

# How do you know you work ALARA?

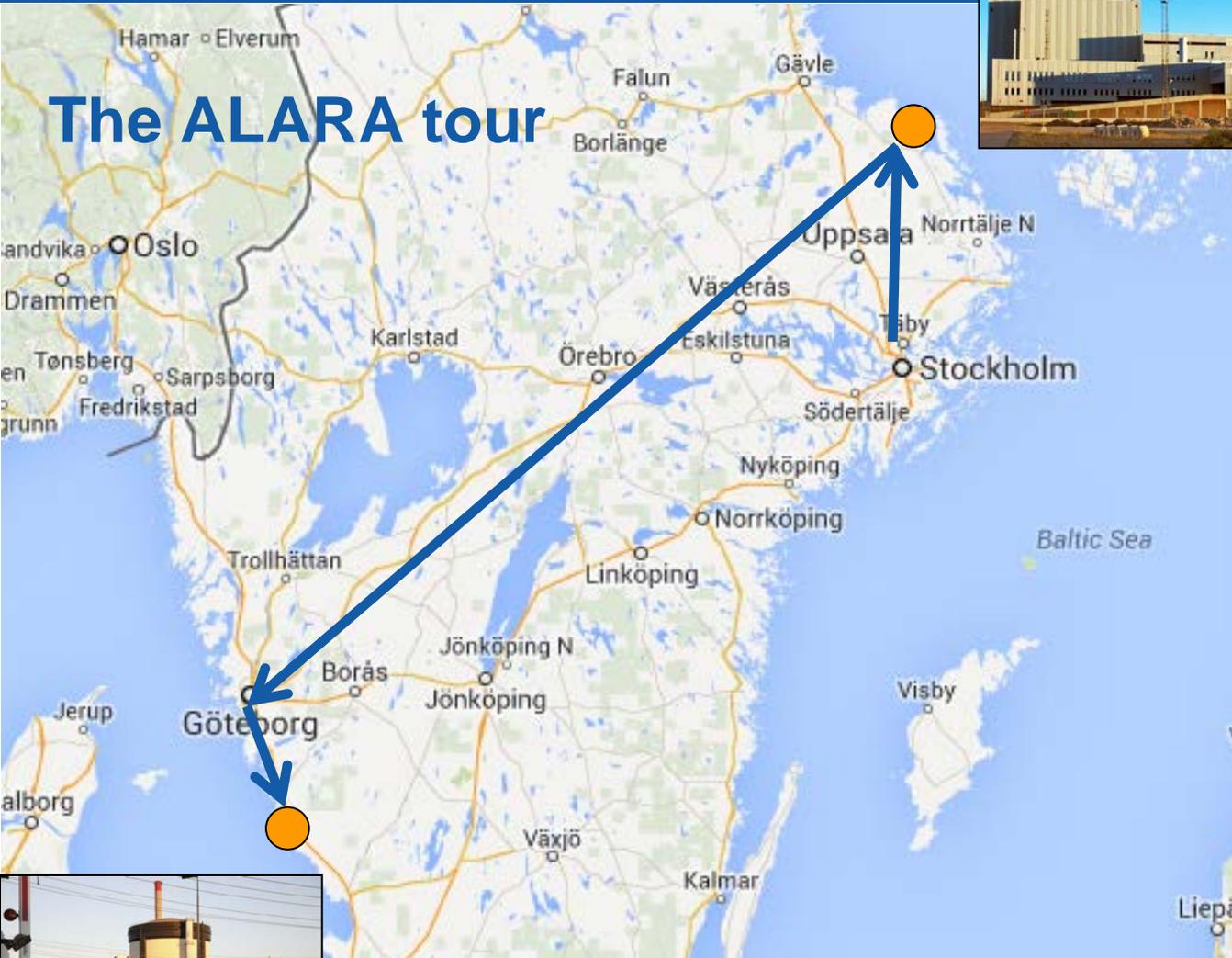
*ALARA benchmarking visits at Forskmark and Ringhals NPP*

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# 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* :

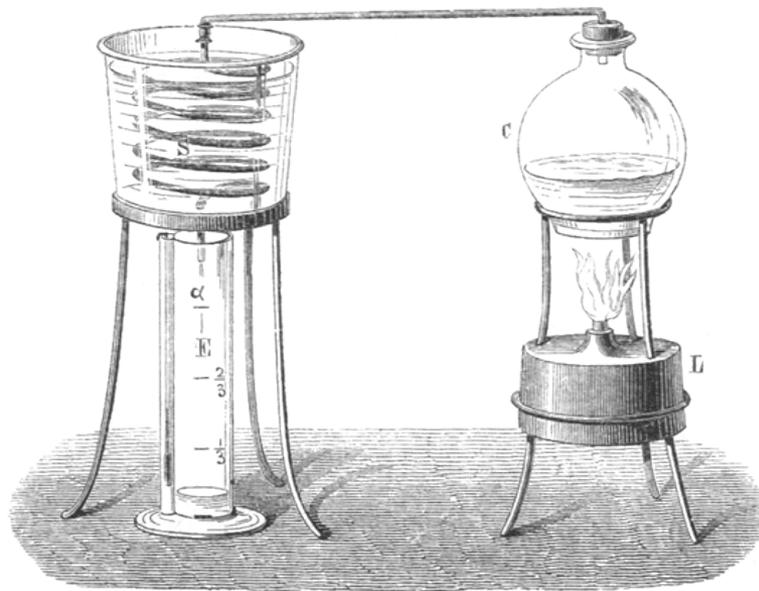
- Initiator and practical coordinator: **Vattenfall**
- Regarding the methodology/concept of the ALARA work: **CEPN**
- Experienced RPM / discussion partners at the BM:
  - RPM from Biblis NPP** (recruited through ISOE)
  - RPM from Sizewell B** (recruited through ISOE)
  - RPM from Forsmark NPP**
  - 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"> <li>• The site has a documented ALARA Programme.</li> <li>• The ALARA Programme is in line with the country regulation and the company policy.</li> </ul>	<ul style="list-style-type: none"> <li>• The Programme is updated and re-evaluated annually, taking into account the feedback and RP review.</li> <li>• Objectives to be reached are expressed in qualitative or quantitative form (e.g. expected dosimetric gain).</li> <li>• Actions are adapted to site specificities.</li> </ul>	<ul style="list-style-type: none"> <li>• The Programme is elaborated by the RP Department in cooperation with other plant’s departments.</li> <li>• Actions in the ALARA Programme come from inter-comparison with other units/utilities or benchmarking.</li> </ul>	<ul style="list-style-type: none"> <li>• The ALARA Programme is presented to the plant’s staff.</li> <li>• Synthesis of the ALARA Programme and ALARA Action Plan is presented to the contractors.</li> </ul>	
../10	../15	../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!**