

---

**From:** Barrett, Harold  
**Sent:** Wednesday, June 27, 2012 2:57 PM  
**To:** Wertz, Trent  
**Cc:** Klein, Alex; Moulton, Charles  
**Subject:** Harris Alternate Seal Injection Pump Picture

Attached is a picture of the Alternate Seal Injection (ASI) Pump installed at the Shearon Harris nuclear plant to address both fire risk issues (as part of the NFWA 805 transition) and to improve accident mitigation for internal and external events. The total modification included this pump and a completely independent diesel generator, boric acid storage tank (to provide a suction source for the ASI pump), suction and discharge piping and controls to make the ASI system fully automatic so that upon loss of RCP seal injection, the new diesel generator and associated pump will automatically start (without the need for operator intervention) and provide RCP seal cooling.

Progress Energy reported in their LAR that all modifications performed during the NFWA 805 Transition reduced risk by  $1.7E-06/\text{yr}$  for CDF and  $9.0E-08/\text{yr}$  LERF. A substantial part of that risk reduction is due to the ASI modification.

Let me know if you have any questions.

Harry Barrett

