

**4th Senior Regulatory Body
Representatives Meeting
at the ISOE-Symposium in Cambridge 2010**

**Overview on
RP Experience Feedback in Germany**

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Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH

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Agenda

- Introduction
- Overview on the German Operation Experience Feedback
 - Reportable (Own / Foreign) Events
 - Non-reportable (Own / Foreign) Events as contribution to Experience Feedback
- Specific Requirements on Radiation Protection Experience Feedback
- “Flow” of Operation Experience Feedback
- Summary

Note:

- This is a brief summary including simplifications; further details can be obtained from*
- *Report by the Government of the Federal Republic of Germany for the Fifth Review Meeting in April 2011 on the Convention of Nuclear Safety*
 - *Nuclear Safety Officer and Reporting Ordinance (AtSMV)*
 - *BMU regulations on RP planning and competence of RP Officers in NPPs*

Introduction

- Operational experience feedback in German nuclear power plants
 - responsibility of the operator
 - radiation protection is part of the operational experience feedback
 - but: specific requirements exist to stipulate the RP related OEF
 - events (mishaps) may be distinguished according to
 - those occurring in the *own NPP* reflecting a violation of existing criteria and as such to be reported to the regulatory body
 - those occurring in *other NPPs* (national and international) reported to the regulatory body
 - those occurring in the *own NPP* without violation of existing criteria and as such not to be reported to the regulatory body and fed into an “experience feedback loop”
 - ➔ difficult to follow by the regulatory body
 - those occurring in *other NPPs* (national and international) not to be reported to the regulatory body and fed into an “experience feedback loop”
 - ➔ difficult to follow by the regulatory body

Overview on the German OEF – Reportable Own Events

- Own events related to RP aspects to be reported to the regulatory body
 - due to violations of
 - laws and ordinances, especially the Radiation Protection Ordinance (StrlSchV)
 - terms and conditions of the licenses
 - following the
 - requirements of the German Radiation Protection Ordinance (StrlSchV), esp.
 - dose limits
 - contaminations
 - requirements of the German Nuclear Safety Officer and Reporting Ordinance (AtSMV)
 - discharge of radioactive material
 - release of radioactive material
 - contamination
 - carryover of radioactive material



Note: depending on the severity different reporting classes shall be applied

Overview on the German OEF – Reportable Foreign Events

- Events in other German NPPs reported to the regulatory body
 - analysed by regulatory body and related TSO
 - analysed by GRS on behalf of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) with respect to their relevance for other German NPPs
 - if relevant: preparation of specific information („GRS Weiterleitungsnachricht“)
 - containing a detailed description and safety related evaluation of the event and recommendations
 - submitted to operators, TSOs and German Länder (regulatory bodies) requesting an feedback on relevance and countermeasures, if necessary
 - typically discussed between the German TSOs involved in the support of the Länder supervisory authorities
- Concept of „GRS Weiterleitungsnachricht“ is applied also in case of events reported in IAEA International Reporting System (IRS)

Specific Requirements on Radiation Protection OEF

- Radiation Protection Ordinance requires ALARA
 - this implies an continuous analysis of RP experiences
- Explicit mentioned in
 - AtSMV – The safety officer shall among others
 - ensure the evaluation of
 - a) reportable events (§ 6)
 - b) other malfunctions in his own installation
 - c) information on reportable events in other installations
 - co-operate in an exchange of experience concerning safety-related operating experiences with the safety officers of other installations
 - BMU regulation on radiation protection planning (IWRS II)
 - retro-perspective analysis of collective doses of the previous year
 - repeatedly performed work activities: assessment of safety measures with respect to effectiveness and improvements
 - in case of the specific RP planning: assessment of future potential for improvement

„Flow“ of RP Operation Experience Feedback

- NPP reporting
 - reportable events to regulatory body (and a national database and IRS)
 - monthly, quarterly, annual reporting to the regulatory body
 - annual reporting to Reactor Safety Commission (RSK) and Radiation Protection Commission (SSK)
- Dissemination of RP experiences by NPPs
 - participating in national working groups of VGB
 - lecturing in national training courses on RP (e.g. for radiation protection officers) and symposia
 - participating in WANO activities
 - participating in OSART missions
 - conducting of bilateral international co-operations
 - providing feedback to vendors
- TSO and regulatory body participating in specific working groups

Summary

- Radiation protection experiences are part of the NPPs Operation Experience Feedback
- In case of violations of existing terms and conditions of the license, laws and ordinances a clear reporting does exist
 - reporting based on the radiation protection ordinance
 - reporting based on the nuclear safety officer and reporting ordinance
- Reportable events of other NPPs are to be considered in German NPPs
- Experiences from non-reportable events are difficult to follow by the regulatory body, but general and RP specific requirements exist on the assessment of experiences
- NPPs, TSOs and regulatory body participate in different ways of dissemination of experiences