

Ongoing work to enhance post-accident radiation protection at Swedish Nuclear Power Plants

- RPFA Working group

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2014/04/11

Confidentiality - None (C1)

General – New landscape

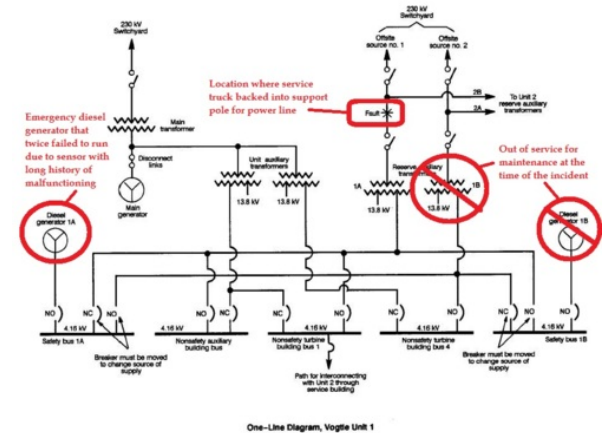
Prepared to cope with emergencies at all reactor units simultaneously
Planning conditions based on two different scenarios:

1. *Station Black Out (SBO)*

- no warning
- no external support within 72 h

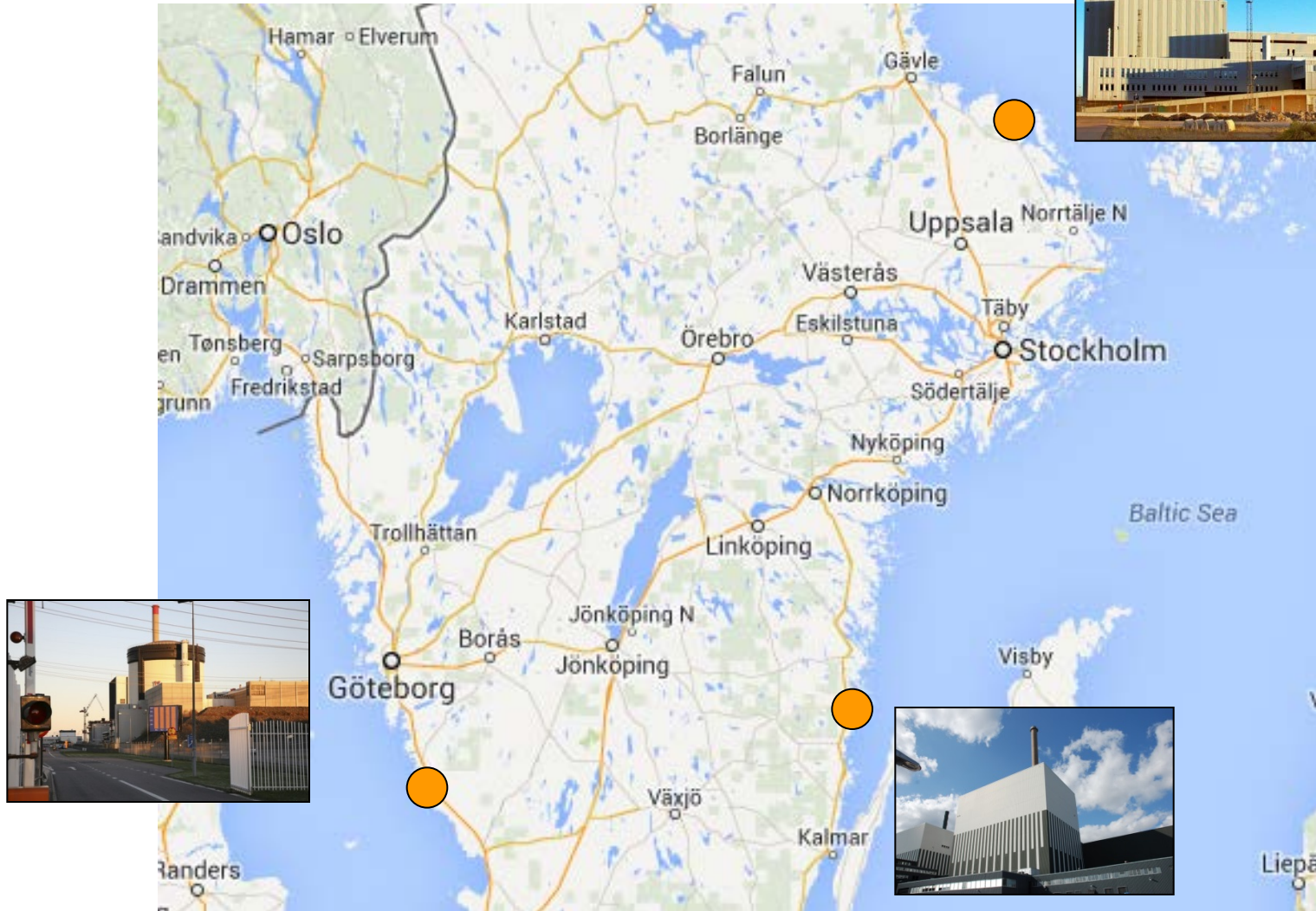
2. *Slowly developing situation*

- warning given some day before
- severe weather conditions
- The site isolated 24 h when the situation actually occurs



The EP organization must be operational for several weeks!

NPP in Sweden



Post-Fukushima Radiation Protection Working Group

- Working group

- Swedish NPPs & CLAB (spent fuel interim storage / SKB, Swedish Nuclear Fuel and Waste Management Co)
- Coordinated by Vattenfall AB
- Report to be issued summer 2014

- Purpose

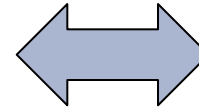
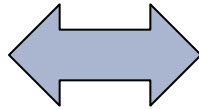
- Identify areas for improvement and develop strategies and procedures for RP during severe accidents following a SBO

- Goal

- A common approach will facilitate the assistance from the others and the communication and interaction with relevant authorities
- Harmonize strategies & procedures within post-accident RP between the nuclear facilities



Harmonize strategies & procedures



EP center

- Operational intervention Levels
- Assessment radiological cons. In environment
- "Evacuation" of site

2014/04/11

Intervention affected unit(s)

- Assess Radiological situation → Accessibility
- Ref. levels emergency workers
- PJB, RP procedure and PjdB

Logistic center

- Decontamination
- Personal dosimetry (internal-external)
- Interaction with other preparedness bodies

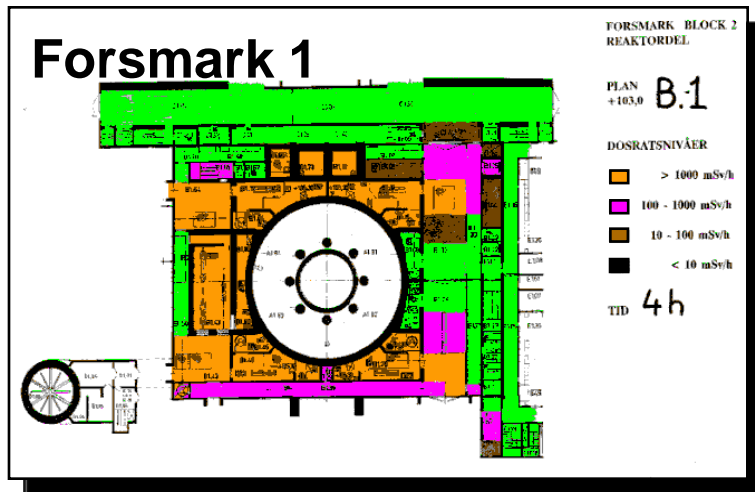
Additional collaboration

- Agreement on assistance – RP – personnel (within 24 h after request)
- Agreement on assistance – Personal Protective Equipment (within 3 days after request) – well defined content in container
- Common understanding about
 - Contracts with external suppliers – RP technicians & equipment
 - Mobile equipment for radiation monitoring
- Training & Exercises
 - More practical and theoretical exercises
 - Monitoring exercises



Ongoing activities – site specific

- Availability of areas within the NPP
- Updating of post-accident dosrate layouts
- Location and amount of radiation monitors in the reactor buildings



Colour

Green

Brown

Pink

Orange

Dose rate (mSv/h)

<10

10-100

100-1000

>1000

Thank you for your attention!