QUESTIONNAIRE FOR PREPARING THE REGULATORY BODY MEETING in conjunction to the ISOE-Symposium in Cambridge 2010

INVITATION

In conjunction with the 2010 ISOE Symposium, 17-19 November 2010, we are preparing a 4rd Senior Regulatory Body Representatives meeting, to be held 16. November 2010 in Cambridge (UK). We hope to encourage your participation in this meeting which follows on from the very successful Regulatory Body representatives meetings in 2004 (Lyon), 2006 (Essen) and 2008 (Turku). The purpose of the meeting is to provide a forum for open exchange and discussion within specialised regulatory audience concerned with occupational radiation protection. Subsequent to the ISOE-Symposium 2009 in Vienna several representatives of regulatory bodies expressed their interest on the exchange of information about: "How **Lessons Learned from Radiological Events** are drawn up, reported and distributed among RP-responsibles in NPP, training facilities, companies and countries".

MOTIVATION

The feedback from events is highly valuable, because the lessons learned show necessary improvements on actual weak points in the Radiation Protection Program. Lessons learned from events may show aspects, which are not considered either in legal regulations, company rules, RP-planning nor in RP training courses. These weak points may exist also in other units, plants, companies or countries. Therefore lessons learned have to reach all persons who may be concerned, so the repetition of similar events will be prevented.

About the distribution of information about radiological events on an international level, see the instructive presentation from Helena Janzekovic "Use of IRS and OSMIR Database – Lessons Learned" at the last ISOE 2009 Symposium. It is shown that both databases can be successfully used complementary to the ISODATA. These international reporting systems shall not be the main topic of this RB information exchange.

OBJECTIVES OF THE MEETING

The main objectives of the meeting are:

- To meet with regulators from other organisations to exchange information regarding regulatory standards and rules on
  - the criteria defined for nomination a deviation or departures from standard operational parameters, faults, defects, finding, malfunction, incident or accident as a radiological event of interest,
  - the company procedure on reporting internal, analysing the direct causes, the root causes, the increasing or decreasing factors, the radiological consequences, determining the lessons learned and package of measures (the common expression for this procedure is "Operational Experience Feedback" OEF, see for example NEA Committee on Nuclear Regulatory Activities/ Working Group on Operating Experience)
  - the criteria and the way for reporting the information about event to the regulatory body
  - the way how the information are distributed among RP-responsibles in other NPP, training facilities, companies and countries
- The focus should be on events, which have or may have radiological consequences on the staff or which occurred in the area of responsibility of the NPP Radiation Protection Organisation (this may include also uncontrolled releases inside and outside the NPP)

- This meeting will not deal with aspects of events in other fields of nuclear safety (loss of control on criticality, loss control on fuel cooling, deviation from transportation rules, …) will not be considered.
- To help to improve national regulatory effectiveness on occupational radiation protection by comparing national reality versus international context

AGENDA OF THE REGULATORY BODY MEETING

- Introduction of the different representatives
- Brief presentation on national requirements to support feedback from radiological events. Additional some interesting examples of lessons learned may be shown (around 15 min)
- Discussion of terms, differences, special approaches and innovative ideas to support the feedback
- Conclusions: Collection of exemplary approaches to get and distribute lessons learned

OBJECTIVES OF THE QUESTIONNAIRE

In order to introduce the Regulatory Body representatives meeting it is expected to draw an overview of **regulatory control on feedback from radiological events in NPPs from an occupational perspective** in the different ISOE member countries with their similarities and differences.

Therefore we would like you to answer, briefly, the following questionnaire to stimulate information exchange and discussions. Only one response per country is necessary.

Please do not go into the details, just describe a few “objective data”.

Even in case you will not be able to attend the meeting the information you can provide is precious. If you agree, questionnaires filled in by national authorities will be sent to all contacts participating in ISOE.

Yes, I agree □
No, the information should be sent only sent only to the RB participating in ISOE □
No, the information should be used only in the RB-meeting □

COUNTRY AND REPRESENTATIVE IDENTIFICATION

- **Country**: Spain
- **Name of the Regulatory Body:** Nuclear Safety council (CSN)
- **Name and post of the person(s) who fill in the questionnaire:**
  T. Labarta
  Occupational Radiological Protection Section

REGULATORY RIQUIREMENTS ABOUT REPORTING RADIOLOGICAL EVENTS

- Criteria

  - Does your legislation specify criteria for nomination a near miss event, a minor damage, a deviation, a finding, an incident or an accident as a radiological event of interest
    YES,
    The legal provisions governing the notification and reporting of events at nuclear facilities in Spain are included in Royal Decree approving the Regulation on Nuclear and Radioactive Facilities. Other Royal Decrees and Resolutions are issued to apply for emergencies.
    The requirements regarding the notification of events to the CSN are set out in detail in Nuclear Safety Council Instruction IS-10, "Criteria governing the notification of events at Spanish nuclear power plants"
  - If no, does some official document of the licensee specify these criteria?
    All the nuclear facilities have included in their Operating Technical Specifications the notification criteria of IS-10, periods for the issuing of reports, format, notification criteria and scope. This content and the corresponding criteria are further developed in the corresponding plant procedures.

  - What are the most important radiological criteria?
    Occupational Safety
    1. Any event in which somebody could have received –on a preliminary estimation– a dose from external irradiation or internal contamination exceeding, in a single exposure, any of the dose limits established by Spanish regulations (24-hour report).
    2. Any event in which, after accumulated exposure, an exposed worker exceeds –or is considered to have exceeded– any of the dose limits established by Spanish regulations (24-hour report).
    3. Any event in which, in a single exposure or after accumulated exposure, an exposed worker exceeds an unplanned effective dose of 20 mSv per year during his stay at the nuclear power plant (24-hour report).

    Releases of Radioactive Materials or Substances
    1. Any unplanned or uncontrolled release of radioactive materials or substances outside the facility involving a public dose over 1 µSv (1-hour report).
    2. Any unplanned or uncontrolled release of radioactive materials or substances inside the facility but outside its radiological protection area requiring or having required an area reclassification for at least 24 hours in accordance with dose or contamination criteria (24-hour report).
    3. Any unplanned or uncontrolled radioactive release of materials or substances inside both the facility and its radiological area that:
    3.1. Produce an increase of the dose area rate by at least 20 mSv/h and, thus, causes:
    The reclassification of the affected area, or
    A final dose rate over 50 mSv/h within a controlled area of restricted permanence (24-hour report);
    3.2. Requires or would have required the reclassification of the affected area for contamination as a restricted permanence area or prohibited access area (24-hour report); or
    3.3. Involves or would have involved the implementation of unplanned special surveillance or protective measurements for a group of 20 or more workers (24- hour report).
    4. Any release causing that the accumulated dose for the last 12 months exceeds the operational dose limit (24-hour report). (The operator shall complete this criterion with numeric values.)
    5. Any off-site release exceeding the effluent monitoring systems' limit levels for instantaneous releases, as stated in the Technical Specifications (1-hour report). (The operator shall complete this criterion with the limit levels for instantaneous releases stated in the Technical Specifications.)
    6. Exit of radioactive materials or substances outside the facility infringing or having infringed any of the radiation intensity or contamination limit level established by the Spanish regulations on the transport of dangerous goods. Detection of nondeclassified radioactive materials or substances

that had left the facility through the procedure established for non-radioactive materials or substances (24-hour report).
7. Disappearance (loss or theft) of any radioactive material or substance whatsoever (1-hour report).

- Does your legislation specify criteria for reporting
  a) only to company internal,
  b) to the regulatory body,
  c) to international information platforms as INES, IRS and so on?
  Only b). The regulatory body (CSN) reports to the international information platforms. Requirements to inform to other NPPs are established in their specific authorization conditions. The CSN issues informative bulletins on all events notified by the nuclear power plants.

- If yes, do the criteria for nomination (for NPP internal analysis and feedback) differ from those criteria for reporting to the regulatory body?
  No

❑ Differentiation of types/categories of radiological events?

- Do the legislation/company rule define different types/category of radiological events?
  Yes
- If yes, for which purpose do you use different types of radiological events?
  To decide whether to start up the emergency organisation and in which way
- Do the legislation use another categorisation instead of INES?
  No
- Which categories are defined in your legislation?
  INES-Scale

❑ Legislation concerning different aspects or steps for management of radiological events

- Does your legislation specify different aspects or steps for management of radiological events?
  Yes.
- If so, which aspects or steps are specified in the legal framework?
  Apart from the immediate notification of any emergency situation, once an event has been detected, and depending on its classification, the initial notification is required to take place in a maximum 1 hour or 24 hours, including all the preliminary information available as of that time.

  Within 30 days, and regardless of the initial notification criterion, the licensee is required to submit a report on the event, with the scope and content indicated in IS-10 and with special emphasis on concurrent failures and corrective actions. In addition, and if a root cause analysis is performed, the licensee must provide a new revision of the aforementioned report with the main conclusions.

❑ Legal framework on experience feedback from radiological events

- Does your legal framework have requirements on the operational experience feedback (OEF) from radiological events?
  Yes there is an specific condition in the NPP authorization
- If so, give a short description of the content of references:
  In the final annual report each NPP has to analyze both internal and external incidents occurred in NPPs
- Does your legislation specify different aspects or steps of operational experience feedback?
  No at the moment. The CSN is issuing an Instruction defining the different steps of operational experience feedback based on IAEA documents.
- If so, which aspects or steps of OEF are specified in the legal framework?

❑ Ways and tools to support the operational experience feedback OEF from radiological events?

- Which ways or tools exist or are described in the legislation, guidelines or company instruction to support the OEF from radiological events within companies, among other NPP or country wide?
  Information on national events included on reports required to each NPP. International information about events and lessons learned spread in INES, IRS, ISOE, etc