

How do you know you work ALARA?

ALARA benchmarking visits at Forsmark and Ringhals NPP

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Karin FRITIOFF, *Vattenfall AB*, Sweden
Sylvain ANDRESZ, *CEPN*, France

Outline

The ALARA tour



Why?

Willingness to improve
External evaluation

How?

The “ALARA Team”
The “ALARA Guide”

Benchmarking visits

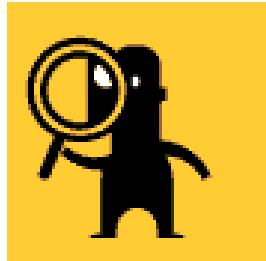
Topics under discussion
The meetings

First results



Why?

- First - “to reach the best level of protection under prevailing circumstances”
- SSM inspection:
“How do you ensure yourselves that you are focusing on the right areas to keep exposure ALARA?”



Forsmark – new RP staff in management departments
Ringhals – an ALARA program in development

Why?

- Learn from others and share your experience
- Have an objective view on our ALARA work – find improvement areas
- Stopping asking the question – one step back
- Awareness of ALARA

How?

① The *ALARA Benchmarking Team* :

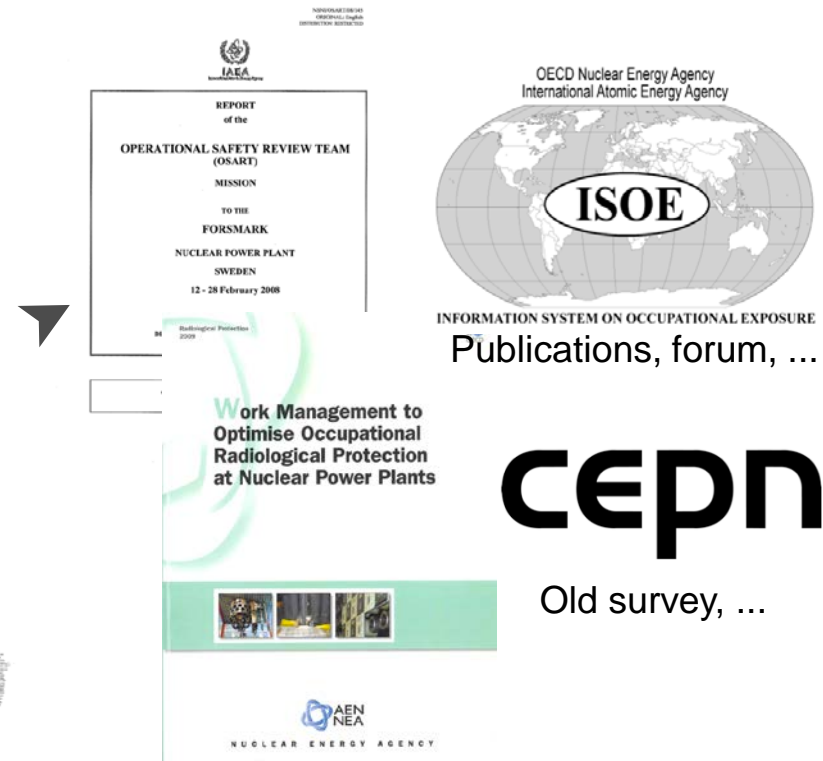
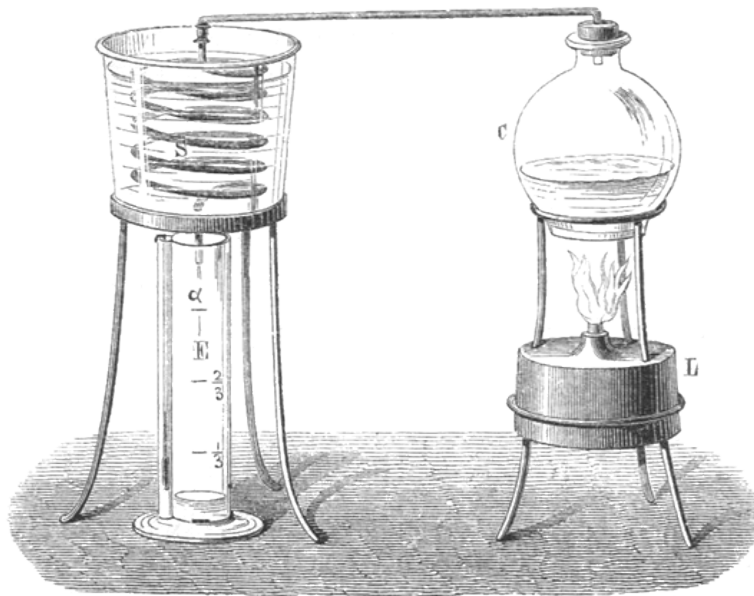
- Initiator and practical coordinator: **Vattenfall**
- Regarding the methodology/concept of the ALARA work: **CEPN**
- Experienced RPM / discussion partners at the BM:
 - RPM from Biblis NPP** (recruited through ISOE)
 - RPM from Sizewell B** (recruited through ISOE)
 - RPM from Forsmark NPP**
 - RPM from Ringhals NPP**

A “benchmarking-with-colleagues ≠
IAEA, WANO etc. assessments



How?

- ② The *ALARA Benchmarking Guide*: an “**extract**” from various sources



How?

- How to use the 'ALARA Benchmarking Guide':
 - 6 topics and 19 sub-topics ⇒ 42 tables
 - Example of one table:

3. ALARA PROGRAMME AND ORGANIZATION

3.1. Existence and content of the ALARA Programme

<ul style="list-style-type: none">• The site has a documented ALARA Programme.• The ALARA Programme is in line with the country regulation and the company policy.	<ul style="list-style-type: none">• The Programme is updated and re-evaluated annually, taking into account the feedback and RP review.• Objectives to be reached are expressed in qualitative or quantitative form (e.g. expected dosimetric gain).• Actions are adapted to site specificities.	<ul style="list-style-type: none">• The Programme is elaborated by the RP Department in cooperation with other plant's departments.• Actions in the ALARA Programme come from inter-comparison with other units/utilities or benchmarking.	<ul style="list-style-type: none">• The ALARA Programme is presented to the plant's staff.• Synthesis of the ALARA Programme and ALARA Action Plan is presented to the contractors.	
../10	../5	../3	../2	../20

- Besides the mark, the Guide presents successful procedures and good practices – you should always find something in it!
- The Guide could also be seen as a Guideline

Benchmarking visits - Topics

Forsmark

- Distribution of ALARA responsibility (3.4)
- ALARA planning (4.2)
- Source term management (5.1)
- Actions to avoid unnecessary and/or the accumulation of low doses (5.2/5.3)

Ringhals

- Content, actions and objectives included in the ALARA-program (3.1/3.2)
- Distribution of the ALARA responsibility (3.4)
- ALARA planning (4.2)
- Actions to avoid unnecessary and/or the accumulation of low doses (5.2/5.3)

Benchmarking visits – The meetings

Interviews

- Senior management
- Supervisors various departments
- RP staff (own, contractors)
- Job planners
- Maintenance
- Contractors

Visit to the plants

- Reactor building (BWR)
- Decontamination facility
- Waste management
- Mock-up building



First results of the benchmarking

- Contributions of the ALARA Benchmarking Team
 - Spot and valorise good practices (*ex. RP section within Maintenance Department at Forsmark*)
 - Formulate recommendations (*ex. involvement of contractors at Forsmark/Ringhals*)
- Many indirect contributions
 - Before the visit: Going through the ALARA Benchmarking Guide
 - RP team work - Identify topics/ideas to be explored
 - Planning the meetings
 - Remind + broadcast ALARA issues among several work sections
 - Free-speech interviews regarding ALARA
 - Strengthen the links between RP and other sections
 - Formulate suggestions
 - Feedback of the benchmarking (worker involvement/empowerment)

Thank you for listening!