



Event Description and Probable Consequences

On August 19, 1981 during monthly surveillance testing, the RCIC turbine tripped via mechanical overspeed. The EGR had failed to regulate the turbine governor valve. The EGR actuator assembly was replaced, and RCIC was satisfactorily retested and returned to service. On September 14, 1981 during the monthly surveillance test, RCIC isolated due to high steam line flow differential pressure. The turbine governor valve again failed to respond, and RCIC was declared inoperable. RCIC inoperability is contrary to Tech. Spec. Section 3.5.G.1. HPCI operability, on both dates, was satisfactorily demonstrated per Tech. Spec. Section 3.5.G.2. There were no consequences to the public health and safety as a result of this event. No similar occurrences have been reported to the commission.

Cause Description and Corrective Action

The cause of the initial event was believed to be the failure of the EGR to regulate the RCIC turbine governor valve. The unresponsive governor valve caused the turbine to overspeed and subsequently trip via mechanical overspeed. The EGR actuator assembly was replaced and the mechanical overspeed trip was reset. During the second event, the EGR also failed to regulate the turbine governor valve. The EGR actuator assembly was again replaced. RCIC was repeatedly restarted but continued to trip. The entire control circuit for RCIC was checked. Preventative maintenance such as cleaning of contacts and retightening of connections was performed. Upon completion of this maintenance, RCIC was restarted. The turbine governor valve operated, but not properly. Further investigation revealed the pilot valve plunger on the EGR actuator assembly to be out of adjustment. Once the pilot valve plunger was properly adjusted, RCIC was successfully run six times.