NUSSC.

During the meeting, the following issues were discussed:
- I&C systems in severe accidents. According to the IAEA, mainly affecting the sensors needed to indicate the status of the installation;
- The power supply of the control command;
- The potential difficulty to obtain consensus on that guide.

► NUSSC considers that it is not necessary to delay the preparation of the guide.

N2.5 DS436 Instrumentation and Control and Software Important to Safety for Research Reactors

The DPP of the guide was approved in 2010. Two consultancy meetings were organized by the IAEA.

► NUSSC insists on the need for coherence with DS431 and DS436. The potential differences will have to be identified and presented to NUSSC, together with justifications.

N2.6 DS468 DPP Remediation Process for Areas Affected by Past Activities and Accidents

The DPP was presented for NUSSC information only.

The guide WS-G-3.1 is of 2007 and was based on WS-R-3 of 2003. Since then, WS-R-3 was replaced by GSR Part 3 — the new BSS — in particular Section 5. The IAEA has to integrate the experience gained following the Fukushima accident and to present more strategies and recommendations on the rehabilitation of contaminated areas.
N3. NUSSC SESSION – MISCELLENIOUS

N3.1 Feedback on Regulatory Arrangements and Current Developments in NUSSC Member States

Ukraine

Fifteen VVER reactors are in operation in Ukraine. On a voluntary basis, Ukraine decided to associate itself with EU stress tests. The main areas requiring further investigation or improvement are the following:

- seismic qualification and seismic re-evaluation;
- the possibility to ensure the long term residual heat removal
- the completion of the implementation of severe accident management guidelines;
- the implementation of additional means to manage a severe accident.

Four reactors are concerned for the extension of lifetime over 30 years, two already obtained it.

In terms of regulations, an update has been launched. The ones which will have priority are: on cooling systems; on containment; on protection against earthquakes and on fuel (new or spent) management.

N4. NUSSC SESSION – CLOSURE OF THE MEETING

N4.1 Actions following 33rd NUSSC Meeting

Mr Svab presented a list of actions following the 33rd NUSSC Meeting (Appendix III). NUSSC approved the list.

N4.2 Conclusions

Mr Feron thanked all NUSSC Members for participation in the meeting.

Mr Lyons, Director of NSNI, closed the meeting and thanked Mr Feron and the Committee for a productive meeting.
APPENDIX I

The Discussions held on the drafts of Safety Standards at the previous NUSSC Meetings

2.4 DS446 Commissioning for Nuclear Power Plants (Report of the 31 NUSSC Meeting)

Mr Martynenko gave a detailed presentation on the DS446. He reminded the background of the document and the production schedule. 282 comments were sent by NUSSC Members and Observers on the draft (Canada 8; Japan 8; France 185; EC 4; WNA 74 and CEZ – Czech Republic 8). 2 comments were received from WASSC (Argentina). Majority of comments were accepted, only 7 comments were rejected and the resolution of other 5 was discussed during the presentation. Finally, Mr Martynenko asked NUSSC for approval to send DS446 to Member States for comments.

Mr Feron thanked Mr Martynenko for his presentation and opened the floor for discussion. In particular:

- Ukraine proposed to change the definition of commissioning. The proposal was not accepted, the proposed definition was specific for NPPs.

- France asked the question whether Annexes and Appendices are enough technology neutral. Or should they be removed? Mr Martynenko reminded the Annexes and footnotes to the main text are used to provide practical examples or additional information or explanations. Annexes (and footnotes) are not an integral part of the standard and may not contain requirement or recommendations. On the other side, the Appendixes are integral part of the standard. It was concluded that the Note Verbal requesting comments from MS will ask specifically feedback on adequacy of level of details and on having or not having Appendixes/Annexes.

- The necessity of close cooperation with INSAG, which is drafting a document on the licensing of the country’s first NPP (commissioning oversight is one topic addressed by this document), was stressed.

NUSSC concluded that DS446 Commissioning for Nuclear Power Plants could be submitted to MS for comments.
## AGENDA

33rd Meeting of the Nuclear Safety Standards Committee (NUSSC)
33rd Meeting of the Waste Safety Standards Committee (WASSC)

VIC, M Building, Board Room A

Monday, 2 July 2012, at 2.00 p.m.

### 1. NUSSC/WASSC JOINT SESSION – GENERAL ISSUES

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| 1. | Opening of Meeting | Mr J. Lyons  
|   |   | Mr. P. Hahn |
| 2. | Chairman’s Remarks | Mr F. Feron  
|   |   | Mr G. Williams |
| 3. | Adoption of agenda for the Joint Session | For approval  
|   |   | NUSSC & WASSC Members |
| 4. | Administrative arrangements for the meeting | For information  
|   |   | Ms G. Siraky  
|   |   | Mr M. Svab |
| 5. | Interaction with other Committees | For information |
| 5.1. | Report from the previous meetings of the 4 Chairs | For information  
|   |   | Mr F. Feron  
|   |   | Mr G. Williams |
| 5.2. | a) Report of the 31st CSS Meeting | Mr D. Delattre |
| 5.2. | b) Progress Report on the Review of Safety Standards. CSS Chair’s letter to IAEA DG |   |
| 6. | Presentation on the Status of the Fukushima Daiichi NPP’s, including regulatory and decommissioning/remediation matters | For information  
|   |   | Mr S. Maki  
|   |   | Mr K. Oue |
|   |   | Mr L. Bevington |
| 8. | Nuclear Security Committee (current development) | For information  
|   |   | Mr I. Barraclough |
| 9. | Report on the Joint Convention Review Meeting and 2nd CNS Extraordinary Meeting preparation | For information  
|   |   | Ms G. Siraky  
|   |   | Mr M. Svab |
Tuesday, 3 July 2012, at 9:00 a.m.

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<td>4.1</td>
<td>Draft Code of Conduct on the Transboundary Movement of Radioactive Material Inadvertently Incorporated into Scrap Metal and Semi-Finished Products of the Metal Recycling Industries</td>
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<td>Progress report on the Revision of the Safety Glossary</td>
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<td>Mr F. Feron</td>
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<td>Mr G. Williams</td>
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# 33rd Meeting of the Nuclear Safety Standards Committee (NUSSC)

Wednesday, 4 July 2012, at 9.00 a.m. – Thursday, 5 July 2012 (to be terminated in the early afternoon)

## N1. NUSSC SESSION – GENERAL ISSUES

| N1.1. | Chairman’s Introduction | Mr F. Feron |
| N1.2. | Adoption of the Agenda of 33rd NUSSC Meeting | For approval | NUSSC Members |
| N1.3. | Approval of the Report of the 32nd NUSSC Meeting | For approval | NUSSC Members |
| N1.4. | Actions of NUSSC Meetings | For information | Mr M. Svab |
| N1.5. | Dates of the next meetings: | For approval | NUSSC Members |
| | 34th NUSSC Meeting: 19–23 November 2012 | | |
| | 35th NUSSC Meeting: 10 - 14 June 2013 | | |
| N1.6. | NUSSC Working Methods Issues | For information and discussion | Mr M. Svab |
| | | | Mr F. Feron |
| | | | NUSSC Members |
| N1.7. | Results of the IEC Meeting on Review of Fukushima Lessons Learned | For information | Mr J-P. Bouard |
| N1.8. | Presentation on “Beyond Design Basis Analysis - Recent Developments in UK’s Approach” | For information | Mr A. Hart |
| N1.9. | Results of the EU Stress Tests | For information | Ms V. Rangelova |
| N1.10. | Approach of the Safety Assessment Section to the review of Safety Guides | For information | Mr P. Hughes |

## N2. NUSSC SESSION – REVIEW OF IAEA SAFETY STANDARDS

| N2.1 | Status of Safety Standards | For information | Mr F. Feron |
| | | | M. Svab |
| N2.2 | DS430 Safety Guide on Design of Electrical Power Systems for NPPs | For approval for submission to CSS | Mr G. Johnson |
| N2.3 | DS367 Safety Classification of Structures, Systems and Components in Nuclear Power Plants | For information | Mr N. Tricot |
| N2.4 | DS431 Digital Instrumentation and Control Systems | For information | Mr G. Johnson |
N2.5  DS436 Instrumentation and Control and Software Important to Safety for Research Reactors  For information  Mr A. Shokr

N2.6  DS468 DPP Remediation Process for Areas Affected by Past Activities and Accidents  For information  Mr J. Rowat

N3.  NUSSC SESSION – MISCELLENIOUS

N3.1.  Feedback on Regulatory Arrangements and Current Developments in NUSSC Member States: Germany  For information  NUSSC Members

N4.  NUSSC SESSION – CLOSURE OF THE MEETING

N4.1.  Actions following 33rd NUSSC Meeting  For discussion and providing input  Mr M. Svab  NUSSC Members

N4.2.  Conclusions  Mr J. Lyons  DIR-NSNI  Mr F. Feron  NUSSC Chairman

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### APPENDIX III

**Actions Following 33rd NUSSC Meeting**

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<td>33.1</td>
<td>Volunteers are encouraged to make presentations on regulatory arrangements and on actions taken or planned following Fukushima accident.</td>
<td>NUSSC members Germany</td>
<td>Next NUSSC Meeting</td>
<td></td>
</tr>
<tr>
<td>33.2*</td>
<td>“Procedure“ on development of the Security Series documents as well as the Safety Standards with the security aspects should be prepared.</td>
<td>Secretariat</td>
<td>ASAP</td>
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</tr>
<tr>
<td>33.3</td>
<td>Procedure(s) on the development of Safety Standards and Security Series documents should be described in a unique document (SPESS or another one).</td>
<td>Secretariat</td>
<td>ASAP</td>
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</tr>
<tr>
<td>33.4</td>
<td>Presentations of the International Expert Meetings related to the Fukushima Dai-ichi Accident should be made available on the Internet and easily downloaded. The Secretariat should check whether this can be free of charge.</td>
<td>Secretariat</td>
<td>ASAP</td>
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<tr>
<td>33.5</td>
<td>DS407 Safety Guide on Criticality Safety, with NUSSC/WASSC comments implemented, can be submitted to the CSS.</td>
<td>TO</td>
<td>ASAP</td>
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<tr>
<td>33.6</td>
<td>DS446 Safety Guide on Commissioning, with NUSSC/WASSC comments implemented, can be submitted to the CSS.</td>
<td>TO</td>
<td>ASAP</td>
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<tr>
<td>33.7</td>
<td>DS462 Document Outline can be submitted to the CSS.</td>
<td>TO</td>
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<tr>
<td>33.8</td>
<td>Creation of a group of NUSSC volunteers to follow the development of revised Safety Requirements (under DS462) should be considered if consensus on the new/updated requirements is not achieved at next NUSSC meeting.</td>
<td>NUSSC</td>
<td>Next NUSSC Meeting</td>
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<tr>
<td>33.9</td>
<td>Presentation on the new Fukushima lessons learned (gained during 2012, if any) should be provided to NUSSC at its next meeting. The gap analysis developed by the Secretariat on the requirement should be updated accordingly.</td>
<td>Secretariat</td>
<td>Next NUSSC Meeting</td>
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<tr>
<td>33.10</td>
<td>DS450 Safety Requirements on Decommissioning, with NUSSC/WASSC comments implemented, can be sent to MS, after the approval of WASSC Chairman.</td>
<td>TO</td>
<td>ASAP</td>
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<td>33.11</td>
<td>DS460 DPP Safety Guide on Communication can be sent to CSS.</td>
<td>TO</td>
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<tr>
<td>33.12</td>
<td>Status report on the development of the DS456 will be</td>
<td>TO</td>
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<td>No.</td>
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<td>Who</td>
<td>When</td>
<td>Status</td>
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<tr>
<td>33.13</td>
<td>Presentation on the DS456 current orientations and potential issues will be provided (see action 32.6).</td>
<td>Canada, Finland, Japan, ENISSL, WNA</td>
<td>Next NUSSC Meeting</td>
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<tr>
<td>33.14</td>
<td>Document on the process of the review and revision of Safety Guides in the light of Fukushima Dai-ichi Accident, not limited to the Safety Assessment Section, will be provided.</td>
<td>Secretariat</td>
<td>Next NUSSC Meeting</td>
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<tr>
<td>33.15</td>
<td>Pilot review of a few “high priority” Safety Guides should be initiated and information on that should be provided to NUSSC at its next meeting.</td>
<td>Secretariat</td>
<td>Next NUSSC Meeting</td>
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<tr>
<td>33.16</td>
<td>DS430 Safety Guide on Design of Electrical Power Systems for NPPs should reflect the results of the Second CNS Extraordinary Meeting. Conference call will be organized to assess the consistency of the draft with the Meeting results. If there is no substantial need to change the draft, DS430 can be sent to MS for comments. Volunteers to participate in the conference call shall inform the Secretariat</td>
<td>Secretariat (with participation of NUSSC Chairman and NUSSC volunteers)</td>
<td>Week of 3 September 2012</td>
<td></td>
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<tr>
<td>32.8</td>
<td>WNA preliminary input into Fukushima Lessons Learned will be provided.</td>
<td>WNA</td>
<td>Next NUSSC Meeting</td>
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<tr>
<td>32.11</td>
<td>Presentation on TSO Forum</td>
<td>EC</td>
<td>Next NUSSC Meeting</td>
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</table>

*) This action is equivalent to the 33 WASSC action No. NW 1.8.
## APPENDIX IV

### LIST OF PARTICIPANTS

<table>
<thead>
<tr>
<th>COUNTRY/ORGANIZATION</th>
<th>PARTICIPANT</th>
<th>OFFICIAL MAILING ADDRESS</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>Mr Merrouche Djemai, <a href="mailto:merrouche_dj@yahoo.com">merrouche_dj@yahoo.com</a></td>
<td>Centre de Recherche Nucléaire de Birine (CNRB) B.P. 180, Ain Oussera 17200 Djelfa Algeria Fax: +213 27 87 42 80 Email: <a href="mailto:merrouche_dj@yahoo.com">merrouche_dj@yahoo.com</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>Austria</td>
<td>Mr Sholly Steven, <a href="mailto:steven.sholly@boku.ac.at">steven.sholly@boku.ac.at</a></td>
<td>Institute for Security and Risk Sciences Department of Structural Engineering and Natural Hazards University of Natural Resources and Applied Sciences Türkenschanzstrasse 17/8 1180 Wien Austria Tel: 00431 47654 7711 Fax: 00431 4277 9539 Email: <a href="mailto:steven.sholly@boku.ac.at">steven.sholly@boku.ac.at</a></td>
<td>2012-07-02 2012-07-03</td>
</tr>
<tr>
<td>Brazil</td>
<td>Mr Gromann De Araujo Goes Alexandre, <a href="mailto:gromann@cnen.gov.br">gromann@cnen.gov.br</a></td>
<td>National Nuclear Energy Commission (CNEN) Rua General Severiano 90 Botafogo 22294-900 RIO DE JANEIRO, RJ BRAZIL Tel: +55 21 2173 2310 / 2173 2311 / 92186435 Fax: +55 21 2173 2313 Email: <a href="mailto:gromann@cnen.gov.br">gromann@cnen.gov.br</a></td>
<td>2012-07-02 2012-07-06</td>
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<tr>
<td>Canada</td>
<td>Mr Rzentkowski Greg, <a href="mailto:greg.rzentkowski@cnscccsn.gc.ca">greg.rzentkowski@cnscccsn.gc.ca</a></td>
<td>Director General Power Reactor Regulation Canadian Nuclear Safety Commission (CNSC) P.O.Box 1046 Station B, 280 Slater Street Ottawa, Ontario, K1P 5S9 Canada Tel: 001 613 995 2655 Fax: 00613 995 5086 Email: <a href="mailto:greg.rzentkowski@cnscccsn.gc.ca">greg.rzentkowski@cnscccsn.gc.ca</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>China</td>
<td>Mr Li Jingxi, <a href="mailto:li.jingxi@sepa.gov.cn">li.jingxi@sepa.gov.cn</a></td>
<td>National Nuclear Safety Administration (NNSA) 115 Xizhimennei Nanxiaojie 100035 BEIJING CHINA Tel: 00755 84437483 Fax: 00755 84437483 Email: <a href="mailto:li.jingxi@sepa.gov.cn">li.jingxi@sepa.gov.cn</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Mr Vesely Jiri, <a href="mailto:jiri.vesely@sujb.cz">jiri.vesely@sujb.cz</a></td>
<td>Director Nuclear Safety Assessment Department State Office for Nuclear Safety (SUJB) Senovazne náměstí 9 110 00 PRAHA 1 CZECH REPUBLIC Tel: +420 562 402 901 Fax: +420 568 866 414 Email: <a href="mailto:jiri.vesely@sujb.cz">jiri.vesely@sujb.cz</a></td>
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<tr>
<td>Egypt</td>
<td>Mr Ibrahim Moustafa Aziz, <a href="mailto:moustafaai@yahoo.com">moustafaai@yahoo.com</a></td>
<td>Egyptian Atomic Energy Authority (EAEA) 3 Ahmed El-Zomor Street El Zohoor District Children Village PO.Box 11787 CAIRO, Nasr City EGYPT Tel: 00202 27584777 Fax: 0020 2 22740238 Email: <a href="mailto:moustafaai@yahoo.com">moustafaai@yahoo.com</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>Finland</td>
<td>Ms Jarvinen Marja-Leena, <a href="mailto:marja-leena.jarvinen@stuk.fi">marja-leena.jarvinen@stuk.fi</a></td>
<td>Deputy Director Radiation and Nuclear Safety Authority (STUK) Nuclear Reactor Regulation P.O. Box 14 FIN-00881 Helsinki Finland Tel: +358 9 7598 8304 Fax: +358 9 7598 8382 Email: <a href="mailto:marja-leena.jarvinen@stuk.fi">marja-leena.jarvinen@stuk.fi</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>France</td>
<td>Mr Feron Fabien, <a href="mailto:fabien.feron@asn.fr">fabien.feron@asn.fr</a></td>
<td>Adjoint au Directeur des centrales nucléaires 10, route du Panorama Robert Schuman Autorité de Sûreté Nucléaire (ASN) 92266 Fontenay-aux-Roses Cedex FRANCE Tel: +33143197111 Fax: +33143197066 Email: <a href="mailto:fabien.feron@asn.fr">fabien.feron@asn.fr</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>France</td>
<td>Mr Wattelle Emmanuel, <a href="mailto:emmanuel.wattelle@irsn.fr">emmanuel.wattelle@irsn.fr</a></td>
<td>IRSN (Institut de Radioprotection et de Sûreté Nucléaire) 31 avenue de la Division Leclerc 92260 FONTENAY AUX ROSES CEDEX FRANCE Tel: +33158357829 Fax: +33146575412 Email: <a href="mailto:emmanuel.wattelle@irsn.fr">emmanuel.wattelle@irsn.fr</a></td>
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<tr>
<td>Germany</td>
<td>Mr Schimpfke</td>
<td>Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) mbH</td>
<td>2012-07-02</td>
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<tr>
<td></td>
<td>Thomas,</td>
<td>Schwertnergasse 1</td>
<td>2012-07-06</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:thomas.schimpfke@grs.de">thomas.schimpfke@grs.de</a></td>
<td>50667 COLOGNE GERMANY</td>
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<td>Tel: +49 221 2068 699</td>
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<td>Email: <a href="mailto:thomas.schimpfke@grs.de">thomas.schimpfke@grs.de</a></td>
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<tr>
<td>Germany</td>
<td>Ms Seefeldt</td>
<td>Bereich Reaktorsicherheitsanalysen</td>
<td>2012-07-02</td>
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<tr>
<td></td>
<td>Diana,</td>
<td>Gesellschaft f. Anlagen- u. Reaktorsicherheit (GRS) mbH</td>
<td>2012-07-06</td>
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<td>Tel: +49 221 2068 698, <a href="mailto:Diana.Seefeldt@grs.de">Diana.Seefeldt@grs.de</a></td>
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<td>Mr Weidenbrueck</td>
<td>Federal Ministry for the Environment</td>
<td>2012-07-02</td>
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<td>Kai-Jochen,</td>
<td>Nature Conservation and Nuclear Safety</td>
<td>2012-07-06</td>
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<td></td>
<td><a href="mailto:Kai.Weidenbrueck@bmubund.de">Kai.Weidenbrueck@bmubund.de</a>,</td>
<td>Division RS I 5 P.O.Box 12 06 29</td>
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<td>Mr Westermeier</td>
<td>Federal Office for Radiation Protection</td>
<td>2012-07-02</td>
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<tr>
<td></td>
<td><a href="mailto:EWestermeier@bfs.de">EWestermeier@bfs.de</a></td>
<td>Department Nuclear Safety Willy-Brandt-Strasse 5</td>
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<td>D-38226 Salzgitter Germany</td>
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<tr>
<td>Hungary</td>
<td>Mr Adorjan Ferenc</td>
<td>Hungarian Atomic Energy Authority (HAEA) Fenyes Adolf u. 4 P.O. Box 676 1036 BUDAPEST HUNGARY Tel: 0036 1 4364914 Fax: 0036 1 4364883 Email: <a href="mailto:adorjan@haea.gov.hu">adorjan@haea.gov.hu</a></td>
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<tr>
<td>India</td>
<td>Mr Duraisamy Swaminathan</td>
<td>Atomic Energy Regulatory Board MUMBAI, Maharashtra 400 094 INDIA Tel: +91 22 2558 0436; +91 22 2599 0511 Fax: +91 22 25552879; +91 22 25565717 Email: <a href="mailto:durai@aerb.gov.in">durai@aerb.gov.in</a></td>
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<td>Iran, Islamic Republic of</td>
<td>Mr Matajikojouri Naimeddin</td>
<td>Atomic Energy Organization of Iran (AEOI) North Kargar Avenue P.O. Box 14155-1339 Tehran Iran Tel: +98 21 88221089 Fax: +98 21 88221091 Email: <a href="mailto:nkojouri@aeo.org.ir">nkojouri@aeo.org.ir</a></td>
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<tr>
<td>Israel</td>
<td>Mr Harari Ronen</td>
<td>Director Research Reactor Nuclear Research Center Negev (NRCN) P.O.Box 9001 84190 BEER-SHEVA ISRAEL Tel: +972 8 6568001 Fax: +972 8 656 7077 Email: <a href="mailto:rharari@inter.net.il">rharari@inter.net.il</a></td>
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<tr>
<td>Italy</td>
<td>Mr Gervasi</td>
<td>ISPRA National Institute for Environmental Protection and Research Via Vitaliano Brancati, 48 00144 ROMA ITALY Tel: +39 06 5007 2836 Fax: +39 06 5007 2941 Email: <a href="mailto:marco.gervasi@isprambiente.it">marco.gervasi@isprambiente.it</a></td>
<td>2012-07-02</td>
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<tr>
<td>Japan</td>
<td>Mr Maki</td>
<td>Director for Safety Examination Nuclear Safety Regulatory Standard Division Nuclear and Industrial Safety Agency (NISA) 1-3-1 Kasumigaseki Chiyoda-ku Tokyo 100-8986 JAPAN Tel: +813 3501 0621 Email: <a href="mailto:maki-shinichiro@meti.go.jp">maki-shinichiro@meti.go.jp</a></td>
<td>2012-07-02</td>
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<tr>
<td>Japan</td>
<td>Mr Nakajima</td>
<td>Senior Officer Safety Standards and Rulemaking Coordination Group Policy Planning and Coordination Department Japan Nuclear Energy Safety Organization (JNES) 4-1-281 Toranomon, Minato-ku Tokyo, 100-8968 JAPAN Tel: +81 3 4511 1143 Fax: +81 3 4511 1297 Email: <a href="mailto:nakajima-tsuyoshi@jnes.go.jp">nakajima-tsuyoshi@jnes.go.jp</a></td>
<td>2012-07-02</td>
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</tr>
<tr>
<td>Korea, Republic of</td>
<td>Mr Chung</td>
<td>Korea Institute of Nuclear Safety (KINS) 62 Gwahak-ro Yusong-Gu DAEJEON 305-338 KOREA, REPUBLIC OF Tel: 0082 42 8680223 Fax: 0082 42 8611700 Email: <a href="mailto:hdchung@kins.re.kr">hdchung@kins.re.kr</a></td>
<td>2012-07-02</td>
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<tr>
<td>Lithuania</td>
<td>Mr Slepavicius Sigitas,</td>
<td>State Nuclear Power Safety Inspectorate (VATESI) A. Gostauto Street 12 01108 VILNIUS LITHUANIA Tel: 00370 5 2661572 Fax: 00370 5 2614487 Email: <a href="mailto:s.slepavicius@vatesi.lt">s.slepavicius@vatesi.lt</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>Mexico</td>
<td>Mr Nunez Carrera Alejandro,</td>
<td>Secretaría de Energía; Comisión Nacional de Seguridad Nuclear y Salvaguardias (CNSNS) Dr José María Barragán 779, Colonia Narvarte 03020 CIUDAD DE MÉXICO, D.F. MEXICO Tel: +52 55 5095 3273 Fax: +52 55 5095 3293 Email: <a href="mailto:anunezc@cnsns.gob.mx">anunezc@cnsns.gob.mx</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Mr Mansoor Faizan,</td>
<td>Pakistan Nuclear Regulatory Authority (PNRA) G-8 Mauve Area P.O. Box 1912 ISLAMABAD 44000 PAKISTAN Tel: 0092 51 9263018 Fax: 0092 51 9263007 Email: <a href="mailto:f.mansoor@pnra.org">f.mansoor@pnra.org</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>Poland</td>
<td>Mr Kielbasa Wladyslaw,</td>
<td>Chief Specialist National Atomic Energy Agency Department of Nuclear and Radiation Safety 18 Chelmonskiego St. 84-200 Wejherowo POLAND Tel: +48 58 742 12 42 Fax: +48 58 572 61 20 Email: <a href="mailto:wladyslaw.kielbasa@paa.gov.pl">wladyslaw.kielbasa@paa.gov.pl</a></td>
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<tr>
<td>Romania</td>
<td>Mr Ciurea-Ercau</td>
<td>National Commission for Nuclear Activities Control (CNCAN) Director of the Nuclear Fuel Cycle Division National Commission for Nuclear Activities Control (CNCAN) 14 Libertatti Blvd., District 5 050706, BUCHAREST, ROMANIA Tel: +4 021 316 24 41 Fax: +4 021 316 24 41 Email: <a href="mailto:cantemir.ciurea@cncan.ro">cantemir.ciurea@cncan.ro</a></td>
<td>2012-07-02</td>
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<tr>
<td>Russia Federation</td>
<td>Mr Stroganov</td>
<td>Head, Nuclear &amp; Radiation Safety Department Federal Environmental, Industrial and Nuclear Supervision Service of Russia (Rostechnadzor); Scientific and Engineering Centre for Nuclear and Radiation Safety (SEC NRS) Malaya Krasnoselskaya ulitsa 2/8, dom 5 107140 MOSCOW RUSSIAN FEDERATION Tel: 007 499 264 7113 Fax: 007 499 264 2859 Email: <a href="mailto:stroganov@secnrs.ru">stroganov@secnrs.ru</a></td>
<td>2012-07-02</td>
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<tr>
<td>Slovakia</td>
<td>Mr Uhrik</td>
<td>Nuclear Regulatory Authority of the Slovak Republic Department of Safety Evaluation and Inspection Activities Okruzna 5 918 64 Trnava Slovak Republic Tel: +421335991240 Fax: +421335991190 Email: <a href="mailto:peter.uhrik@ujd.gov.sk">peter.uhrik@ujd.gov.sk</a></td>
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| South Africa         | Mr. Tselane | National Nuclear Regulator (NNR)  
Cnr Embankment and Hendrik Verwoerd Drive  
P. O. Box 7106  
0046 CENTURION  
sOUTH AFRICA  
Tel: +27 12 674 7100  
Email: ttselane@nnr.co.za | 2012-07-02  
2012-07-06 |
|                      | Thabo Johannes, |                         |       |
|                      | ttselane@nnr.co.za |                         |       |
| Spain                | Mr. Zarzuela | Deputy Director Nuclear Installations  
Consejo de Seguridad Nuclear (CSN)  
Pedro Justo Dorado Dellmans, 11  
28040 MADRID  
SPAIN  
Tel: 0034 913460149  
Fax: 0034 913460144  
Email: jzj@csn.es | 2012-07-02  
2012-07-06 |
|                      | Javier, |                         |       |
|                      | jzj@csn.es |                         |       |
| Sweden               | Mr. Hallman | Senior Analyst  
Swedish Radiation Safety Authority  
Department of Nuclear Power Plant Safety  
Solna strandvaeg 96  
SE-171 16 Stockholm  
Sweden  
Tel: +46 8 799 42 42  
Fax: +46 8 799 40 10  
Email: anders.hallman@ssm.se | 2012-07-02  
2012-07-06 |
|                      | Anders, |                         |       |
|                      | anders.hallman@ssm.se |                         |       |
| Ukraine              | Mr. Gromov | State Scientific and Technical Center for Nuclear and  
Radiation Safety  
Stusa Vasilya Vul. 35/37  
03142 KYIV  
UKRAINE  
Tel: 00380 44 4500500  
Fax: +380 44 452 8990  
Email: gromov@i.kiev.ua | 2012-07-02  
2012-07-06 |
<p>|                      | Grygoriy, |                         |       |
|                      | <a href="mailto:gromov@i.kiev.ua">gromov@i.kiev.ua</a> |                         |       |</p>
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<tr>
<td>United Arab Emirates</td>
<td>Mr Al Hanai</td>
<td>Senior Specialist&lt;br&gt;Nuclear Safety Department&lt;br&gt;Federal Authority for Nuclear Regulation (FANR)&lt;br&gt;Street Sheikh Zayed 1st&lt;br&gt;P.O. Box 112021&lt;br&gt;ABU DHABI&lt;br&gt;UNITED ARAB EMIRATES&lt;br&gt;Tel: +97126516674&lt;br&gt;Fax: +97126516661&lt;br&gt;Email: <a href="mailto:waddah.alhanai@fanr.gov.ae">waddah.alhanai@fanr.gov.ae</a></td>
<td>2012-07-02 2012-07-06</td>
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<tr>
<td>United Kingdom</td>
<td>Mr Hart</td>
<td>Office for Nuclear Regulation&lt;br&gt;Redgrave Court&lt;br&gt;Merton Road, Bootle&lt;br&gt;Merseyside L20 7HS&lt;br&gt;UNITED KINGDOM&lt;br&gt;Tel: 0044 151 9515753&lt;br&gt;Fax: 00 44 151 951 3710&lt;br&gt;Email: <a href="mailto:anthony.hart@hse.gsi.gov.uk">anthony.hart@hse.gsi.gov.uk</a></td>
<td>2012-07-02 2012-07-06</td>
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<tr>
<td>United States of America</td>
<td>Mr Case</td>
<td>U. S. Nuclear Regulatory Commission&lt;br&gt;Office of Research&lt;br&gt;CSB-05A24M&lt;br&gt;Washington, DC 20555&lt;br&gt;United States of America&lt;br&gt;Tel: 301-251 7618&lt;br&gt;Fax: 301-251-7425&lt;br&gt;Email: <a href="mailto:michael.case@nrc.gov">michael.case@nrc.gov</a></td>
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<tr>
<td>European Commission/Joint Research Centre</td>
<td>Ms Rangelova Vesselina, <a href="mailto:vesselina.rangelova@ec.europa.eu">vesselina.rangelova@ec.europa.eu</a></td>
<td>Head of Unit Nuclear Safety and Security Coordination European Commission (EC) Joint Research Centre Office: SDME 10/061 1049 Brussels BELGIUM Tel: +32 229 84019 Fax: +32 229 50146 Email: <a href="mailto:vesselina.rangelova@ec.europa.eu">vesselina.rangelova@ec.europa.eu</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>European Nuclear Installation Safety Standards Initiative</td>
<td>Mr Bassing Gerd, <a href="mailto:bassing@dexcon.eu">bassing@dexcon.eu</a></td>
<td>ENISS Reactor Safety Group Rue Belliard 65 1040 Brussels BELGIUM Tel: 0049 16096361336 Email: <a href="mailto:bassing@dexcon.eu">bassing@dexcon.eu</a></td>
<td>2012-07-02 2012-07-06</td>
</tr>
<tr>
<td>European Nuclear Installation Safety Standards Initiative</td>
<td>Mr Berger Jean-Pierre, <a href="mailto:jean-pierre.berger@foratom.org">jean-pierre.berger@foratom.org</a></td>
<td>Director ENISS Initiative, Regulatory Issues European atomic forum Rue Belliard 65 1040 Bruxelles Belgium Tel: +32 2 5024595 Fax: +32 2 5023902 Email: <a href="mailto:jean-pierre.berger@foratom.org">jean-pierre.berger@foratom.org</a></td>
<td>2012-07-02 2012-07-06</td>
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<tr>
<td>International Organization for Standardization</td>
<td>Mr Sevestre Bernard, <a href="mailto:bernard.sevestre@cea.fr">bernard.sevestre@cea.fr</a></td>
<td>Chairman International Organization for Standardization (ISO) CEA Saclay bat 121 - PCS F-91191 Gif sur Yvette Cedex FRANCE Tel: +33 1 69084511 Email: <a href="mailto:bernard.sevestre@cea.fr">bernard.sevestre@cea.fr</a></td>
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| The International Electrotechnical Commission | Mr Bouard         | IEC SC 45A Secretary  
Électricité de France (EDF)  
Direction Production Inginieure  
Service d'études et projets thermiques et nucléaires (SEPTEN)  
12-14, avenue Dutriévoz  
69628 Villeurbanne Cedex  
France  
Tel: 0033 72 82 7 166  
Fax: 0033 72 827155  
Email: jean-paul.bouard@edf.fr | 2012-07-02  
2012-07-06 |
| World Association of Nuclear Operators       | Mr Krenicky       | Programme Director  
WANO  
Cavendish Court  
11-15 Wigmore Street  
London W1U 1PF, U.K  
Tel: +44 20 7478 9200  
Fax: +44 20 7495 4502  
Email: krenicky@wanocc.org | 2012-07-02  
2012-07-06 |
| World Nuclear Association                    | Mr Waddington     | Director of Strategy  
CORDEL Working Group  
World Nuclear Association (WNA)  
Carlton House, 22a  
St. James Square  
London SW1Y 4JH  
United Kingdom  
Email: waddinton@world-nuclear.org | 2012-07-02  
2012-07-06 |