Abstract

Some Impact of Melting Scrap for the Decommissioning of Nuclear Power Plant Stade

Dr. Georg U. Bacmeister. E.ON Kernkraft GmbH, NPP Stade

The NPP Stade in Germany was shut down in November 2003. After a transient phase the license for dismantling was given in 2005. Until now the Mass, dismounted from the controlled area, is add up to about 13,000 Mg. About 1 quarter (4,200 Mg) is dedicated to be remelted. Most of this section is subject of clearance according the regulations given in RP 89.

Main criteria to choose a certain option for treatment of contaminated material are:

- Characteristic of the waste
 - o Material
 - o geometry
- Radioactive content of the waste
- Expected decontamination result of the desired treatment
- Conditions of acceptance of the desired service facility
- Availability of the desired service facility
- Process reliability and stability
- Cost and efficiency of the process for the desired treatment option
- On-site or off-site treatment
 - o Available place to perform the treatment
 - o Influence on the time schedule
 - o Availability of the desired treatment on site
 - o Surrounding licensing environment?
- Long term aspects (e.g. remaining waste amount, decay storage)

Decision criteria for on-site and off-site treatment of contaminated material

The criteria will be reflected in the context of the experiences achieved during dismantling the NPP Stade. Finally some Impact of Melting Scrap for the Decommissioning of Nuclear Power Plant Stade will be discussed.