Impact of metals recycling on a Swedish BWR decommissioning project

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Decommissioning of nuclear power plants generates large volumes of radioactive or potentially contaminated metals. By proper management of the waste streams significant amounts can be free released and recycled either directly or after decontamination and melting.

A significant part of the required work should be performed early in the process to make the project run smoothly without costly surprises and delays. A large portion of the clearance activities can be performed on-site. This on-site work should focus on the so called low-risk for contamination material. Other material can be decontaminated and released on site if schedule and the available facility areas so allow. It should be noted that the on-site decontamination and clearance activities can be a significant bottle neck for a decommissioning project. The availability of and access to a specialized metals recycling facility is an asset for a decommissioning project.

This paper will describe the forecasted positive impact of a well-structured metals characterisation, categorisation and clearance process for a BWR plant decommissioning project. The paper is based on recent studies, performed projects and recent in-house development.