Nuclear Safety Standards Committee

37th Meeting

1 – 4 July 2014

Agenda item 2.3.5

DS462 - Revision of GSR Part 4

Javier Yllera, Safety Assessment Section, Division of Nuclear Installation Safety
Fukushima Implications

There are strictly speaking few implications of the lessons learned for the Safety Assessment Requirements.

No new requirements have been introduced

Amendments proposed reflect the will of making requirements more explicit with regard to some issues.

There has been a tendency to require to mirror SSR-2/1. It needs to be taken into account that the document is of a generic type, i.e. for activities and facilities in general.
Areas for Improvement

The lessons learned from the Fukushima accident resulted in changes proposed to the following document sections and requirements:

- **SAFETY ASSESSMENT**
  - *SPECIFIC ASPECTS* - Assessment of engineering aspects (Req. 10)
  - *DiD & SAFETY MARGINS* - Assessment of DiD (Req. 13)
  - *SAFETY ANALYSIS* - Deterministic & Probabilistic approaches (Req. 15)

- **MANAGEMENT, USE AND MAINTENANCE OF THE SAFETY ASSESSMENT**
  - Maintenance of the safety assessment (Req. 24)
Process after the 35th NUSSC meeting

- DS 462 sent to Members States for comments.
- NUSSC WG participated in the discussion and resolution of MS comments.
- Resolutions implemented in the draft and posted in the website.
- New comments from NUSSC received.
- Comments resolved and presented to the other committees last week.
- Resolution of comments is presented now to NUSSC.
## Comments Received by NUSSC

<table>
<thead>
<tr>
<th>Country</th>
<th>Comments</th>
<th>Accepted</th>
<th>Accepted with modifications</th>
<th>Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>2</td>
<td>2</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2</td>
<td>1</td>
<td>1 (linguistic)</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>1</td>
<td>1</td>
<td>1 (meaning of the comment already captured in the current formulation)</td>
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<tr>
<td>France</td>
<td>2</td>
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<td>2: -</td>
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<td></td>
<td></td>
<td></td>
<td>“to avoid offsite contamination” instead of “consistently with ref xx (ref xx : SSR-2/1)”</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>Preface only about Fukushima No replacement of “should” by “shall”, but “has to”, “have to” by “shall”.</td>
</tr>
<tr>
<td>Finland</td>
<td>5</td>
<td>4</td>
<td></td>
<td>Not clear which definitions are needed.</td>
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<tr>
<td>Japan</td>
<td>9</td>
<td>3</td>
<td>5 “Are / is” to “shall be”. The change would introduce new explicit requirements.</td>
<td>Accident conditions vs. Accidents</td>
</tr>
</tbody>
</table>
Use of Accidents vs Accident Conditions

• **Accident conditions defined in SSR 2/1:**
  Deviations from normal operation that are less frequent and more severe than anticipated operational occurrences, and which include design basis accidents and design extension conditions.

  DBAs + DECs considered in the design

• **SSR 2/1: 2. 9** ... The safety assessment is required in order to examine: (i) normal operation of the plant, (ii) the performance of the plant in anticipated operational occurrences, and (iii) accident conditions.

• **If GRS Part 4 uses “Accident Conditions”:**
  • It has to be understood that it refers to NPPs.
  • Applicability to activities and facilities is subjected to the graded approach, but the term make not make sense.
  • In relation with Emergency Preparedness and response:
    • The results of the SA shall be used as input for ER (and AM)
    • Emergency response cannot be limited to the accident conditions considered in the design. In such sense “accidents” is the term to use.
Conclusion

- Comments have been minor after the resolutions agreed in the NUSSC WG and no relevant comments have been rejected

- NUSSC is requested to approve the draft GRS Part 4 for submission to CSS

Thank you!