

ANNUAL MEEM LECTURE
David A. Heacock
Site Vice President North Anna Power Station
Tuesday, April 15, 2003 - Best Western, Mount Vernon Inn, Charlottesville, VA
[Directions](#)

The North Anna Head Replacement Project - Can This Happen to my Plant and When?

The tradition of the Meem Lecture features a UVA Nuclear Engineering graduate talking on a topic of interest in the nuclear field. The lecture series, now more than 25 years old, is supported by a fund established when Larry Meem retired as Chair of the Nuclear Engineering Department. It has featured some outstanding speakers and this year's event will be no exception. We are hoping that Larry and Boo Meem will be able to be with us again this year.

One of the most serious issues facing the nuclear power community is the corrosion of the reactor vessel head near the control rod drive mechanism (CRDM) penetrations, with subsequent primary coolant leakage. Dave Heacock will discuss the 3 failure mechanisms that can cause a CRDM penetration to leak and what this means for a utility. He will then review the process a utility goes through to replace a reactor vessel head, including finding and shipping the head, radiation dose to the workers, and the project duration and cost. As North Anna 2 has just gone through this process [see Nuclear News, March 2003] Dave can address this topic first hand and will be able to show a number of photos of the actual task, including a rare photo of a section removed from the Davis Besse vessel head.

Dave Heacock joined Virginia Power in 1979 as an assistant engineer at North Anna Power Station. In August of 1985 he was named Supervisor-Surveillance & Test Engineering and he received his Nuclear Regulatory Commission Senior Reactor Operator License that same year.

In 1989, he was appointed Superintendent-Station Engineering, and in 1990 became Superintendent-Technical Services. Heacock was promoted the position of manager-Nuclear Safety & Licensing in March 1998. In June 1998, Dave became Manager-Station Operations & Maintenance, and he was promoted to his current position in May 2000.

A native of Northern Virginia, Dave Heacock received a Bachelor's degree in Nuclear Engineering from the University of Virginia in 1979. He is a Professional Engineer registered in Virginia. Dave and his wife, Lynn, have two sons and live in Richmond.