SUMMARY OF
PUBLIC MEETING TO DISCUSS RESULTS OF TESTING OF
HIGH-BURNUP FUEL CLADDING UNDER LOCA CONDITIONS
February 10, 2005

The regulations for loss-of-coolant-accident (LOCA) analysis specify limits on peak cladding temperature and maximum cladding oxidation to ensure cladding ductility and thereby maintain coolable geometry following a LOCA (10 CFR 50.46(b)). Cladding corrosion, which accumulates during fuel burnup, has long been suspected of affecting these limits. Preliminary ductility results obtained by Argonne National Laboratory (ANL) were discussed with the industry in a public meeting on February 10, 2005, at NRC headquarters. The results were from ring compression tests, and these were the first such ductility tests ever conducted with cladding from high-burnup fuel rods. Comments were made in brief presentations by the Electric Power Research Institute (EPRI) and Framatome ANP. Future test plans were discussed. It should be noted that EPRI has provided irradiated fuel rods and that Framatome, Westinghouse, and Global Nuclear Fuel have provided unirradiated cladding for testing in this NRC cooperative research program.