Safe and efficient operation

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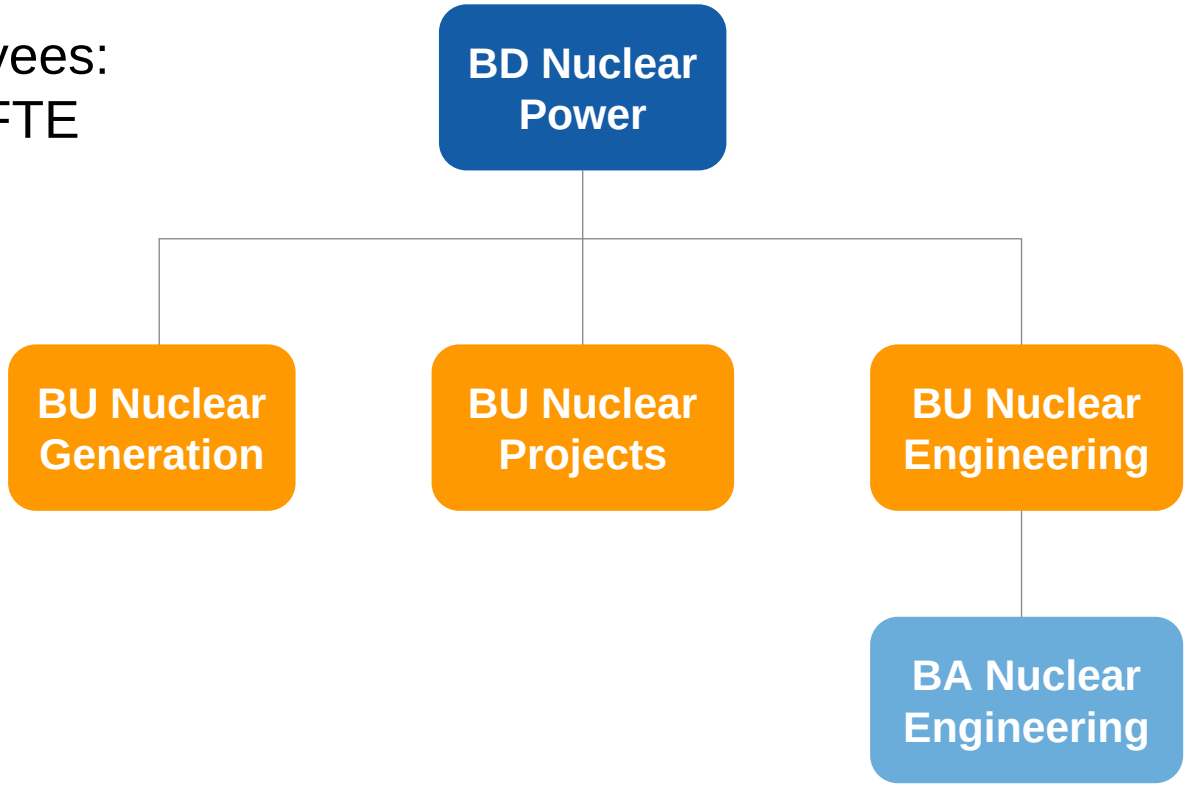
Temporary Organization from 1 December, 2012

Employees:
4,700 FTE



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Vattenfall's nuclear power operations

- **Installed capacity (2011): 6,815 MW**
  - **Vattenfall share: 4,943 MW**
- **Electricity generation (2011): 42.5 TWh**
  - **Vattenfall share: 31.0 TWh**

Brokdorf

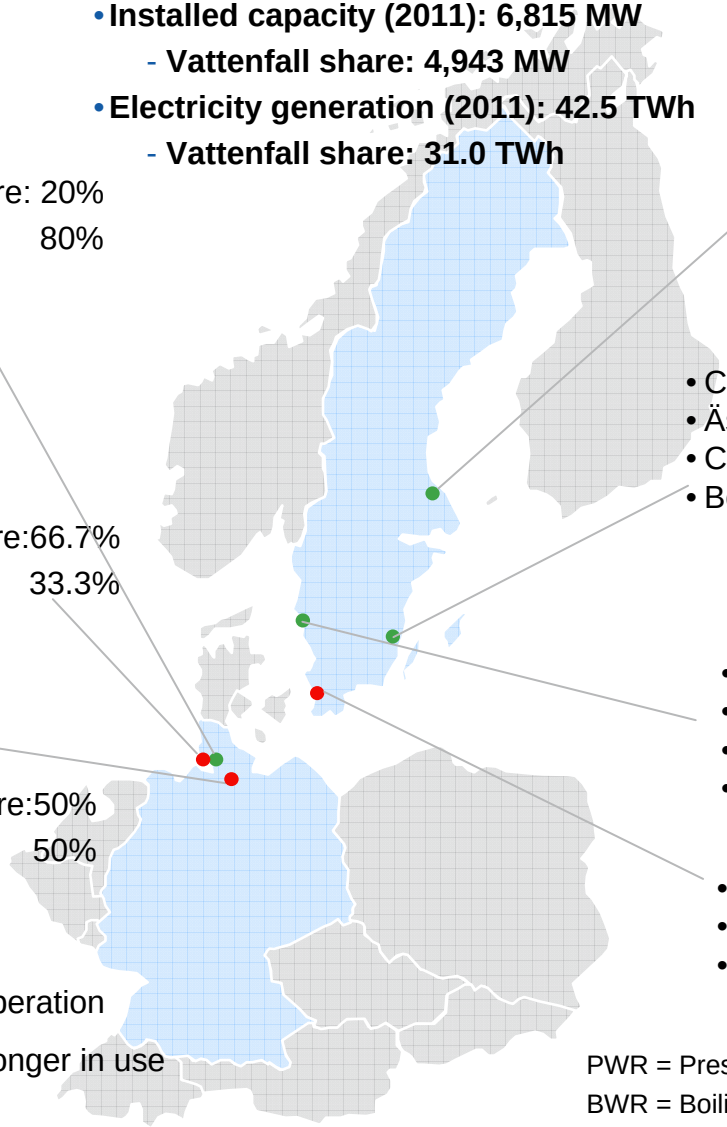
- 1 PWR
- 1,410 MW
- Vattenfall share: 20%
- E.ON share: 80%

Brunsbüttel

- 1 BWR
- 771 MW
- Vattenfall share:66.7%
- E.ON share: 33.3%

Krümmel

- 1 BWR
- 1,346 MW
- Vattenfall share:50%
- E.ON share: 50%



Forsmark

- 3 BWR
- 3,150 MW
- Vattenfall share: 66%
- E.ON share: 8.5%
- Mellansv.: 25.5%

Oskarshamn

- Clab
- Äspö hard rock laboratory
- Canister laboratory
- Bentonite laboratory

Ringhals

- 3 PWR, 1 BWR
- 3,733 MW
- Vattenfall share: 70.4%
- E.ON share: 29.6%

Barsebäck

- Barsebäck Kraft AB*
- Barsebäck NPP
- Ringhals share: 100%

* Service operator

● = Jointly owned unit(s) in operation

● = Jointly owned unit(s) no longer in use

PWR = Pressurized Water Reactor

BWR = Boiling Water Reactor

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Focus areas (I)

- Continued investments in safety, lifetime extensions and power up rates
  - 2003 until 2012 over SEK 30 bn → 2013-2017 over SEK 20 bn

- Safe operations is our first priority:
  - Top-KPI "*Lost Time Injury Frequency*" (LTIF) closely monitored; continuing decreasing trend for own personnel, forecast 2012 indicates level of 1.4 LTIF
  - We are well underway with our transition plans for 2015

- Increase efficiency by optimising plant operations and maintenance
  - Preparation and execution of outage performance:
    - We coordinate the process "Outage Performance" to develop and improve in a number of areas to ensure we have full control of the work and activities to be carried out during a outage period.
    - We have introduced so-called "Readiness Reviews" to ensure that all involved persons are qualified to begin the outage work.

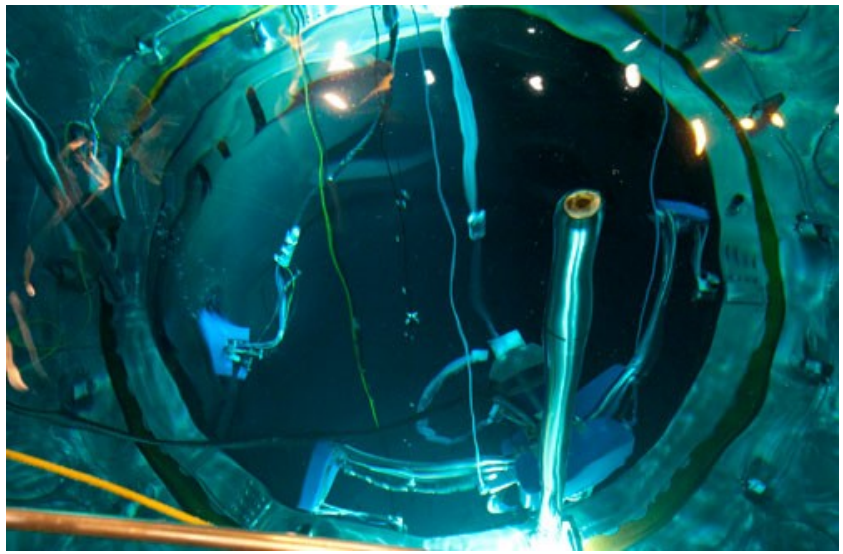
Focus areas (II)

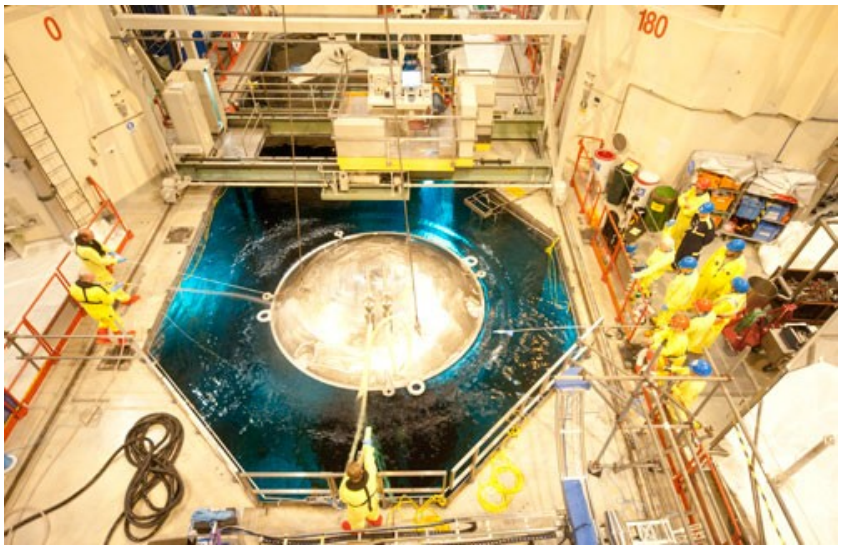
- Preparations for licensing of final repository for spent nuclear fuel
  - Continued application process for final repository for spent nuclear fuel in Sweden, including an encapsulation plant

- Preparations for decommissioning German nuclear power plants
  - Application filed beginning of November to decommission Brunsbüttel
  - Krümmel in long-term standstill mode

- Vattenfall works with international benchmarks and peer reviews for continuous improvement.
  - Example: World Association of Nuclear Operators corporate peer review

Reactor vessel at Ringhals 2 without defects





- In summer 2012 manufacturing defects (cracks) were discovered at the reactor pressure vessel at nuclear plant Doel 3 in Belgium. The reactor vessel of Vattenfall's reactor Ringhals 2, has the same manufacturer.

- In October extended testing of the reactor vessel at Ringhals 2 showed no signs of damage or deficiencies in the reactor vessel similar to the defects found in Doel 3.

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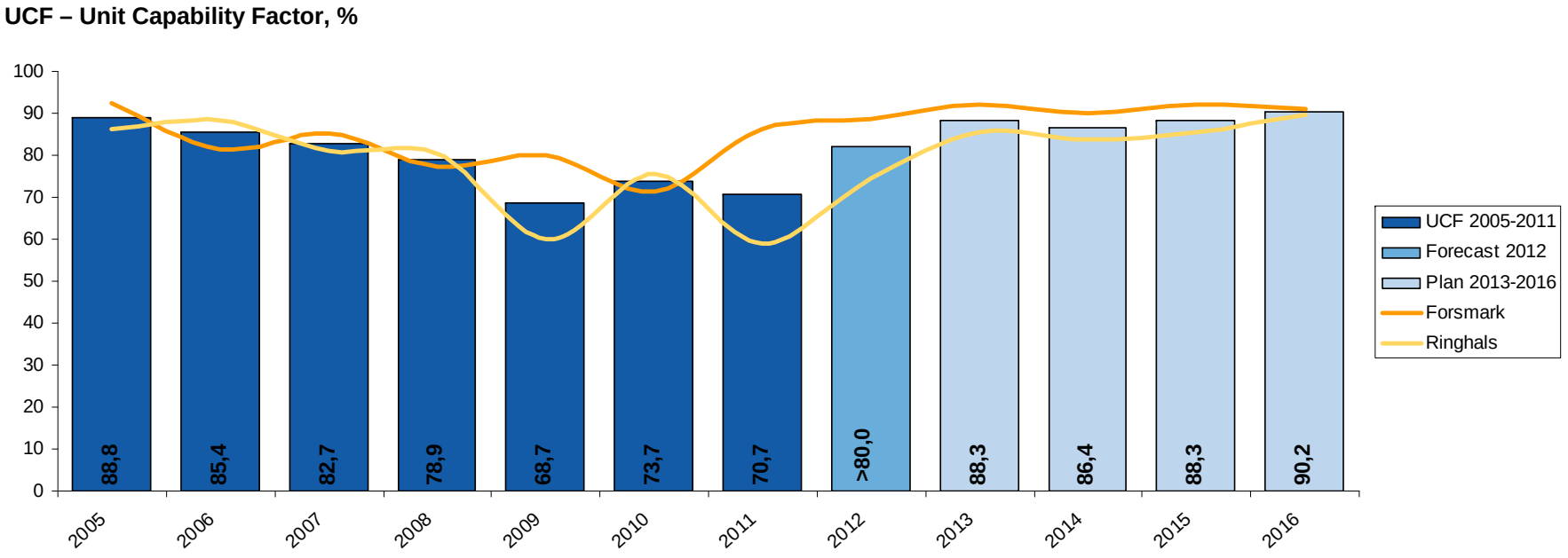
Outages during 2012

Reactor	Start date	Planned end date	Actual end date
Forsmark 1	2012-08-05	2012-09-06	2012-09-05
Forsmark 2	2012-05-13	2012-06-21	2012-06-20
Forsmark 3	2012-07-08	2012-07-24	2012-07-28
Ringhals 1	2012-05-06	2012-06-25	2012-06-26
Ringhals 2	2012-09-15	2012-10-26	2012-11-01
Ringhals 3	2012-06-06	2012-07-07	2012-07-08
Ringhals 4	2012-08-11	2012-09-14	2012-09-29

Plan 2013-2016 indicates availability between 86-90%

- Availability forecast 2012 indicates 5 year average high (> 80%)



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EU stress tests

- Swedish nuclear power plants generally came out strongly in the country peer-review process of ENSREG (European Nuclear Safety Regulator Group)
- Swedish Radiation Safety Authority (SSM) is currently reviewing the action plans that Forsmark and Ringhals have submitted to SSM on 15 September
- By year-end SSM will provide a consolidated national action plan for continued international review (including workshops in spring 2013)
- It is premature to determine any required additional investments until SSM has concluded its work with the stress tests

Application to Swedish Radiation Safety Authority

- Vattenfall has made an application to Swedish Radiation Safety Authority, SSM, to specify terms for new nuclear reactors
- The application is necessary for Vattenfall to investigate conditions set by SSM. It is a multi-step process which takes several years to complete
- No decision has been made within Vattenfall to replace old reactors with new reactors
- Any potential future investment will be decided on a cost versus benefit basis. If profitable, Vattenfall wants to have the option to replace reactors

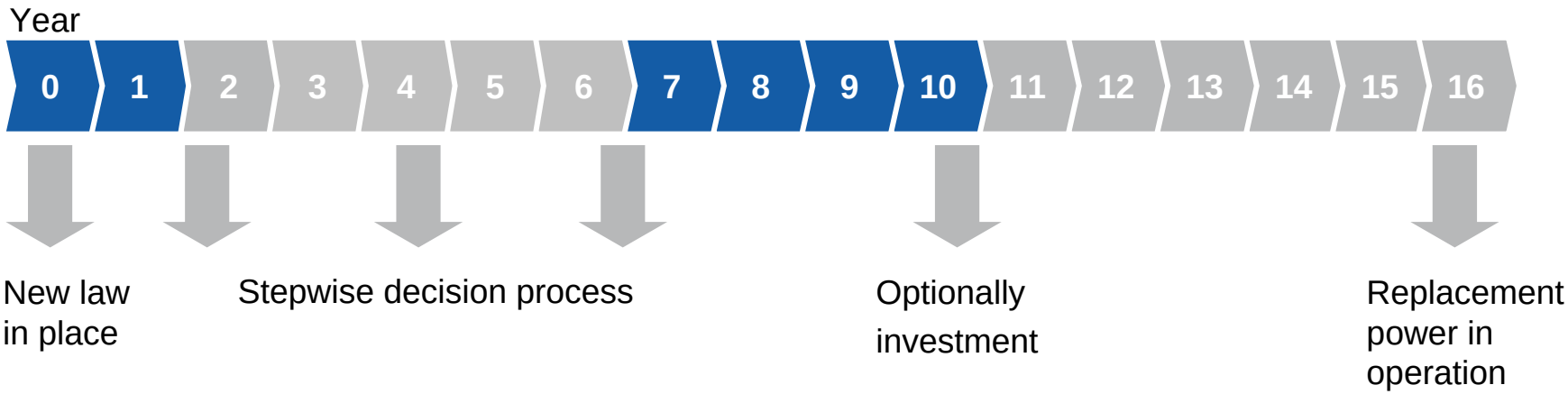
Future Challenges and Actions

Nuclear availability in Sweden	• Finalisation of modernisation programmes • Further improve outage performance management
Nuclear phase-out in Germany	• Continued planning for direct decommissioning of Brunsbüttel
Fees and taxes	• Continued discussion about increasing fees and taxes
Stress tests	• Review requirements from the relevant national regulator • Determine and deploy appropriate measures
Long-term operations	• Future legislation and amended regulations

Appendix

Potential nuclear new build in Sweden

Assessment starts now in order to have the option for replacement power



Analysis of the conditions, requirements and processes for a complete basis for decision

Project planning for new plant

Erection and commissioning of a new plant

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