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## INTERNATIONAL SAFEGUARDS APPLIED TO THORP.

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### Extended Synopsis for poster:-

This poster session consists of a multi media presentation using a Phillips CDI (compact disc interactive) system prepared in 1996. It is not accompanied by any written text; interested readers will be referred by the accompanying 'presenter' to conference papers which described in more detail the safeguards approach in the BNFL plutonium handling plants (such as Thorp) at Sellafield.

The Thermal Oxide Reprocessing Plant (Thorp) is situated on the Sellafield Site in the north-west of England. The plant, which is capable of reprocessing 1200 tU per annum, is in the final stages of commissioning using real feedstock. A sister plant, the Sellafield Mixed Oxide Fuels Plant (SMP) is being constructed alongside Thorp and this will take BNFL's recycling capabilities from demonstration scale to full production capability. All these plants are safeguarded by the European Safeguards Directorate, Euratom and under the UK voluntary offer are open to IAEA designation and verification. The IAEA currently safeguard some spent fuel and plutonium dioxide stores at Sellafield.

This multi media presentation allows the 'reader' to interact with the software as it describes how Nuclear Materials Accountancy and Safeguards are mapped onto the Thorp process. Details are given of key measurement points which have been incorporated in the Thorp design so that Nuclear Materials Accountancy is integrated with plant operation. The presentation takes the form of a linear video and an interactive compact disk and is used by BNFL for induction and public information purposes.