

REQUEST FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST
REVISION TO THE SOUTH TEXAS PROJECT (STP), UNITS 1 AND 2
FIRE PROTECTION PROGRAM RELATED TO THE
ALTERNATE SHUTDOWN VCAPABILITY

1. In its submittal dated June 2, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11161A143), STP Nuclear Operating Company (STPNOC, the licensee) stated that a fire induced spurious opening of the pressurizer PORVs would result in an engineered safety features safety injection (SI) signal in approximately 71 seconds. In submittal dated August 1, 2011 (ADAMS Accession No. ML11221A230), however, the time is identified as 61 seconds following reactor trip. Please clarify which value is correct.
2. The its request dated June 2, 2011, the licensee states that operators can close the power operated relief valve (PORV) block valves within sixty seconds. Analytic results indicate that a SI signal would be received in either 61 or 71 seconds following spurious PORV opening on reactor trip, assuming the reactor is in a nominal condition prior to reactor trip. Please quantify the uncertainty in SI signal receipt time attributable to the pre-trip power level, reactor coolant system (RCS) average temperature, pressurizer pressure and level, and RCS flow uncertainties and demonstrate that this uncertainty, when accounted for, leaves enough time for operator intervention to close the PORV block valves post-trip.
3. Letter dated June 2, 2011 states that operators can place centrifugal charging pumps in pull to lock within 120 seconds, and a SI actuation would occur at 146 seconds, if the pressurizer auxiliary spray valve opens on reactor trip. Please demonstrate that the 26 second margin between stated operator capability and the analyzed SI injection signal receipt time is sufficient to account for reactor pre-trip statepoint uncertainties.
4. Letter dated August 1, 2011, states that steam generator water level will go off-scale high in 130 seconds following a reactor trip with a spurious main feedwater isolation valve opening. The letter dated June 2, 2011 states that operators have demonstrated the capability to secure startup feed pumps within 120 seconds. Please demonstrate that the 10-second difference between stated operator capability and analytic results is sufficient to account for pre-trip reactor statepoint uncertainty.
5. Letter dated June 2, 2011 appears to consider each of the credited post-trip operator actions independently. Please clarify whether operators are assessed in their capability to follow all actions in aggregate following a reactor trip due to fire, or whether the actions are assessed separately. If the actions are assessed separately, explain how the independent assessments lead to a conclusion that all operator actions can be performed within their stated time frames, when performed together.