

The

Nuclear Institute





Joint Lecture with the Royal Society of Chemistry

BWR Water Chemistry

Evening Lecture 13th November 2018

18:30 for a 19:00 start

School of Chemistry, Bristol University, BS8 1TS

Presented by Olivia Collier, Horizon Nuclear Power and Brian Handy, Wood Group

The different types of water reactor have different requirements on their water chemistry regime which enable the operators to control parameters to manage factors such as reactivity and operator doses.

This presentation will give a detailed technical overview of the way in which BWR water chemistry management has evolved to help manage plant issues discovered during operation and development of the BWR, giving some details of the regime to be adopted on the ABWR proposed for Wylfa. The presentation will show how water chemistry has:

- Reduced Stress Corrosion Cracking in the Reactor Vessel
- Reduced Operator Doses in the Turbine Hall and Water Treatment Plant
- Reduced Flow Assisted Corrosion in the Feedwater System

