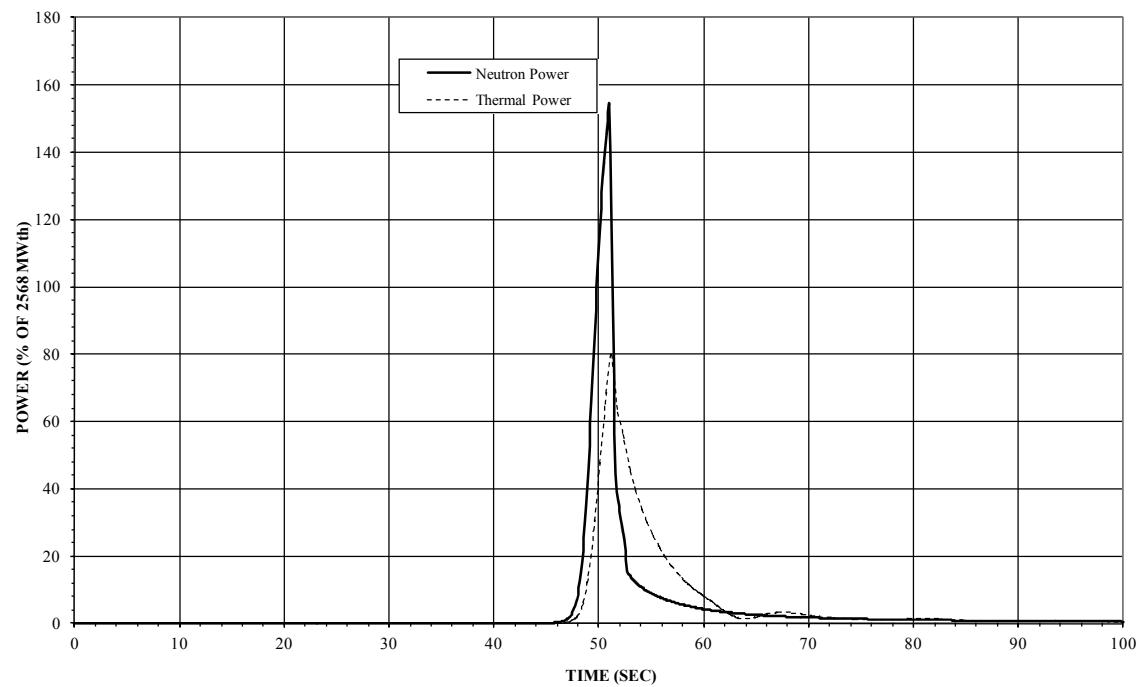
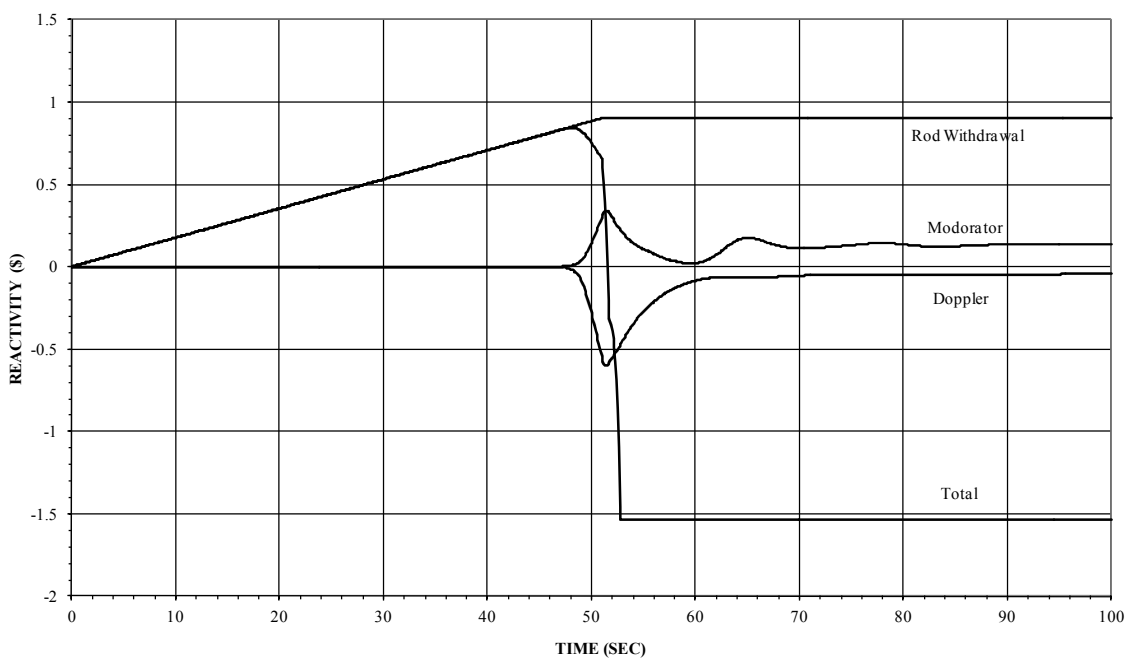
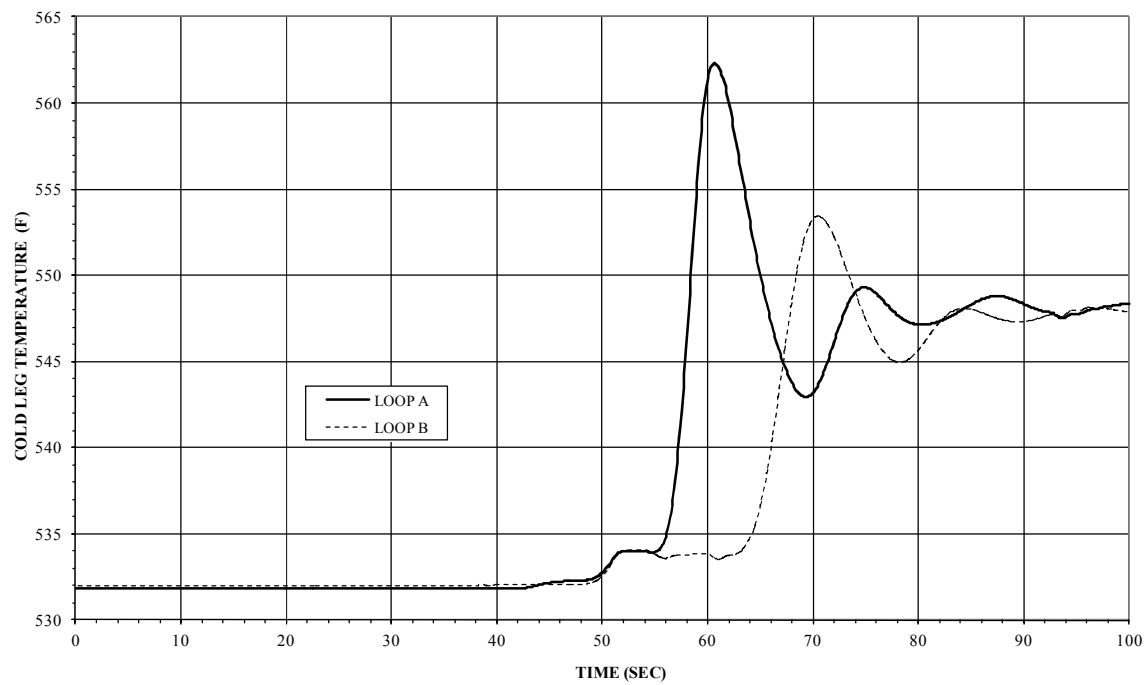
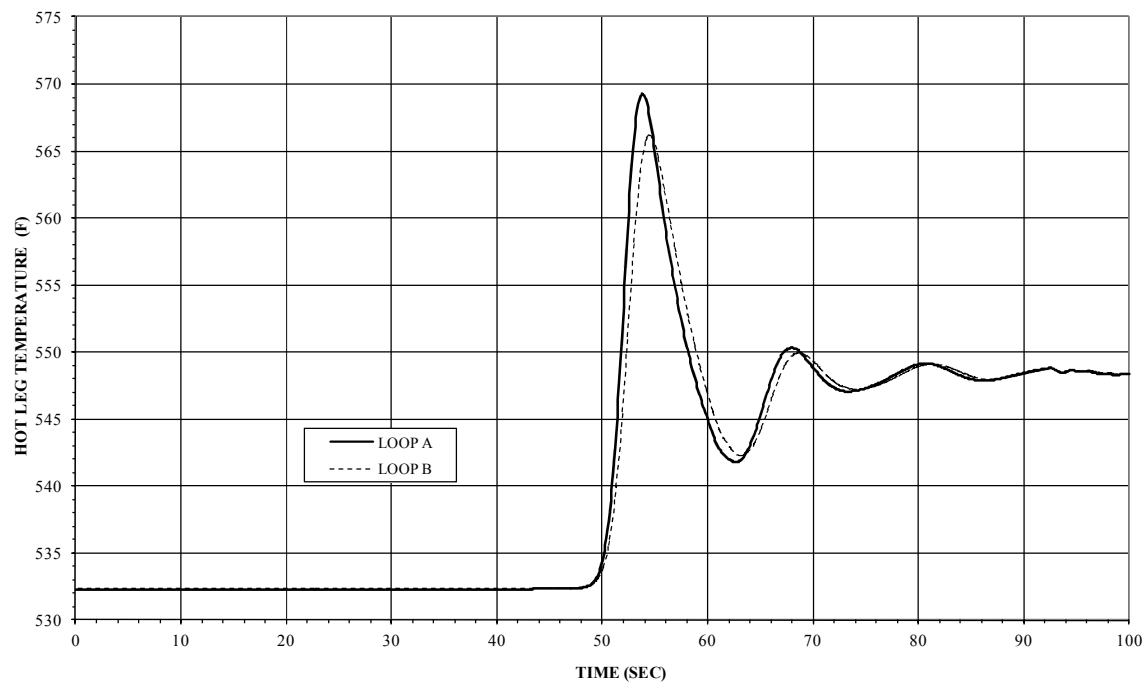


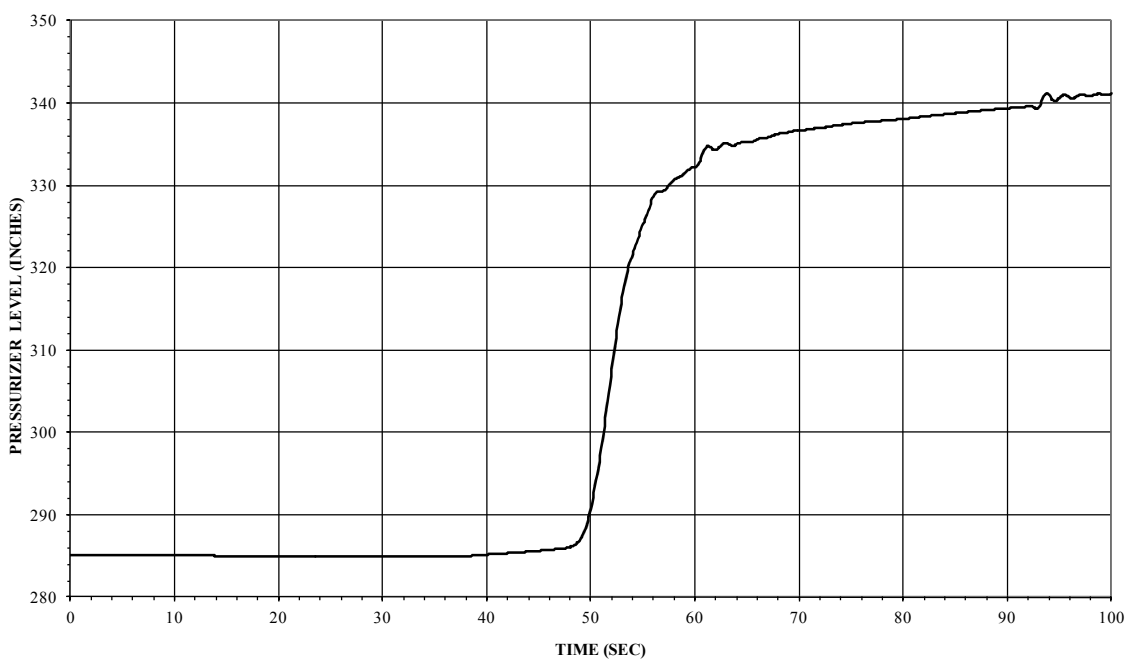
## Appendix 15B. Figures

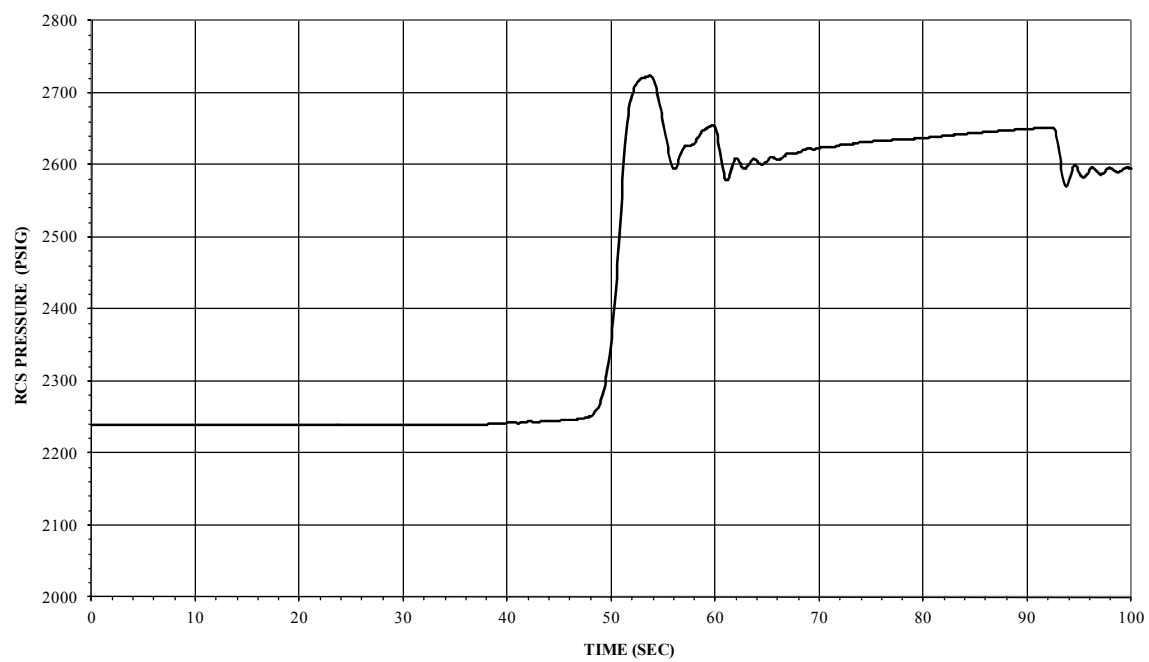
**Figure 15-1. Startup Accident**

**Figure 15-2. Startup Accident**

**Figure 15-3. Startup Accident**

**Figure 15-4. Startup Accident**

**Figure 15-5. Startup Accident**

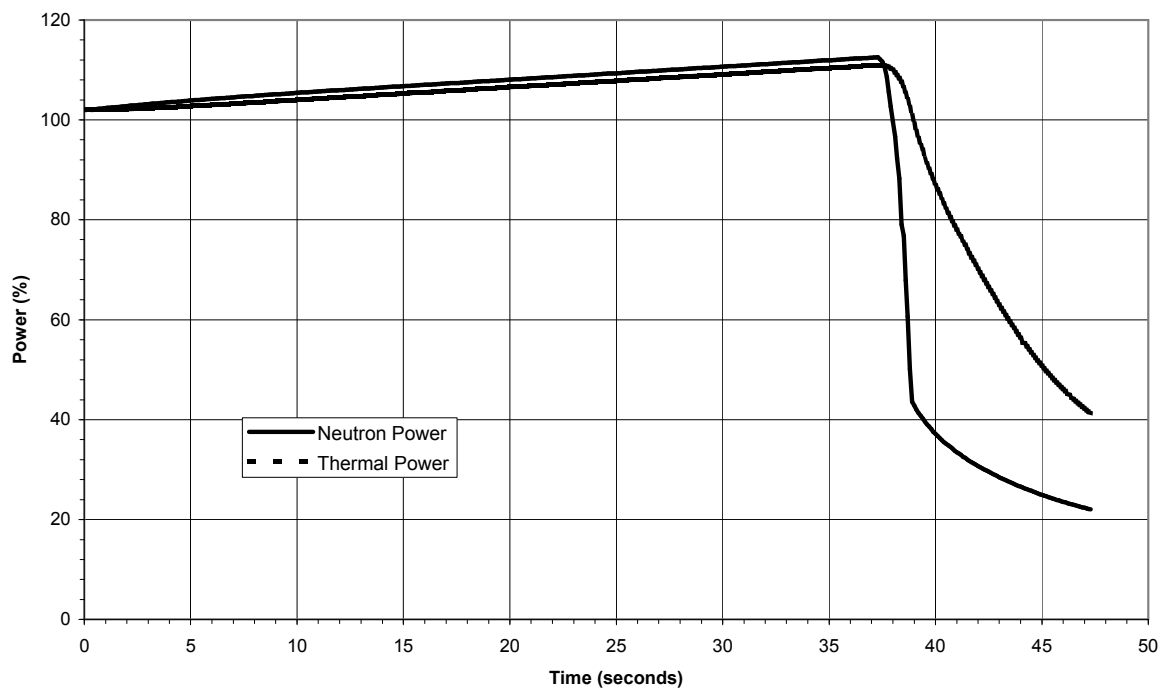
**Figure 15-6. Startup Accident**

**Figure 15-7. Deleted Per 1998 Update**

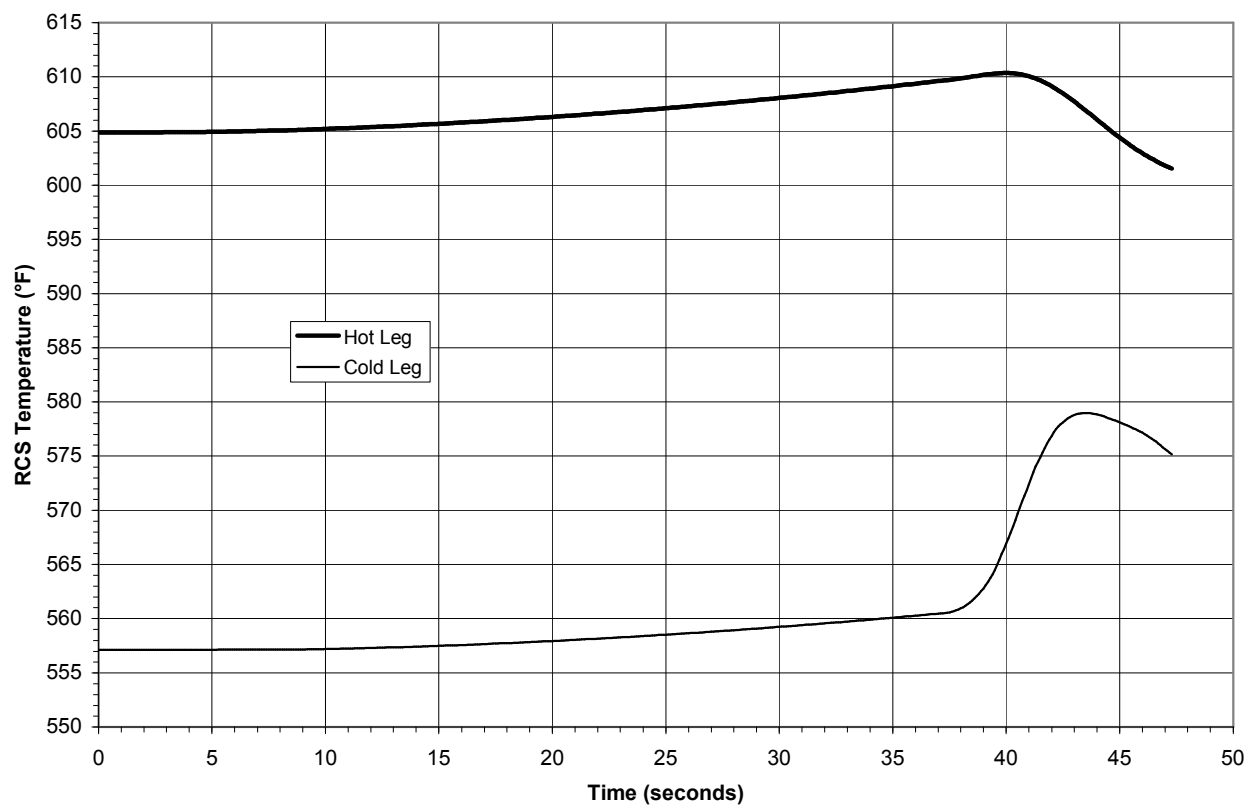
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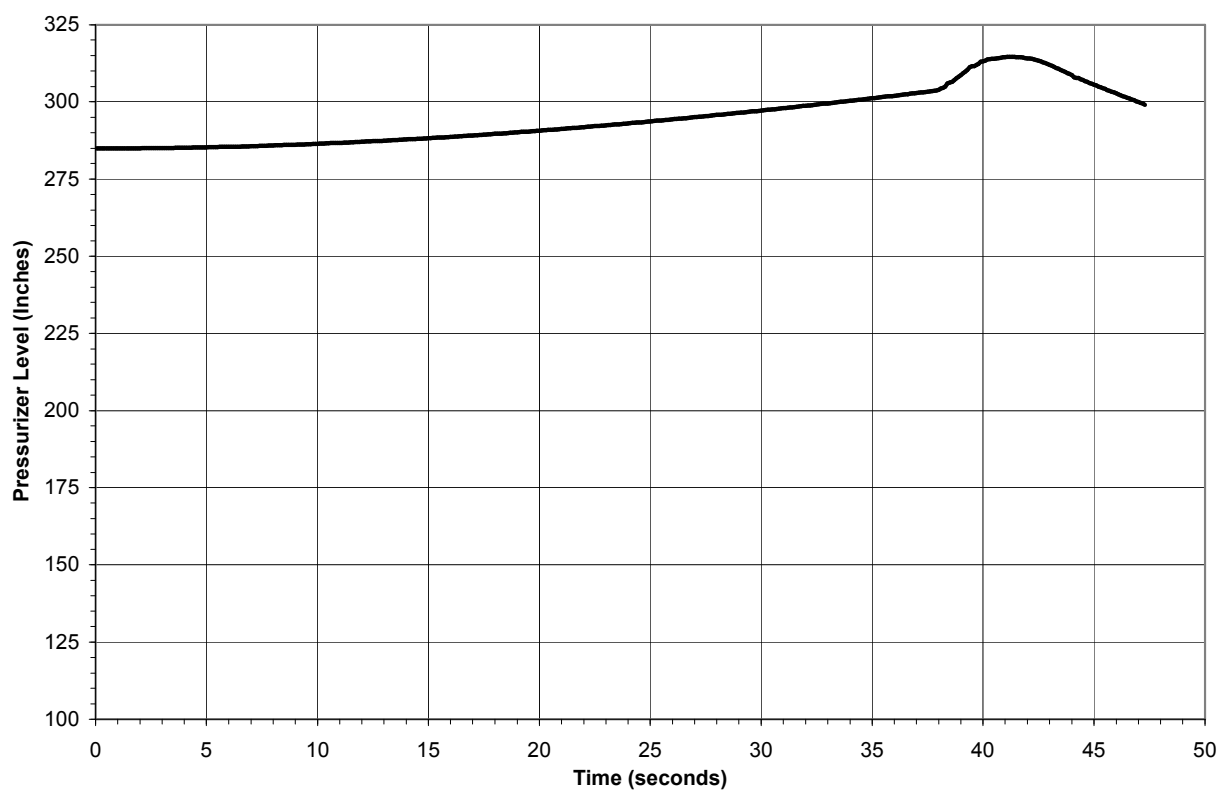
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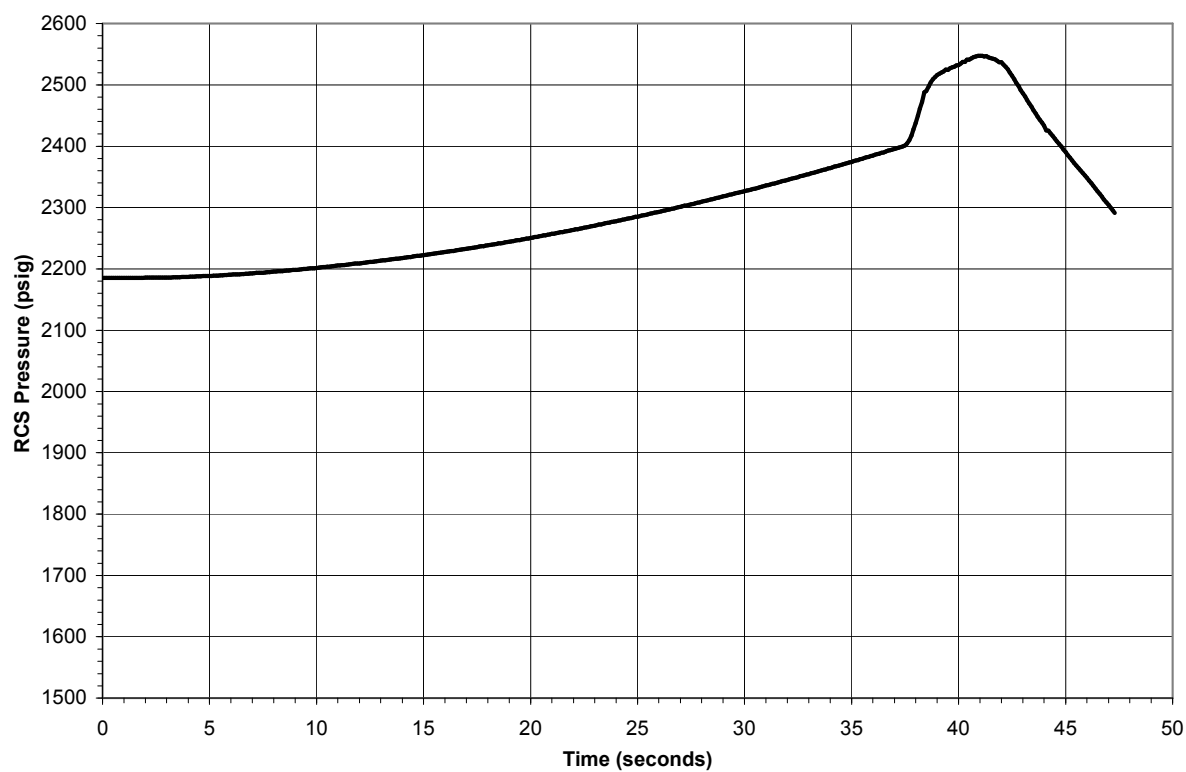
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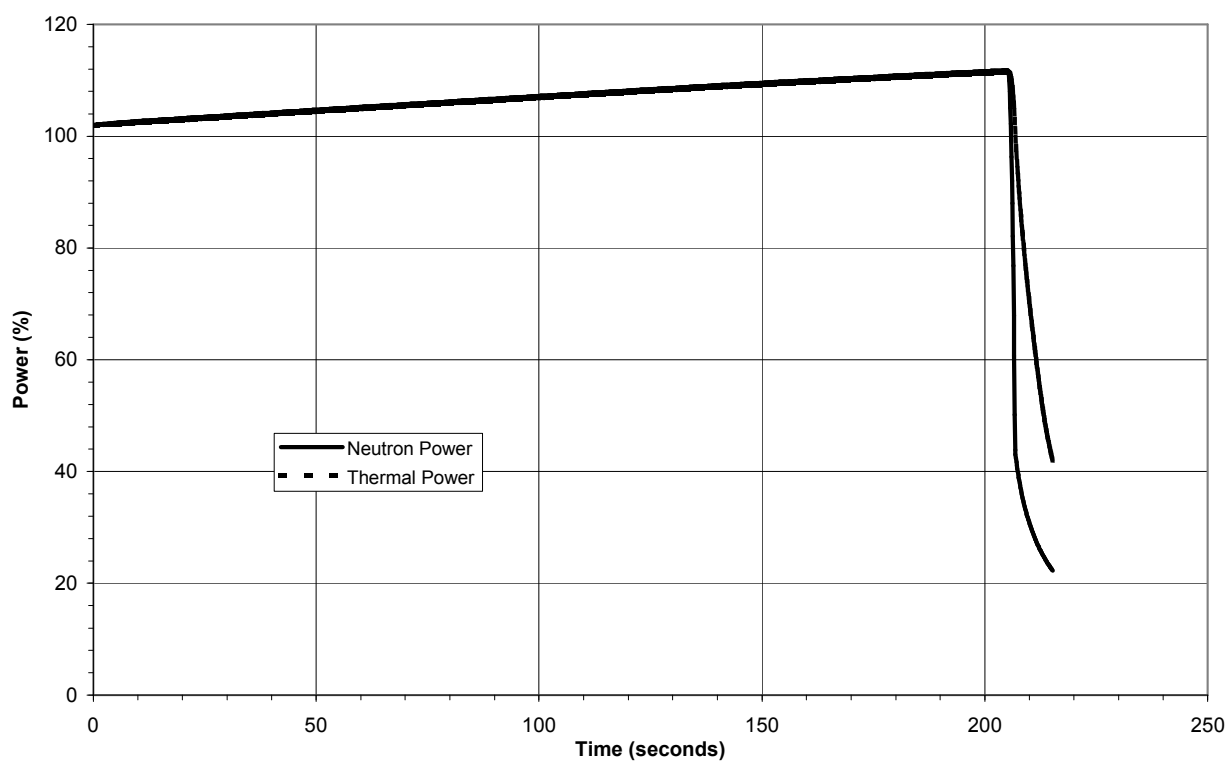
**Figure 15-11. Rod Withdrawal at Power Accident - Peak RCS Pressure Analysis Power**

**Figure 15-12. Rod Withdrawal at Power Accident - Peak RCS Pressure Analysis RCS Temperatures**

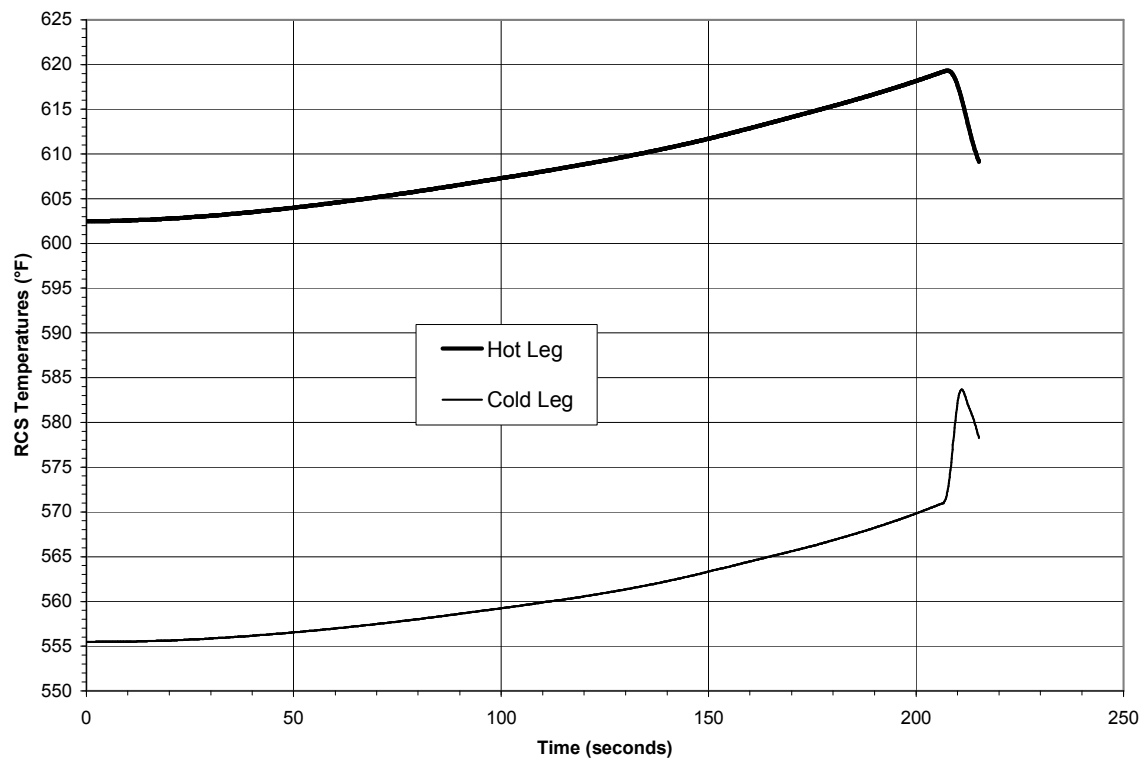


**Figure 15-13. Rod Withdrawal at Power Accident - Peak RCS Pressure Analysis Pressurizer Level**

**Figure 15-14. Rod Withdrawal at Power Accident - Peak RCS Pressure Analysis RCS Pressure**

**Figure 15-15. Rod Withdrawal at Power Accident - Core Cooling Capability Analysis Power**

**Figure 15-16. Rod Withdrawal at Power Accident - Core Cooling Capability Analysis RCS Temperatures**



**Figure 15-17. Rod Withdrawal at Power Accident - Core Cooling Capability Analysis Pressurizer Level**

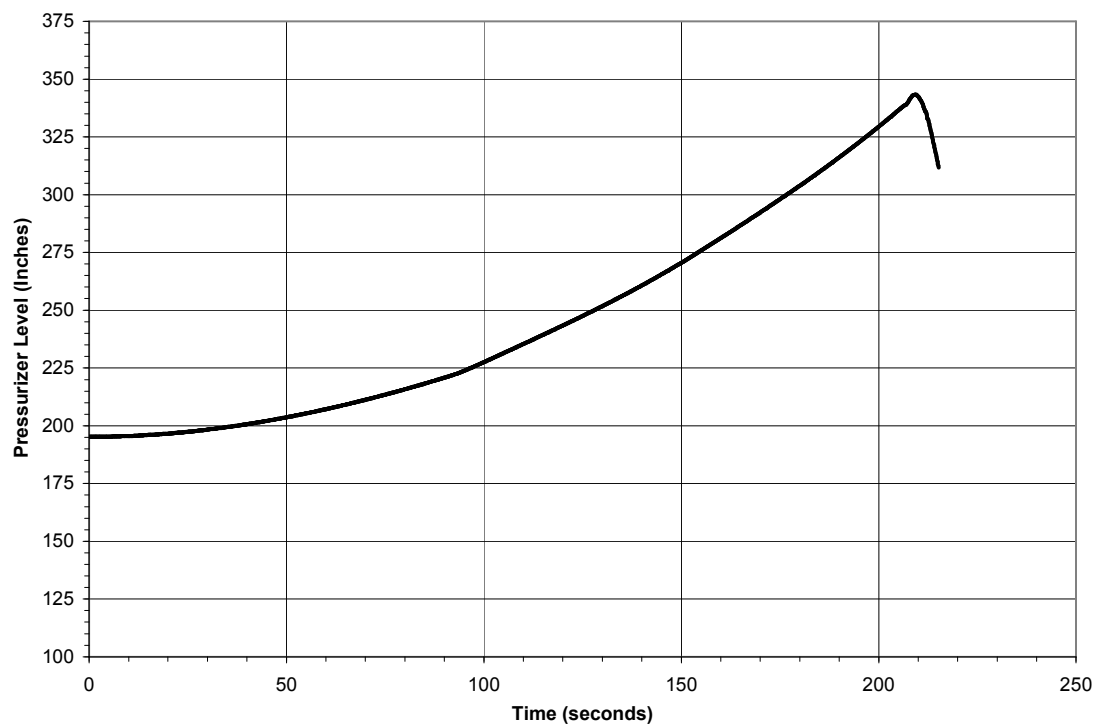
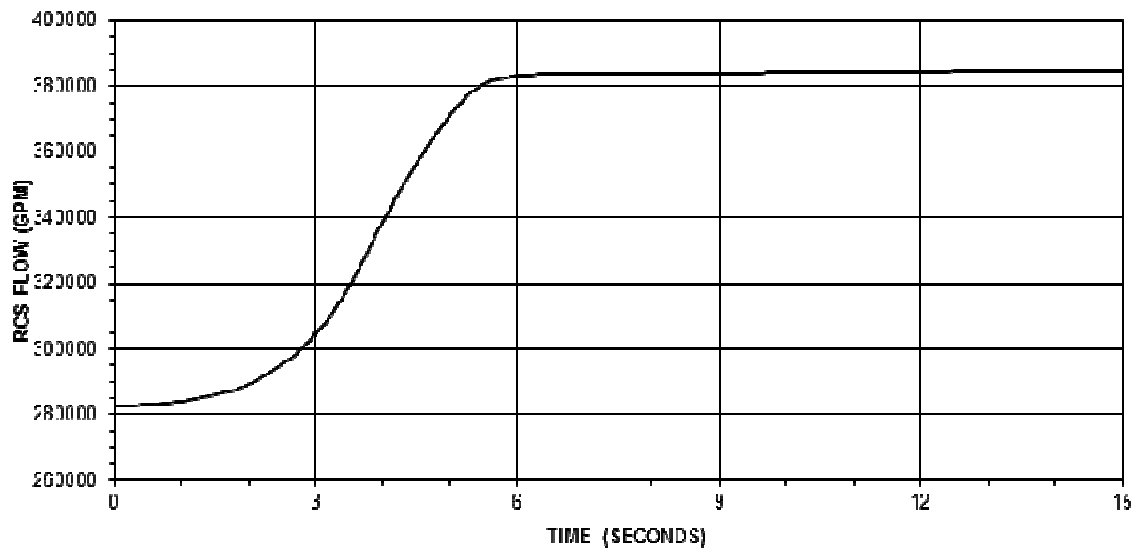
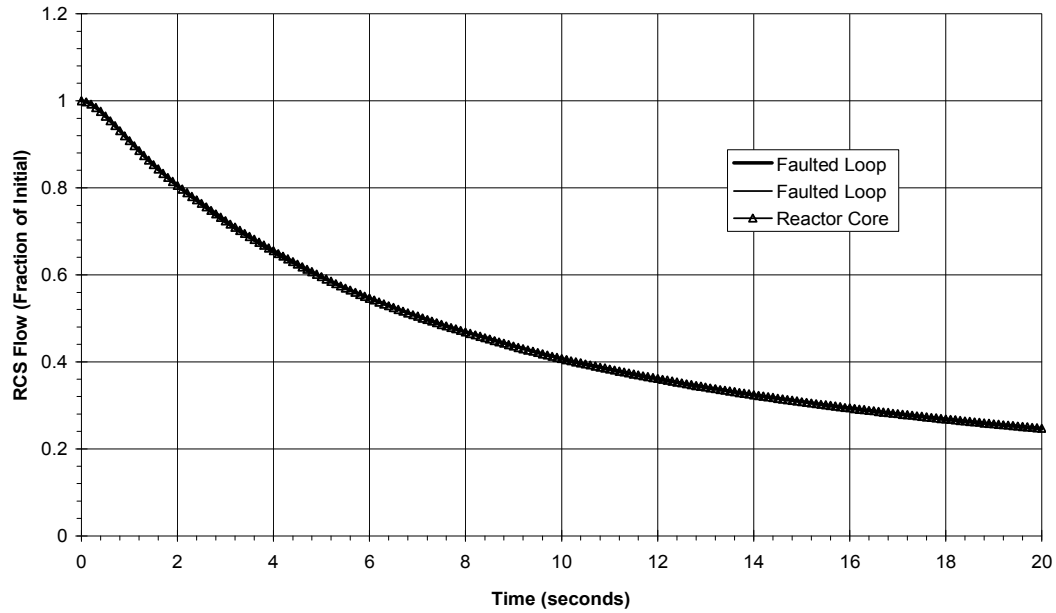


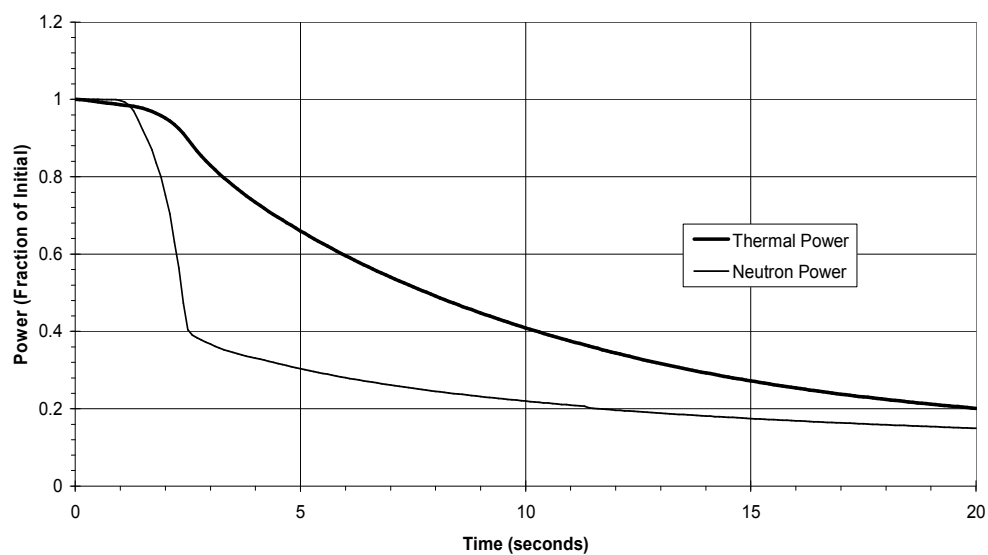
Figure 15-18. Cold Water Accident - RCS Flow



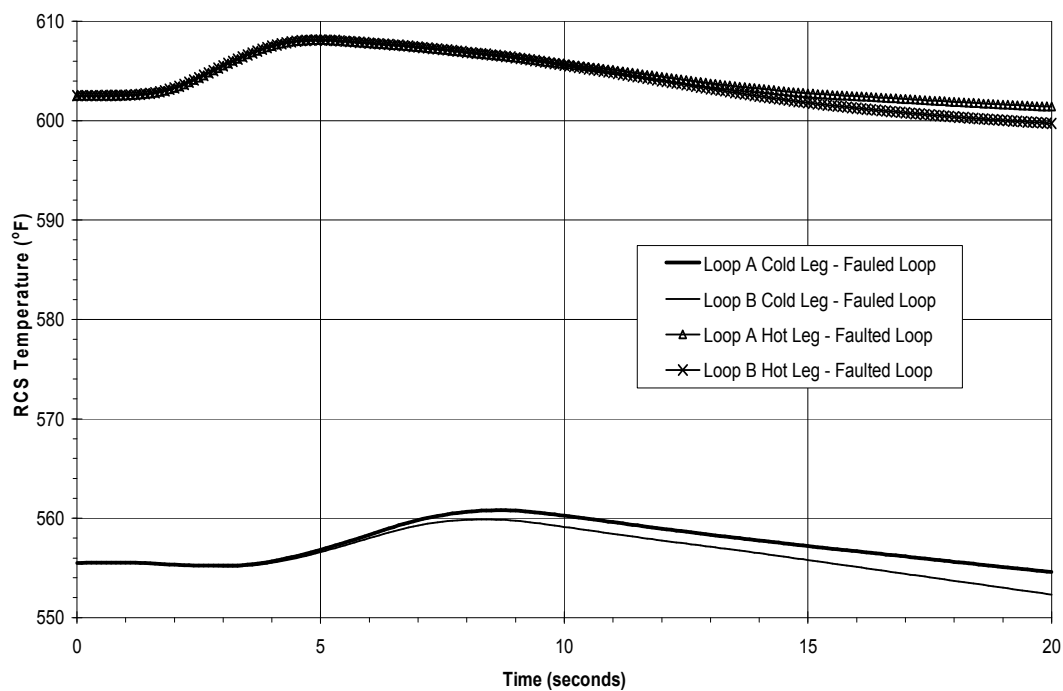
**Figure 15-19. Loss of Coolant Flow Accidents - Four RCP Coastdown From Four RCP Initial Conditions Analysis - RCS Flow**



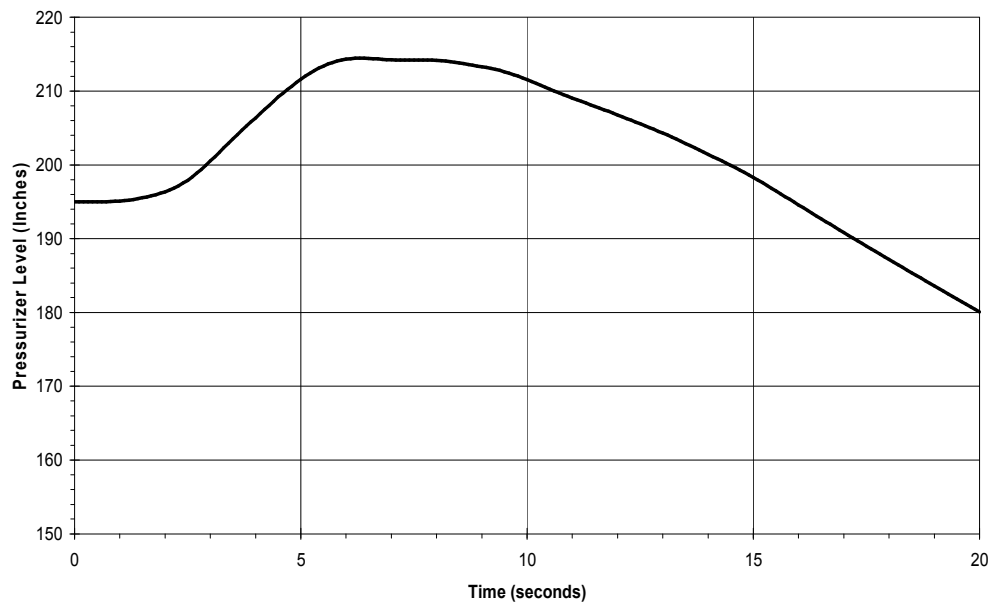
**Figure 15-20. Loss of Coolant Flow Accidents - Four RCP Coastdown From Four RCP Initial Conditions Analysis - Power**



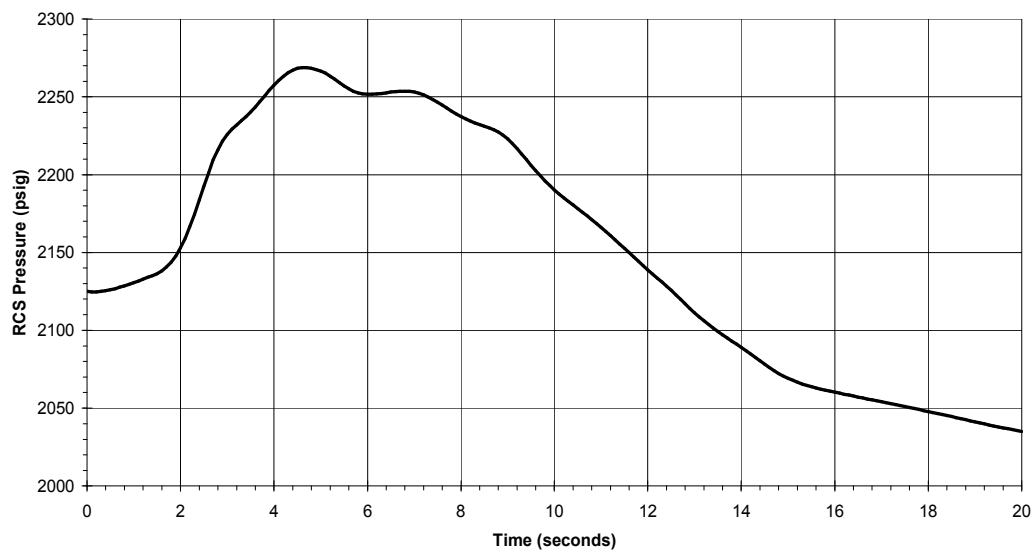
**Figure 15-21. Loss of Coolant Flow Accidents - Four RCP Coastdown From Four RCP Initial Conditions Analysis - RCS Temperature**



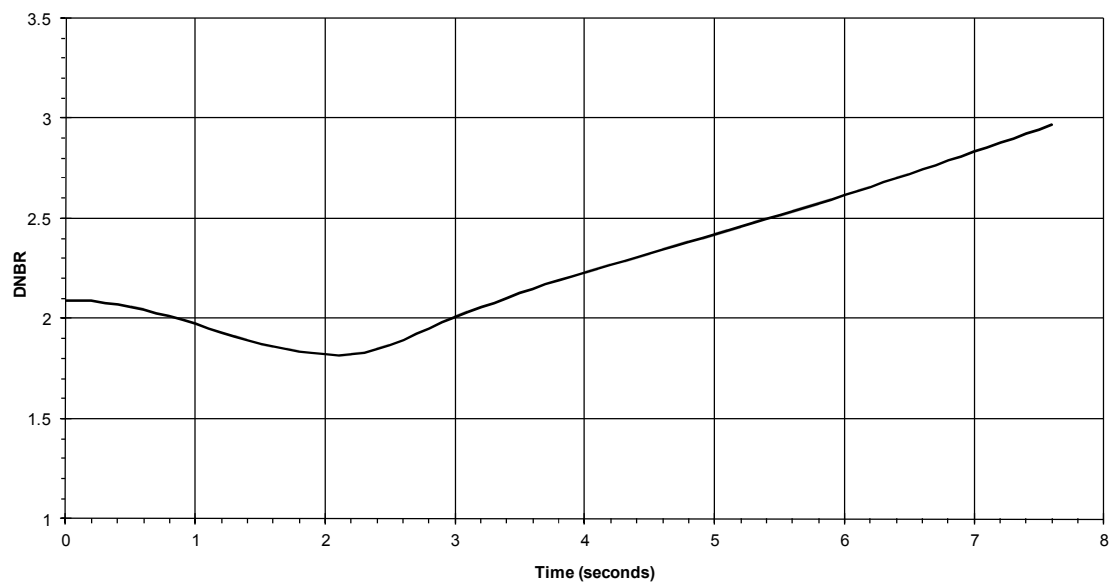
**Figure 15-22. Loss of Coolant Flow Accidents - Four RCP Coastdown From Four RCP Initial Conditions Analysis - Pressurizer Level**



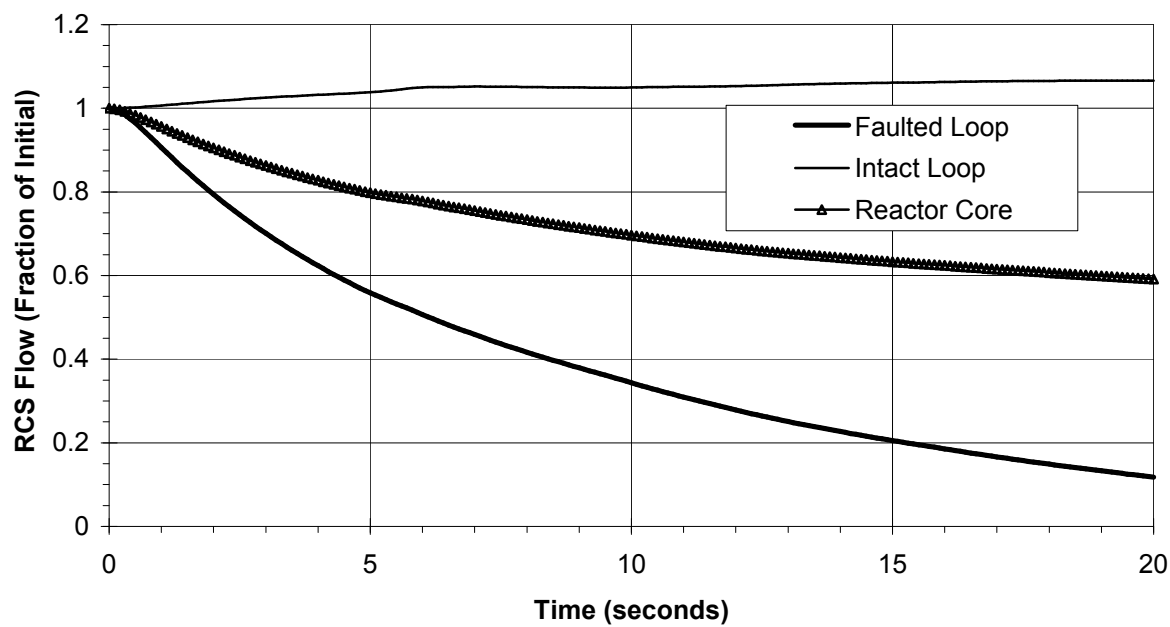
**Figure 15-23. Loss of Coolant Flow Accidents - Four RCP Coastdown From Four RCP Initial Conditions Analysis - RCS Pressure**

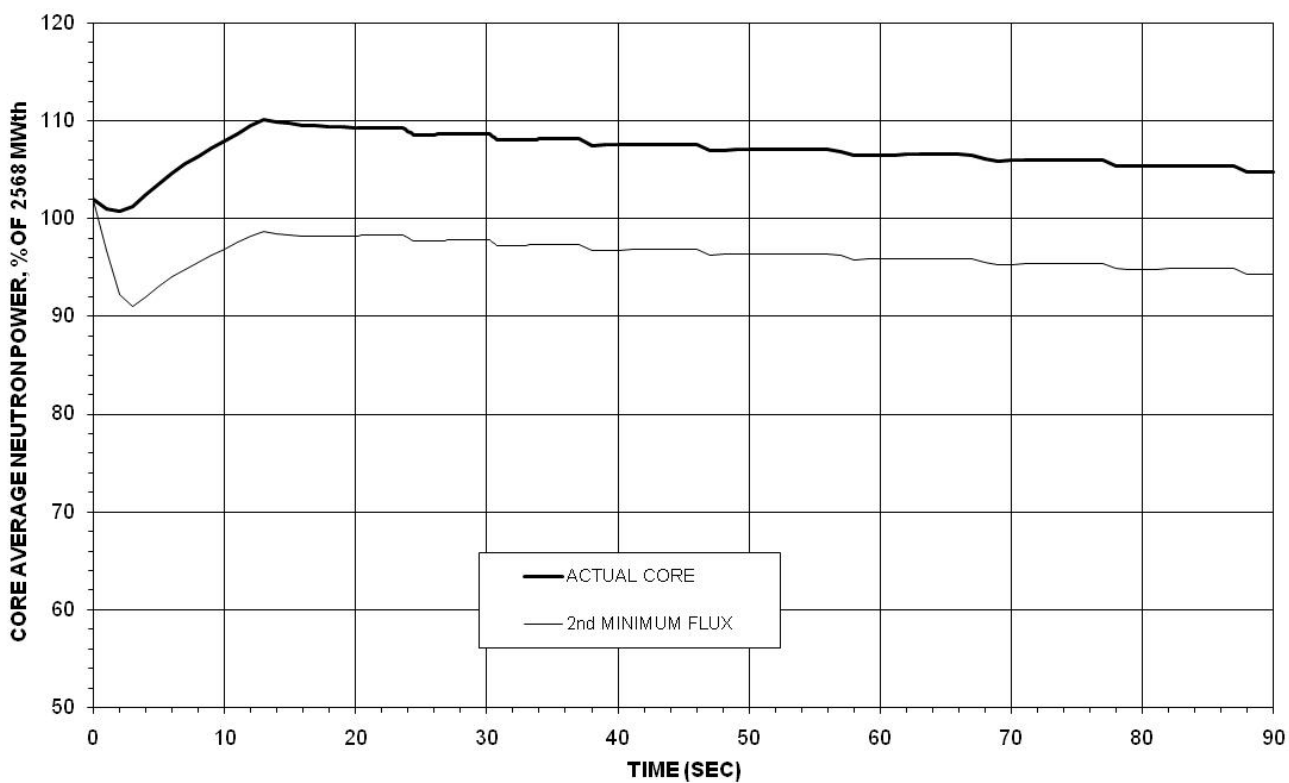


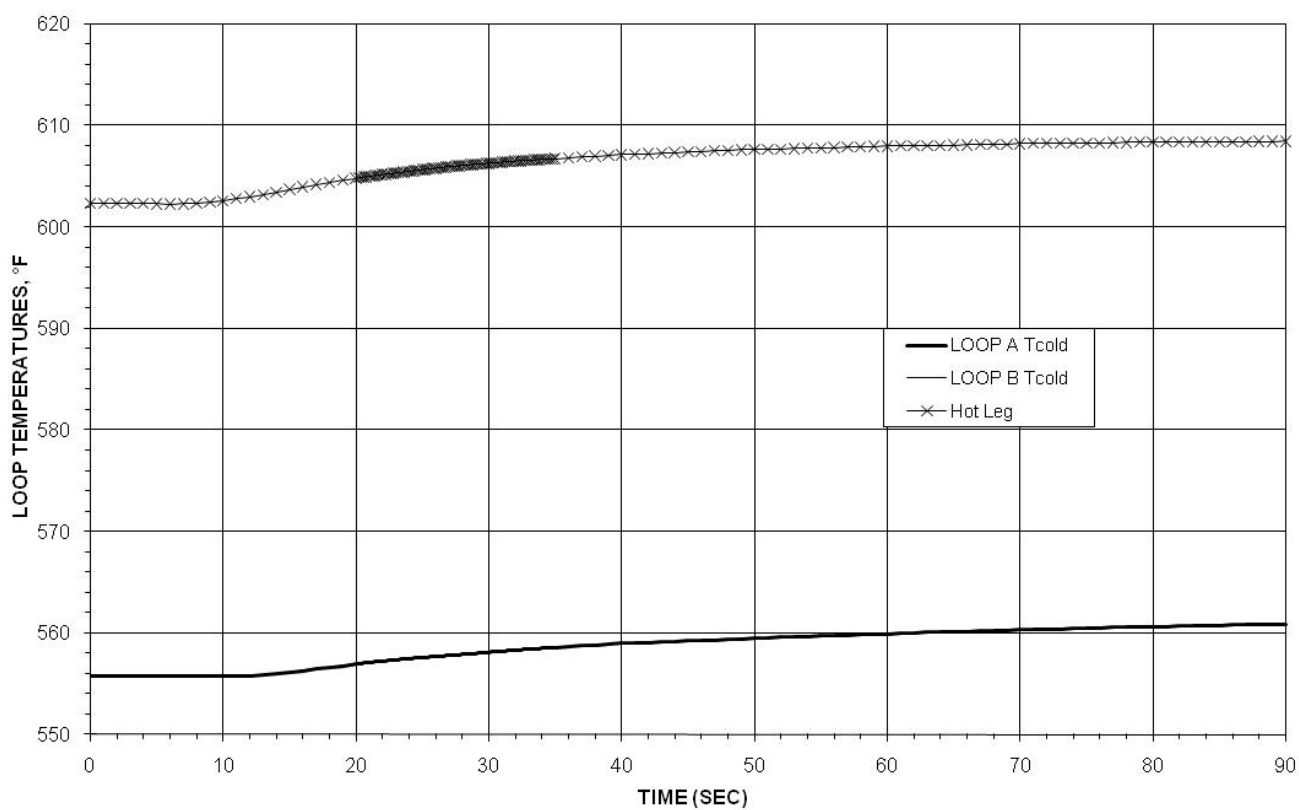
**Figure 15-24. Loss of Coolant Flow Accidents - Four RCP Coastdown From Four RCP Initial Conditions Analysis - DNBR**

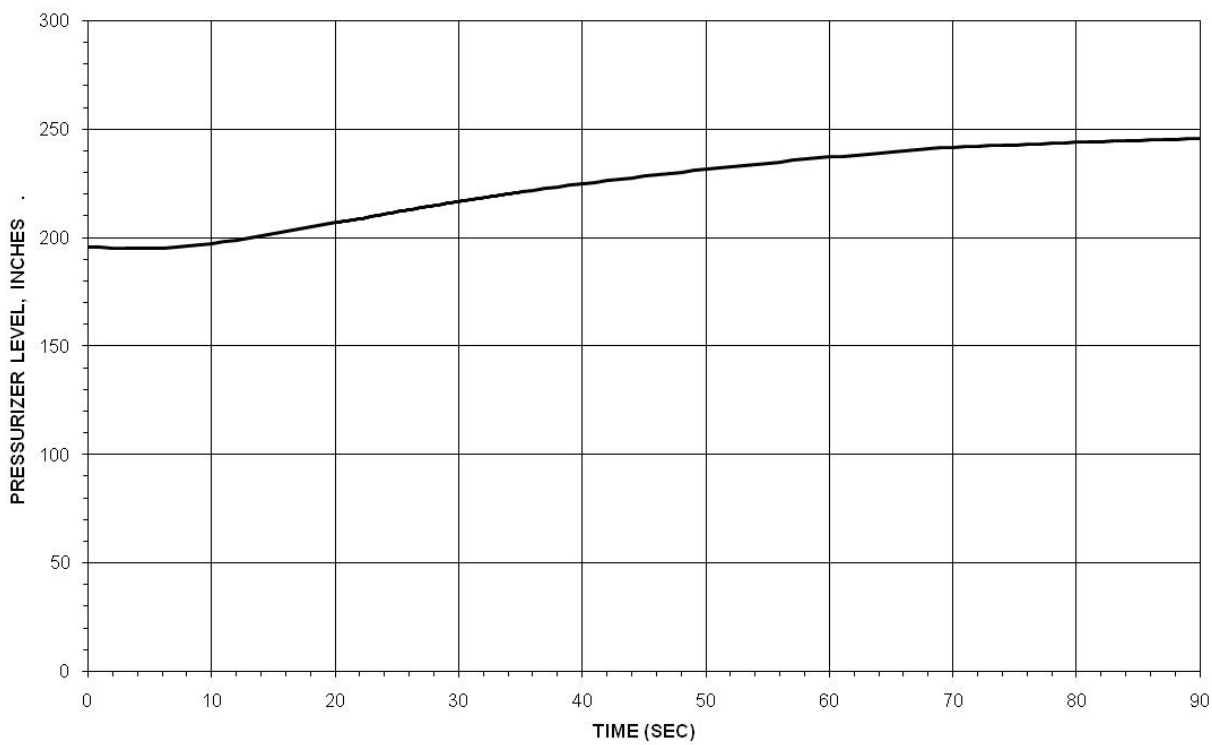


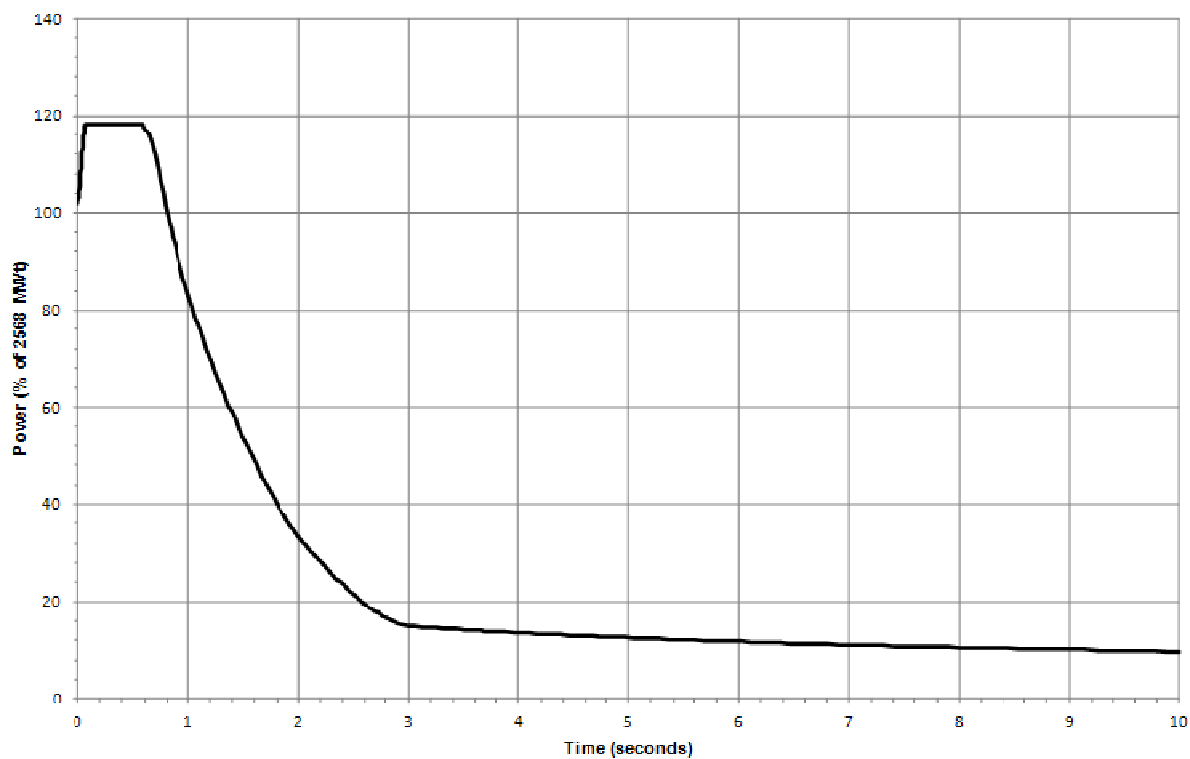
**Figure 15-25. Loss of Coolant Flow Accidents - Two RCP Coastdown From Four RC P Initial Conditions Analysis - RCS Flow**

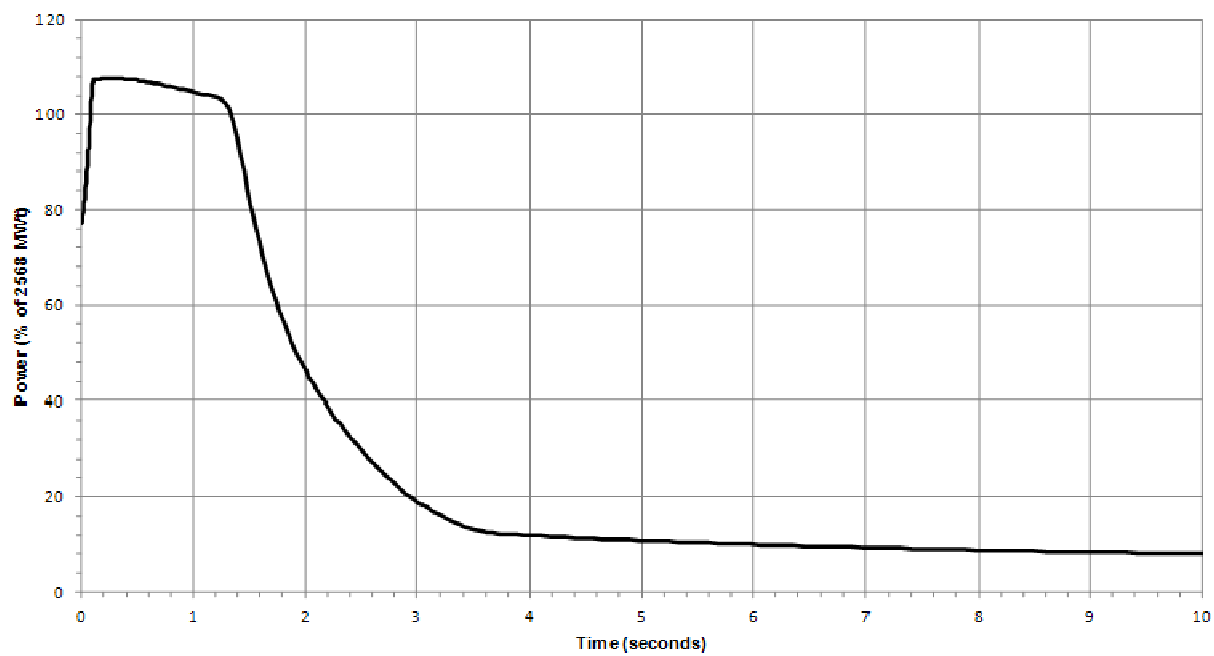


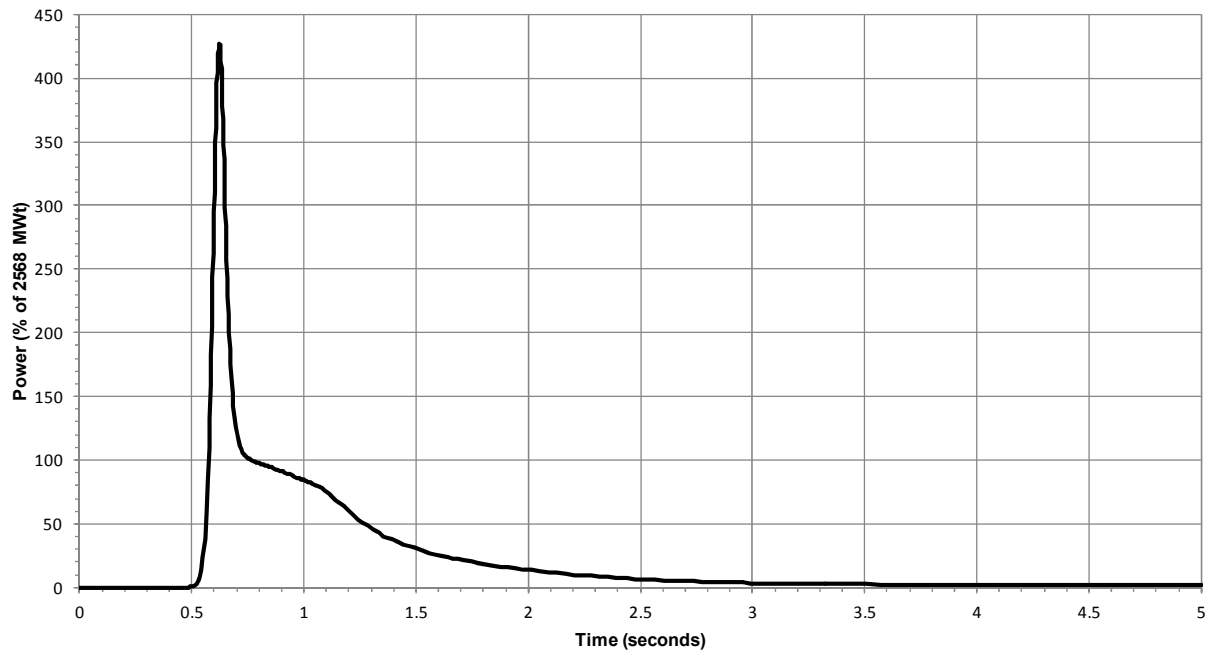
**Figure 15-26. Control Rod Misalignment Accidents - Dropped Rod Analysis - Neutron Power**

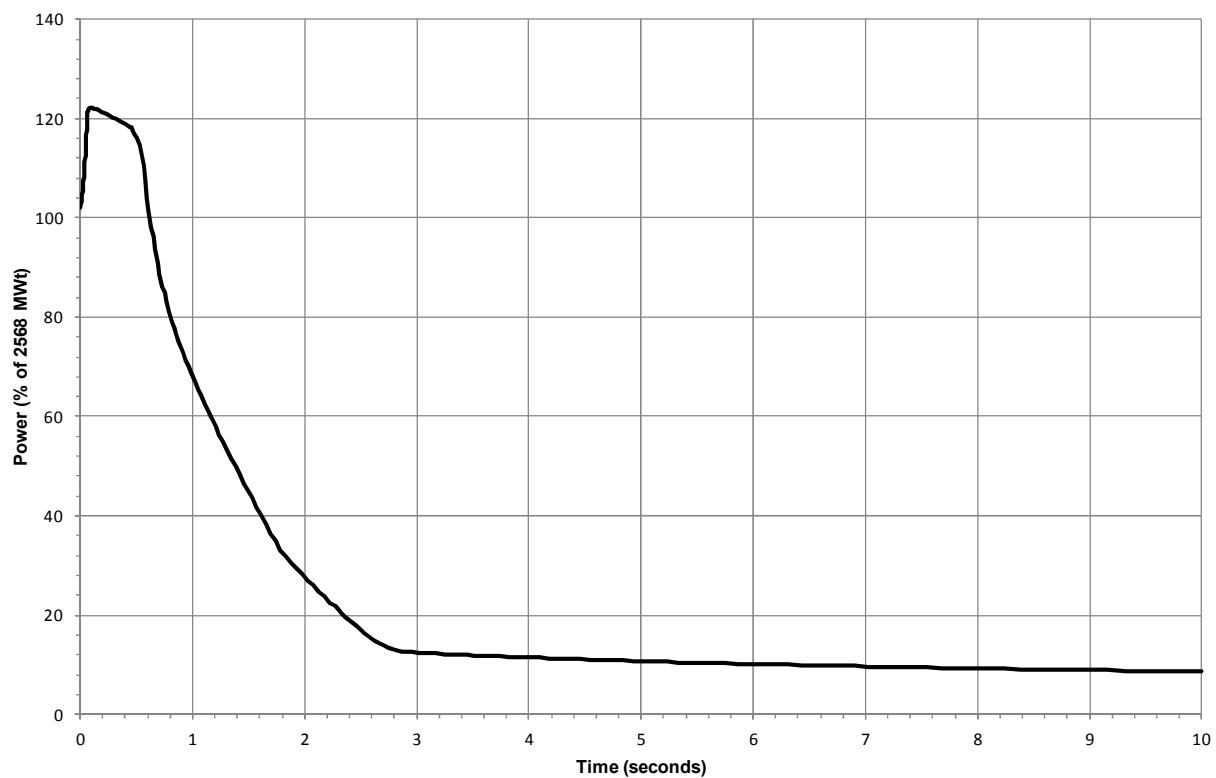
**Figure 15-27. Control Rod Misalignment Accidents - Dropped Rod Analysis - RCS Temperatures**

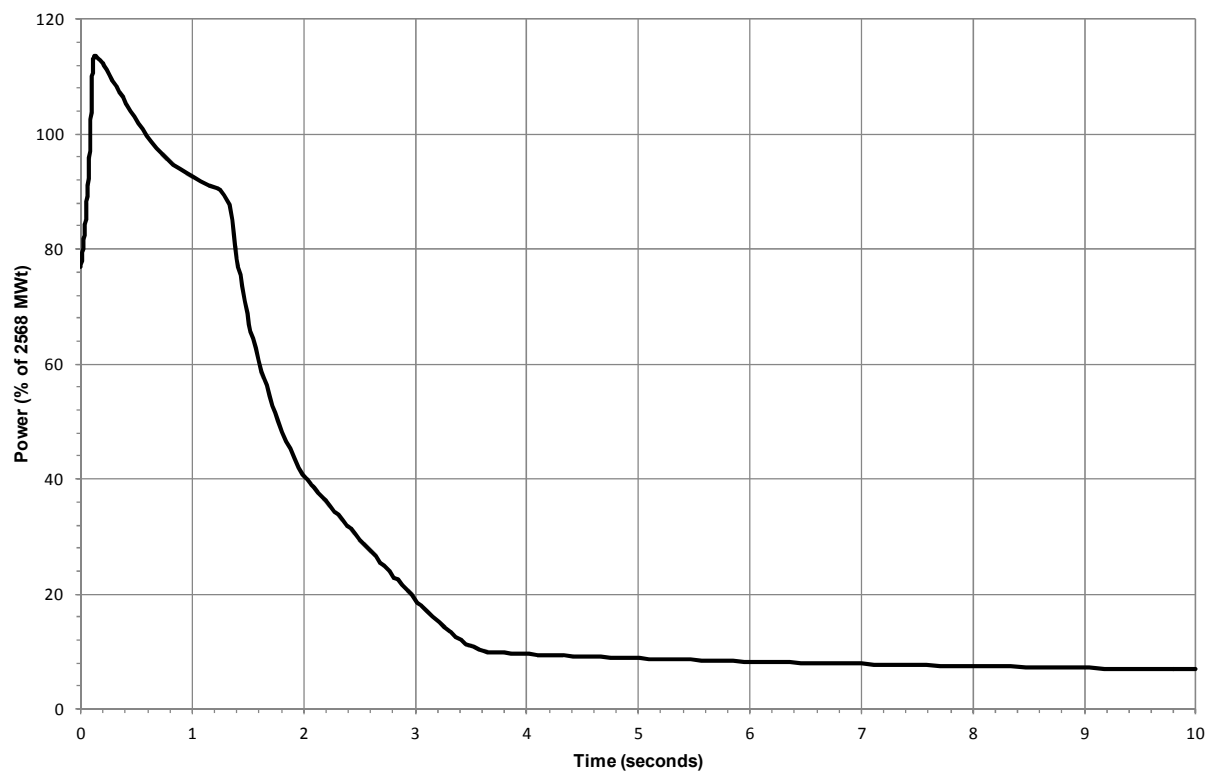
**Figure 15-28. Control Rod Misalignment Accidents - Dropped Rod Analysis - Pressurizer Level**

**Figure 15-29. Rod Ejection Accident - BOC Four RCPs - Power**

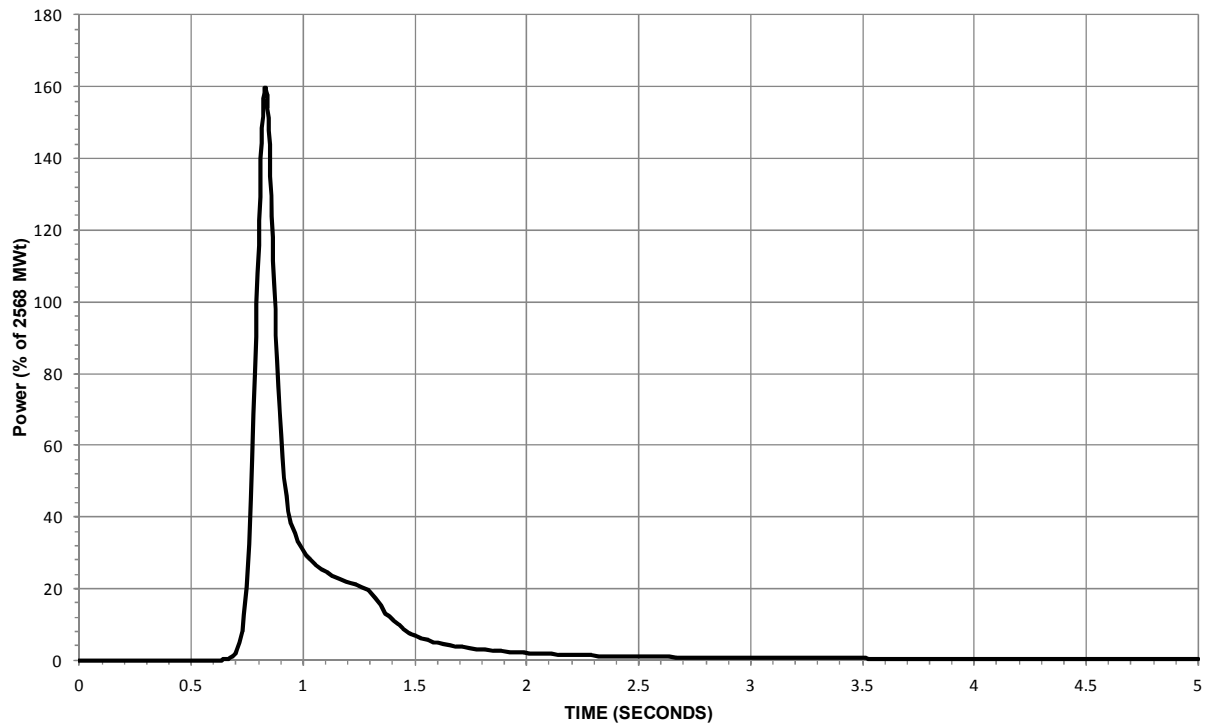
**Figure 15-30. Rod Ejection Accident - BOC Three RCPs - Power**

**Figure 15-31. Rod Ejection Accident - BOC HZP - Power**

**Figure 15-32. Rod Ejection Accident - EOC Four RCPs - Power**

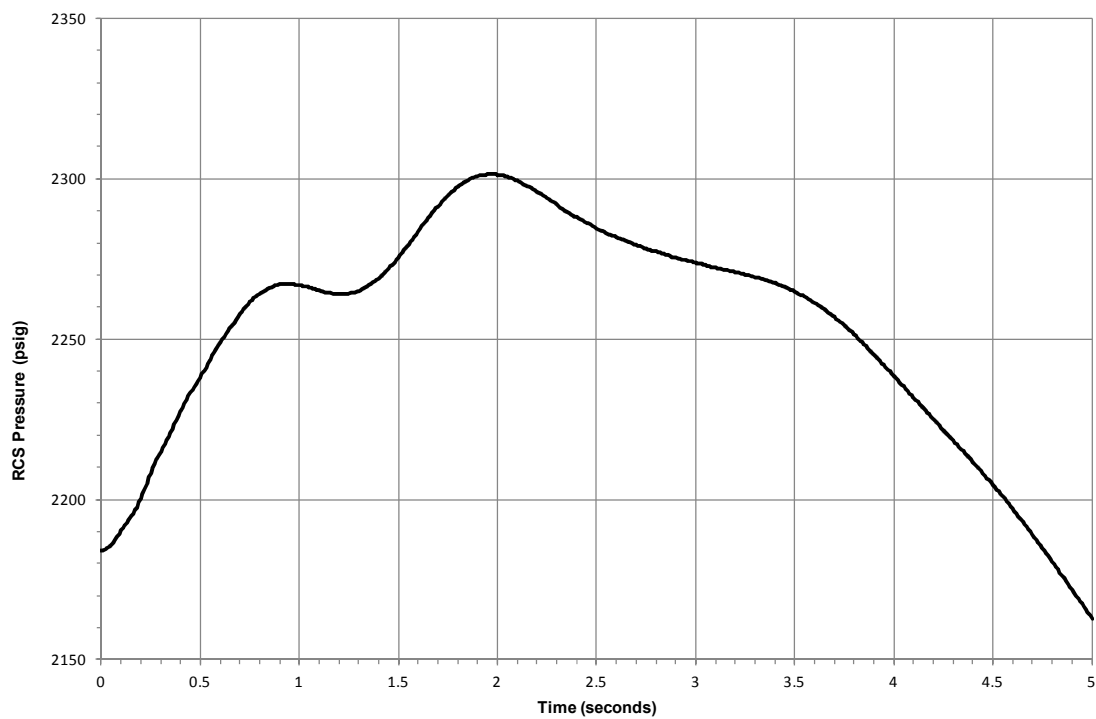
**Figure 15-33. Rod Ejection Accident - EOC Three RCPs - Power**

**Figure 15-34. Rod Ejection Accident - EOC HZP - Power**



**Figure 15-35. Deleted Per 2013 Update**

**(31 DEC 2013)**

**Figure 15-36. Rod Ejection Accident - BOC Four RCPs - RCS Pressure**

**Figure 15-37. Deleted Per 1999 Update**

**Figure 15-38. Deleted Per 1999 Update**

**Figure 15-39. Deleted Per 1999 Update**

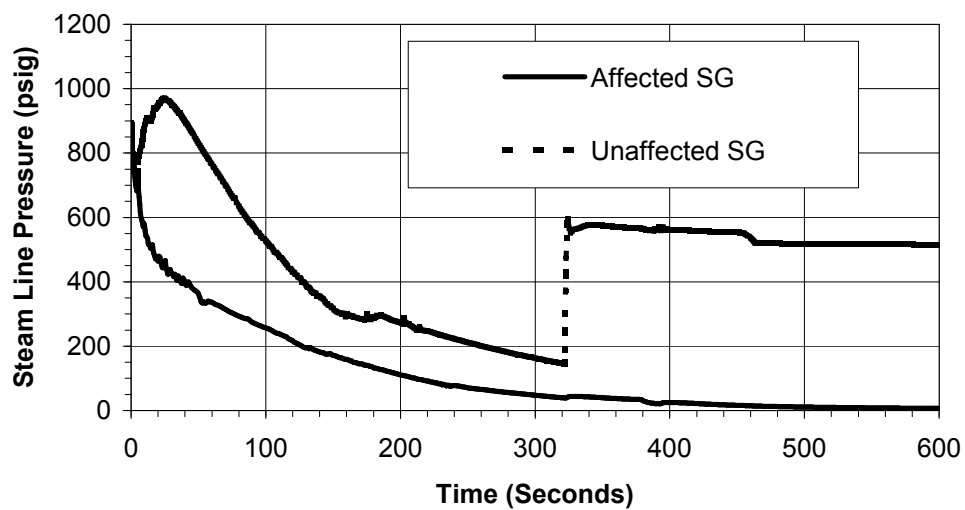
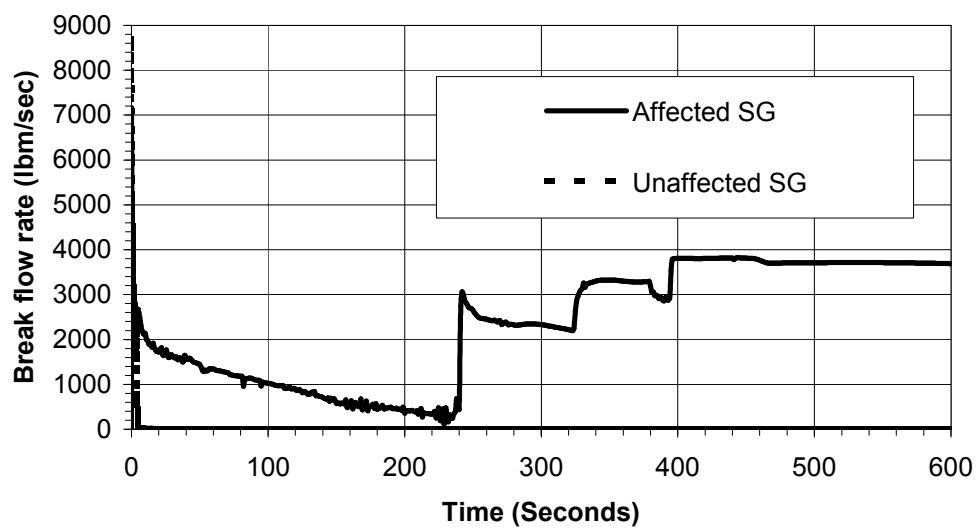
**Figure 15-40. Steam Line Break Accident - With Offsite Power - Steam Line Pressure**

Figure 15-41. Steam Line Break Accident - With Offsite Power - Break Flowrate



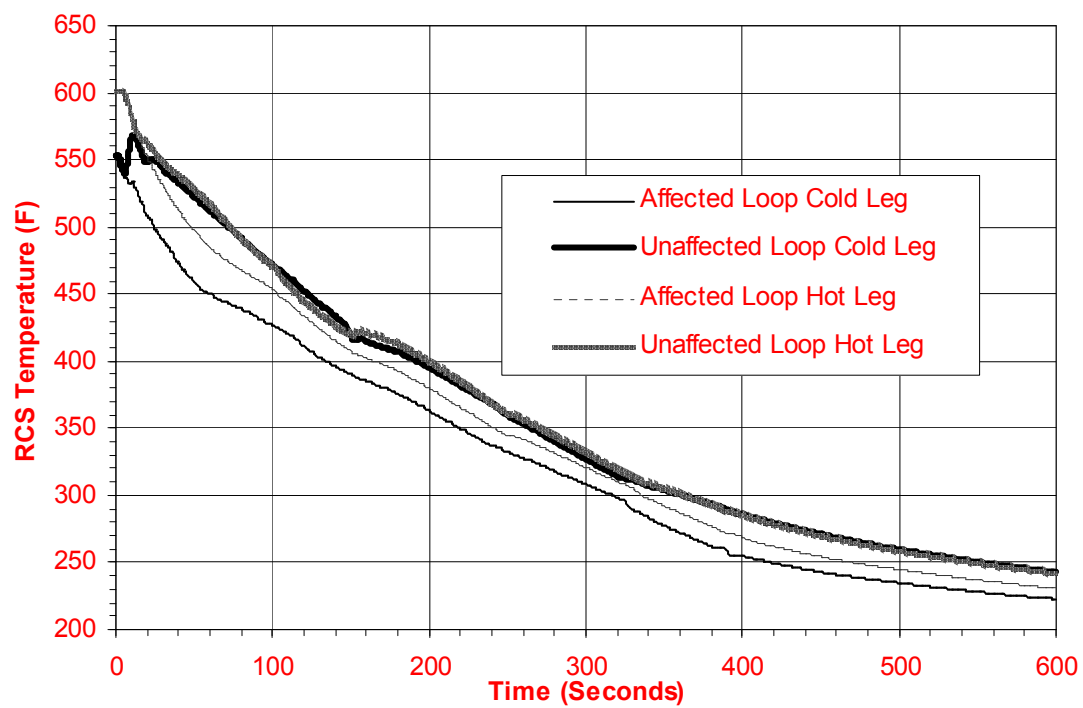
**Figure 15-42. Steam Line Break Accident - With Offsite Power - RCS Temperature**

Figure 15-43. Steam Line Break Accident - With Offsite Power - Reactivity

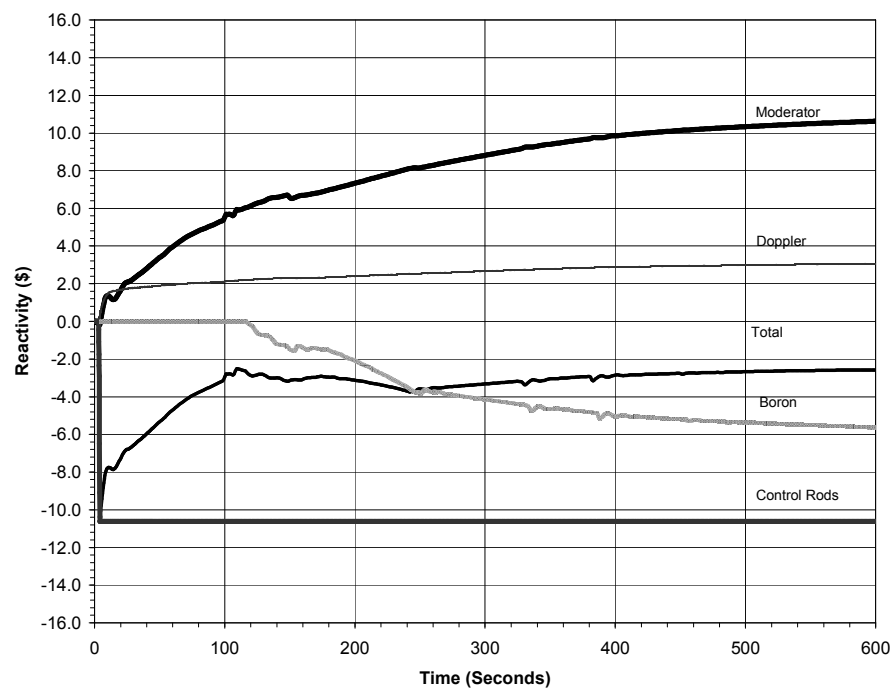
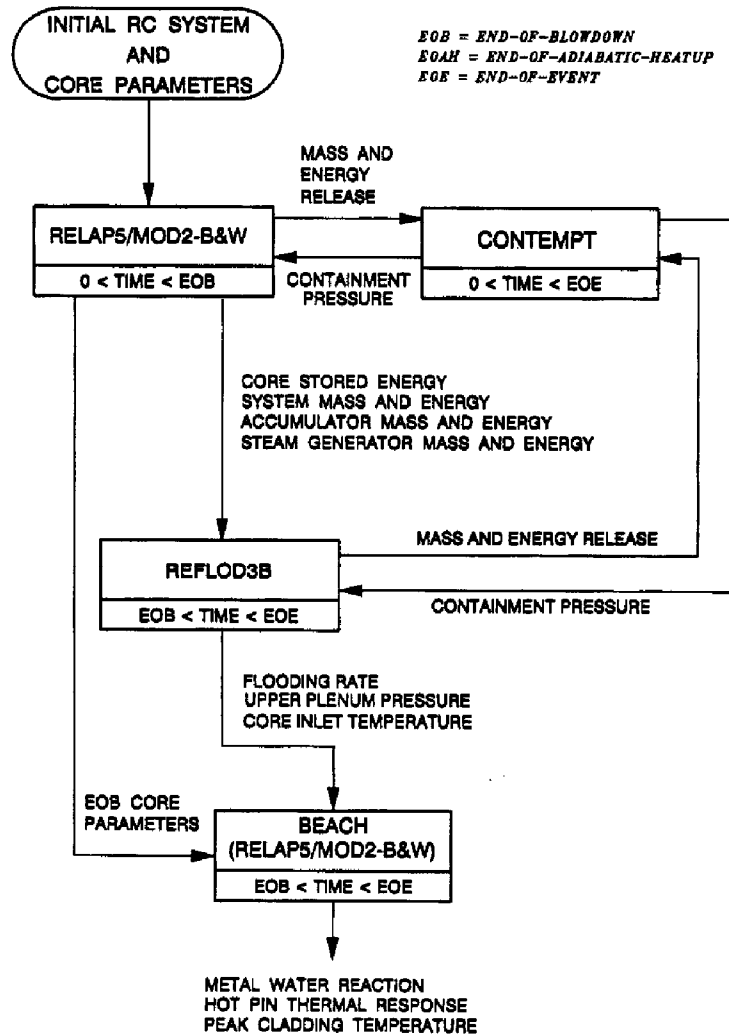


Figure 15-44. LOCA - Large Break Analysis Code Interfaces



**Figure 15-45. Deleted Per 2000 Update**

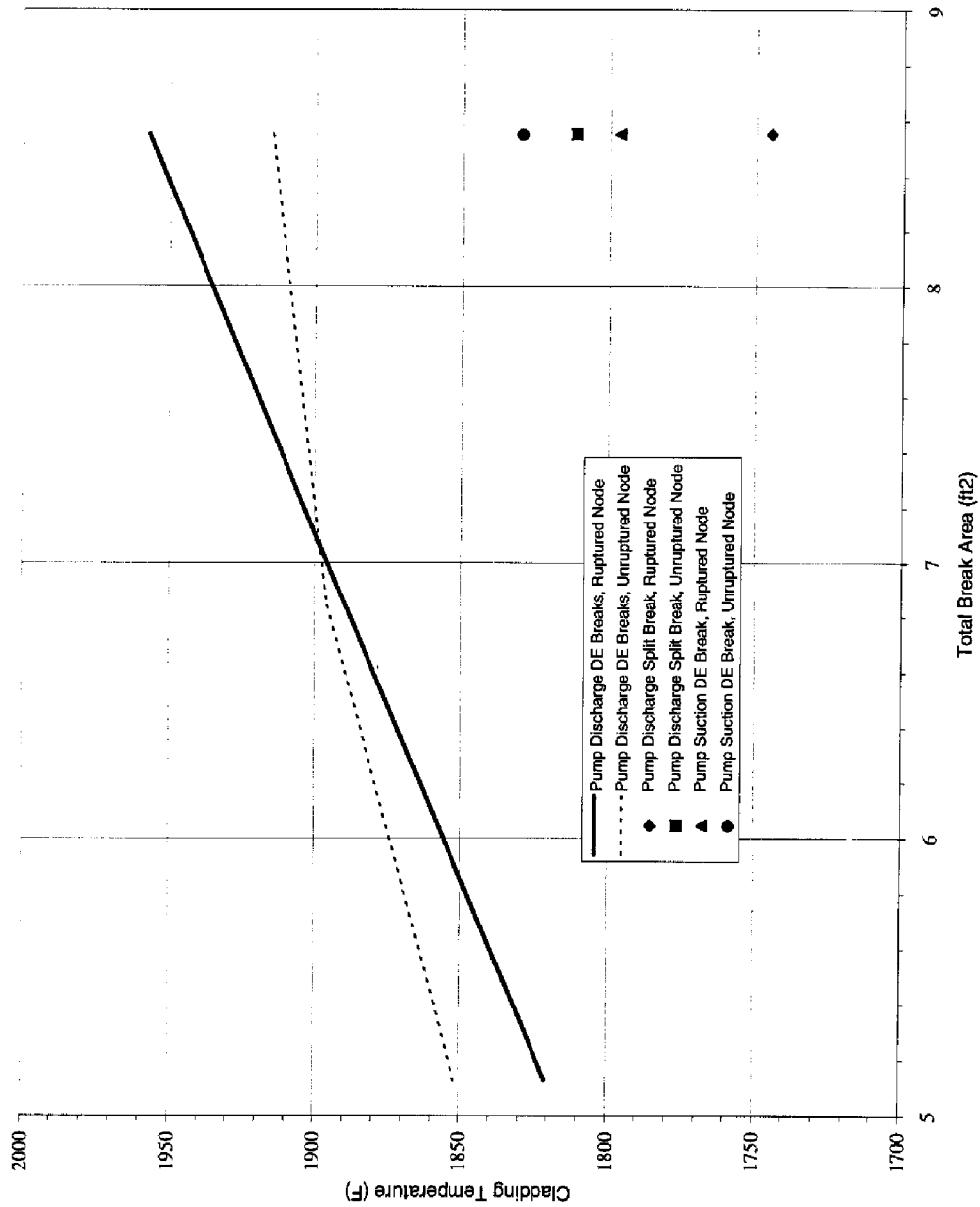
**Figure 15-46. Deleted Per 1990 Update**

**Figure 15-47. Deleted Per 1997 Update**

**Figure 15-48. Deleted Per 1997 Update**

**Figure 15-49. Deleted Per 2000 Update**

Figure 15-50. LOCA - Peak Cladding Temperature vs Break Size for LBLOCA Spectrum



**Figure 15-51. Deleted Per 1997 Update**

**Figure 15-52. Deleted Per 1995 Update**

**Figure 15-53. Deleted Per 1995 Update**

**Figure 15-54. Deleted Per 1995 Update**

**Figure 15-55. Deleted Per 1995 Update**

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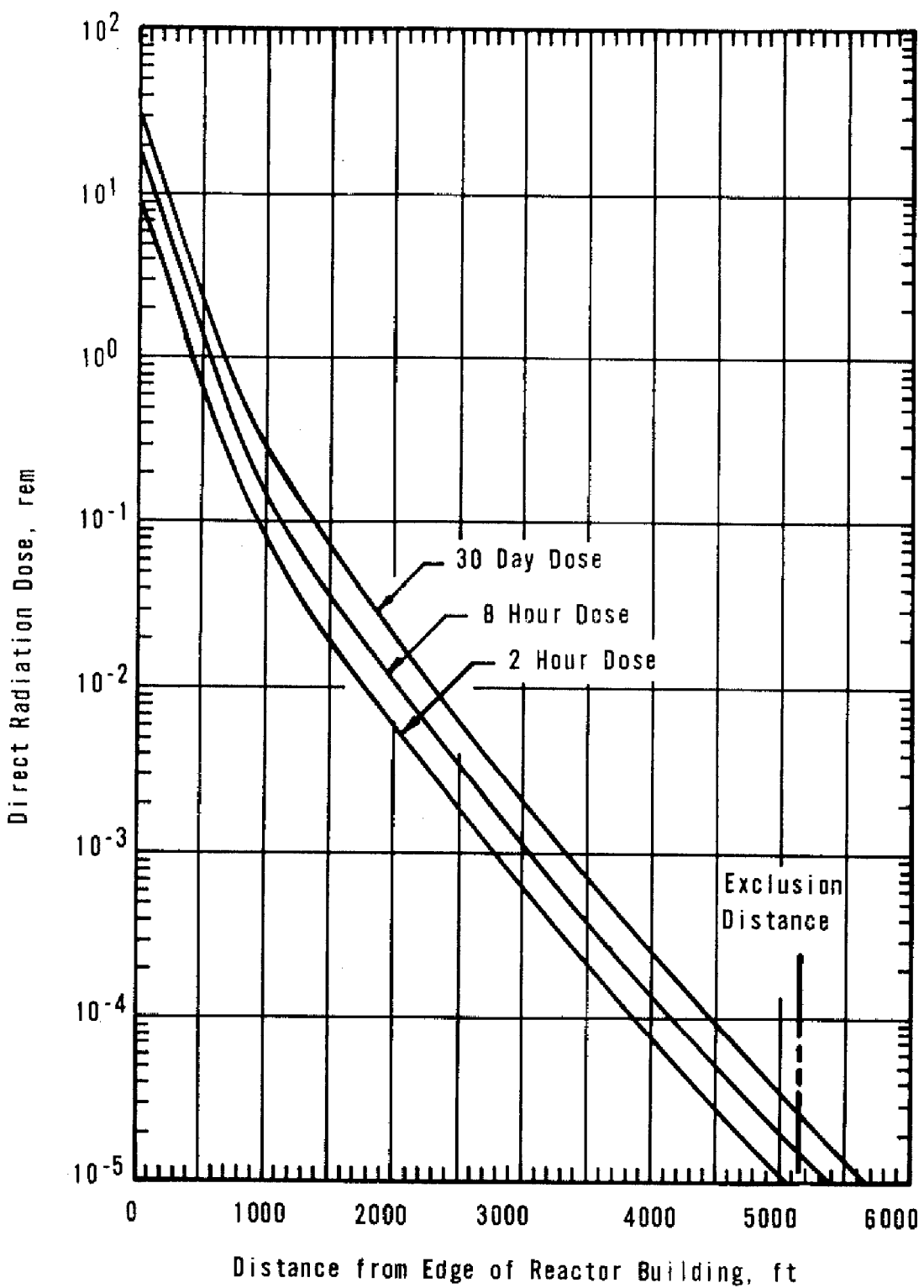
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**Figure 15-79. Deleted Per 1995 Update**

Figure 15-80. MHA - Integrated Direct Dose



**Figure 15-81. Deleted Per 1995 Update**

**Figure 15-82. Deleted Per 2000 Update**

**Figure 15-83. Deleted Per 1995 Update**

**Figure 15-84. Deleted Per 2000 Update**

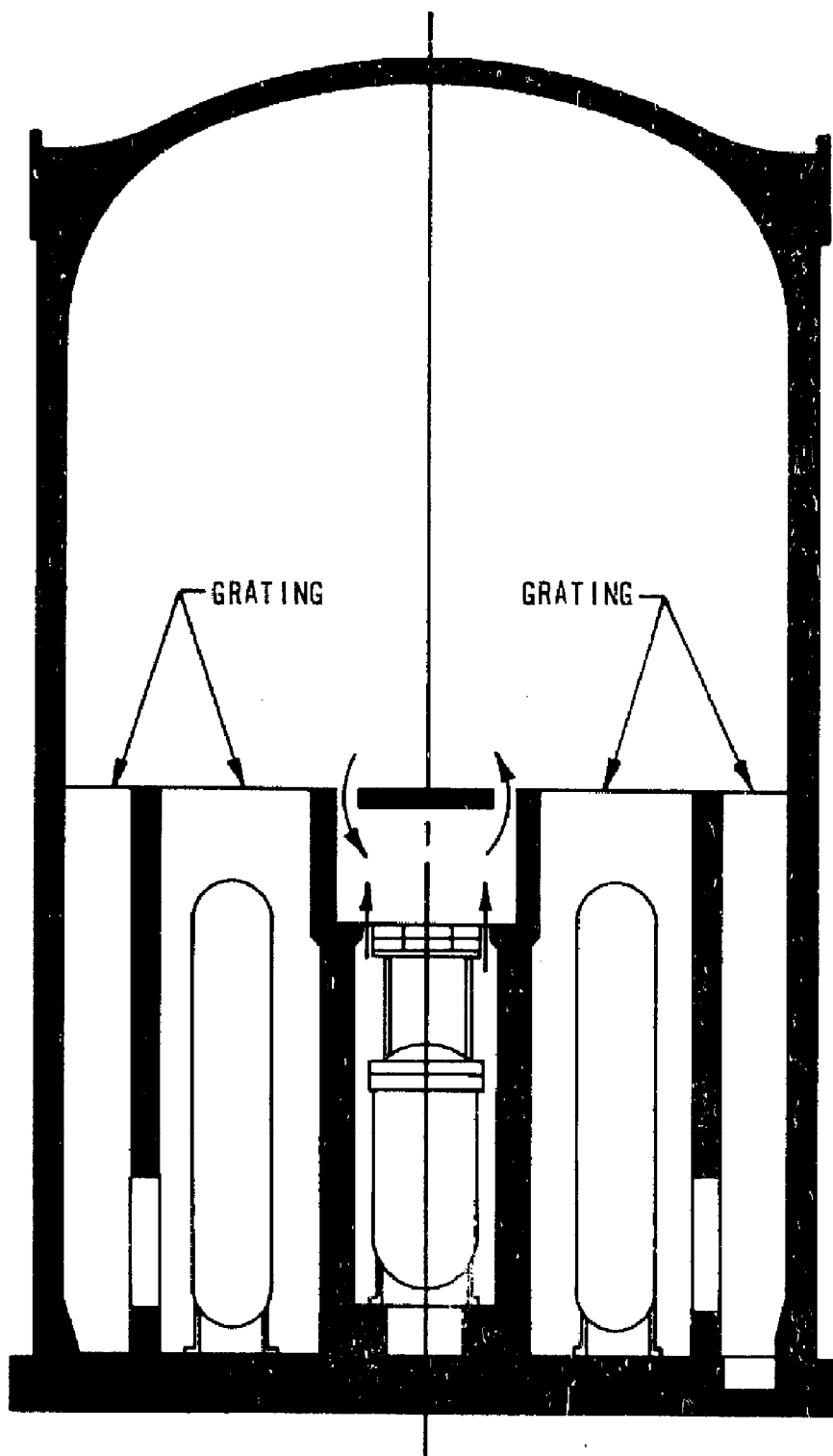
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**Figure 15-87. Deleted Per 2000 Update**

**Figure 15-88. Deleted Per 1995 Update**

Figure 15-89. Post-Accident Hydrogen Control - Reactor Building Arrangement



**Figure 15-90. Deleted Per 1995 Update**

**Figure 15-91. Deleted Per 1995 Update**

**Figure 15-92. Deleted Per 1995 Update**

**Figure 15-93. Deleted Per 1995 Update**

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**Figure 15-99. Deleted Per 1995 Update**

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**Figure 15-101. Deleted Per 1995 Update**

**Figure 15-102. Deleted Per 1995 Update**

**Figure 15-103. Deleted Per 1995 Update**

**Figure 15-104. Deleted Per 1995 Update**

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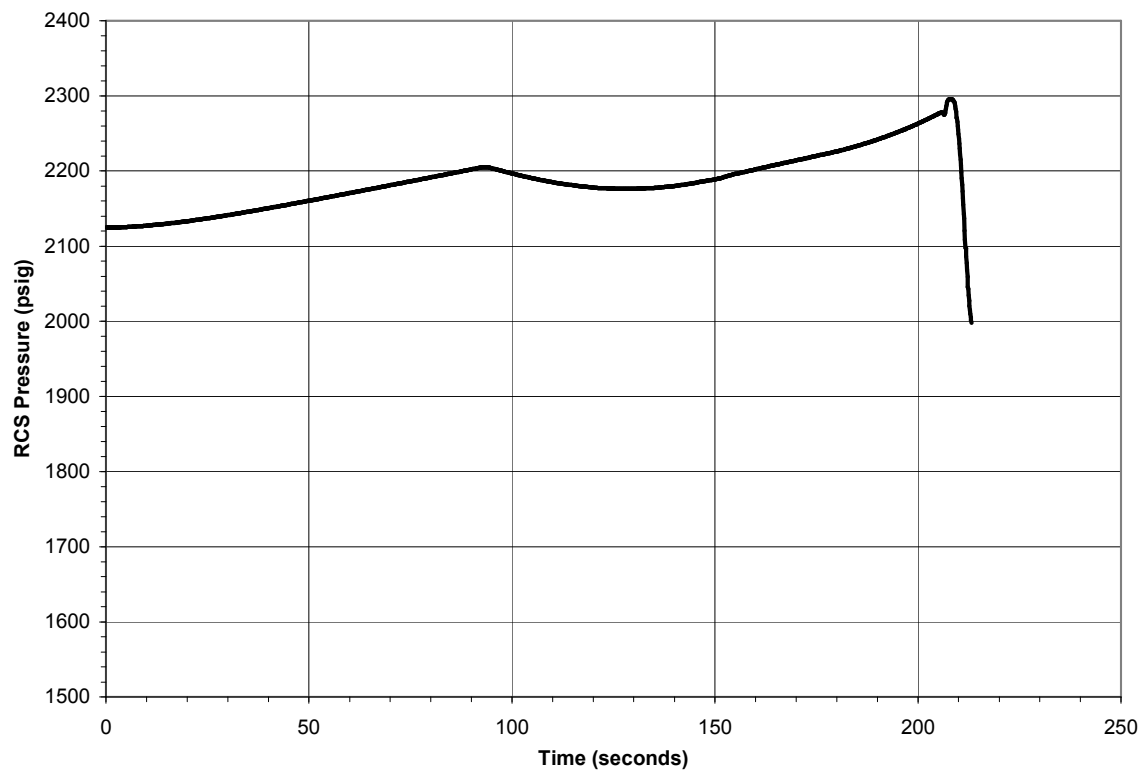
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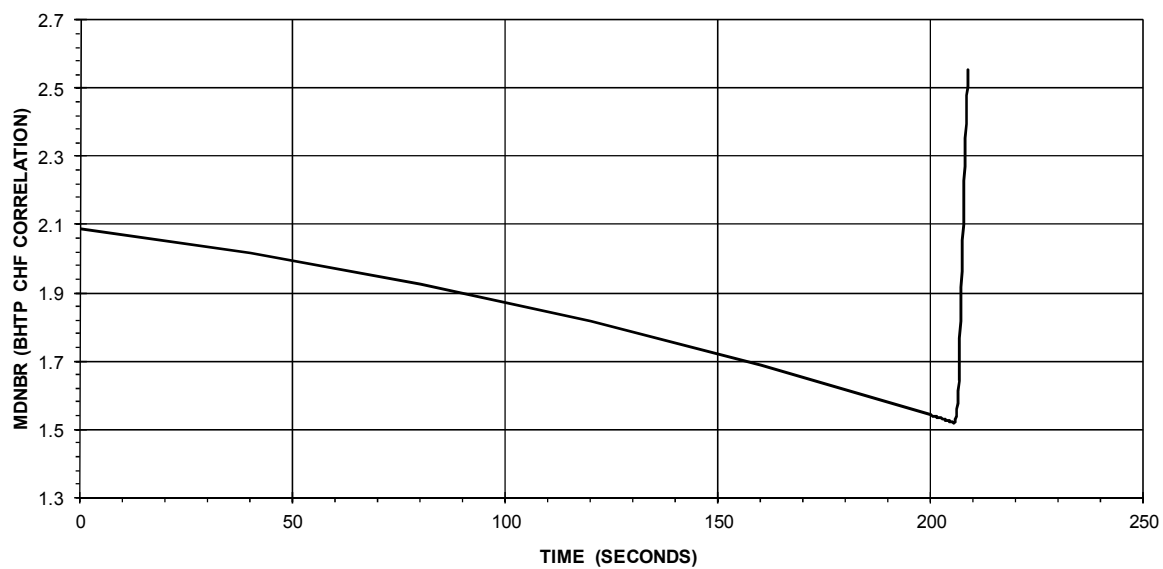
**Figure 15-110. Deleted Per 2001 Update**

**Figure 15-111. Deleted Per 2003 Update**

**Figure 15-112. Deleted Per 2014 Update**

**Figure 15-113. Rod Withdrawal at Power Accident - Core Cooling Capability Analysis RCS Pressure**



**Figure 15-114. Rod Withdrawal at Power Accident - Core Cooling Capability Analysis DNBR**

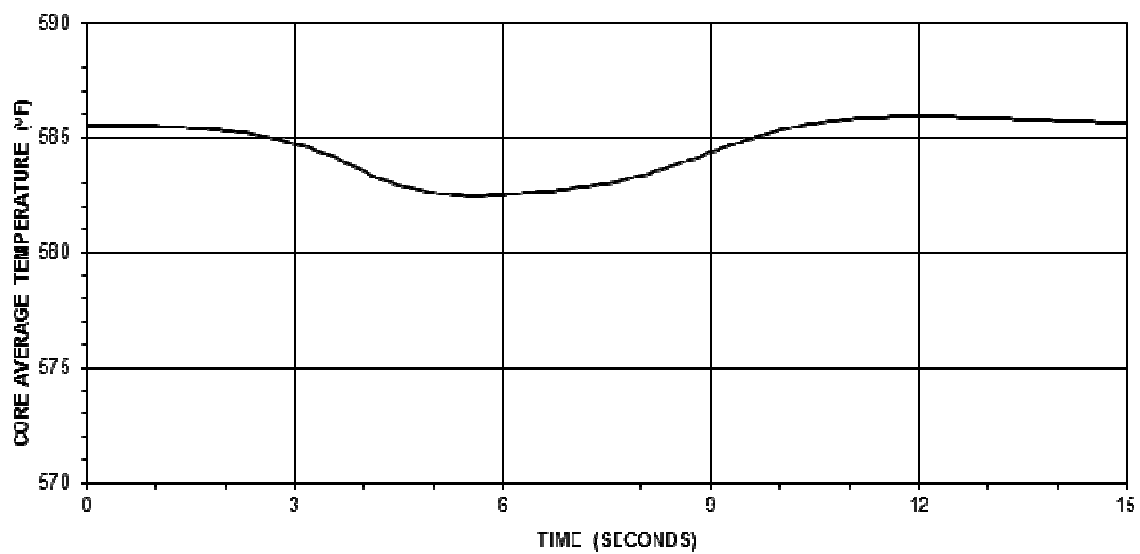
**Figure 15-115. Cold Water Accident - Core Average Temperature**

Figure 15-116. Cold Water Accident - Power

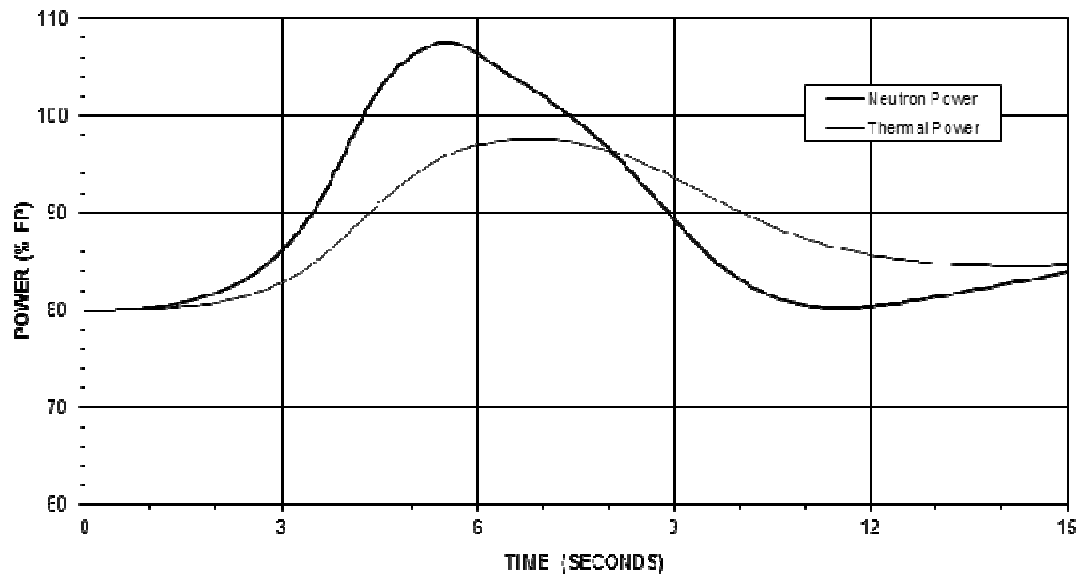
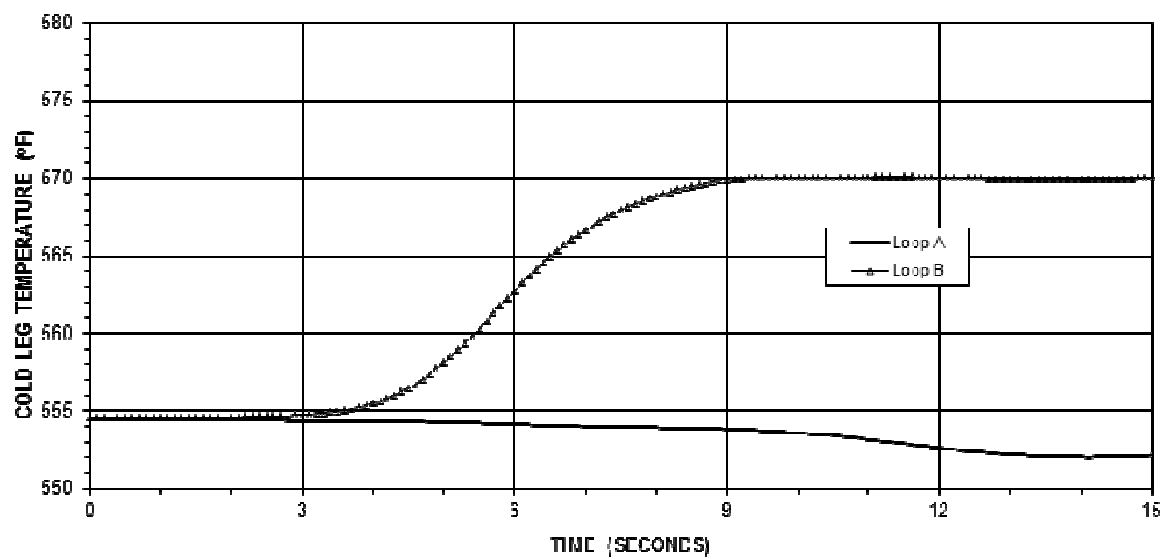
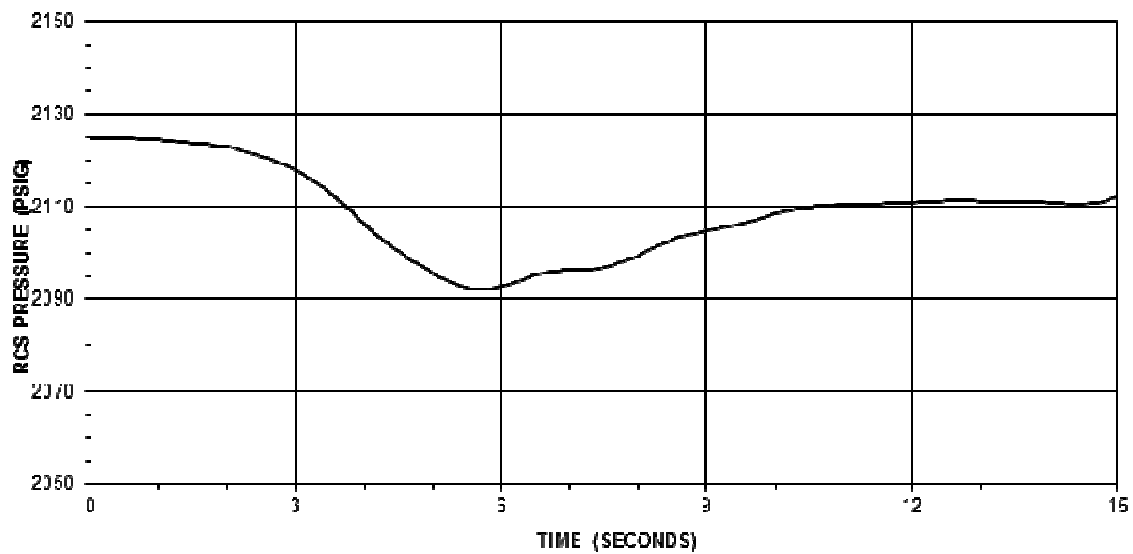
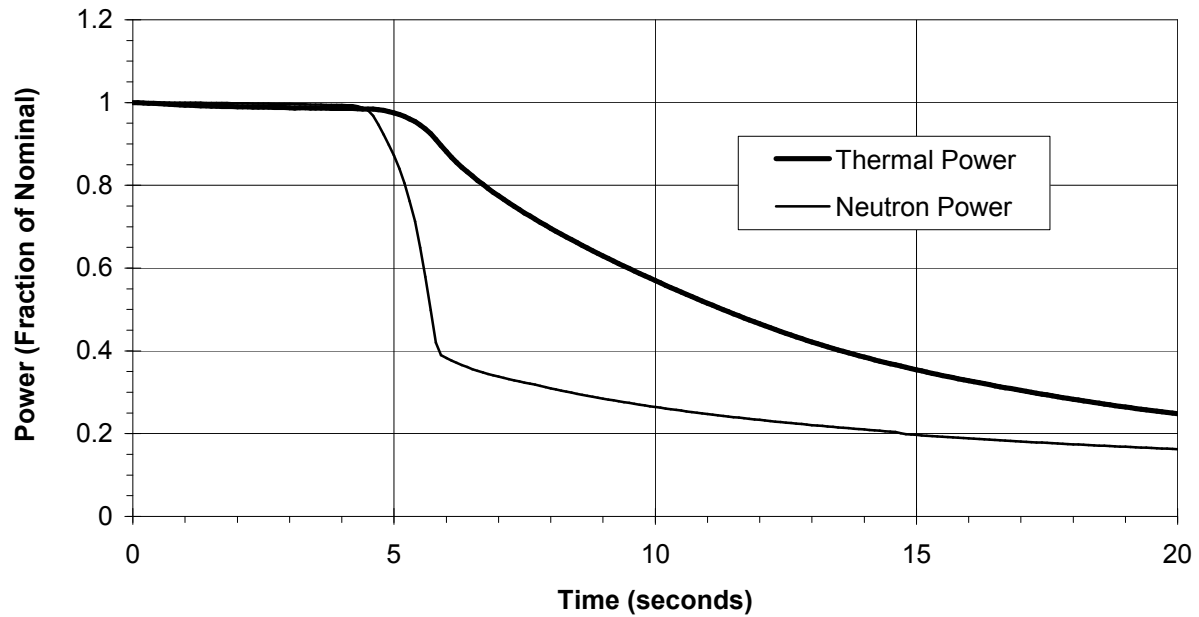


Figure 15-117. Cold Water Accident - Cold Leg Temperature

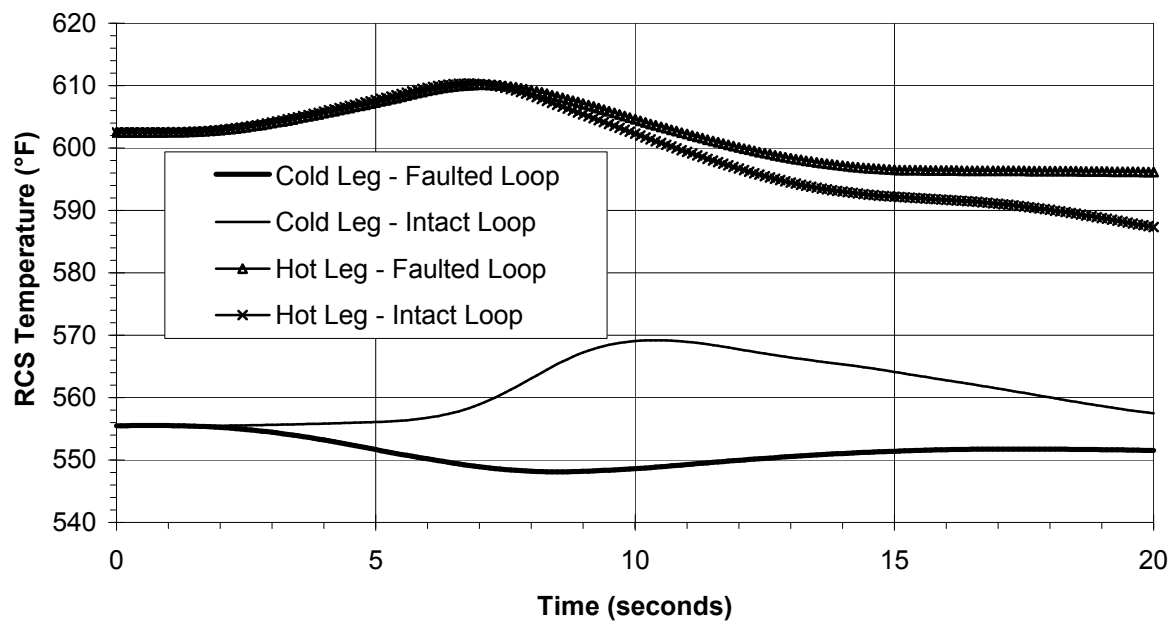


**Figure 15-118. Cold Water Accident - RCS Pressure**

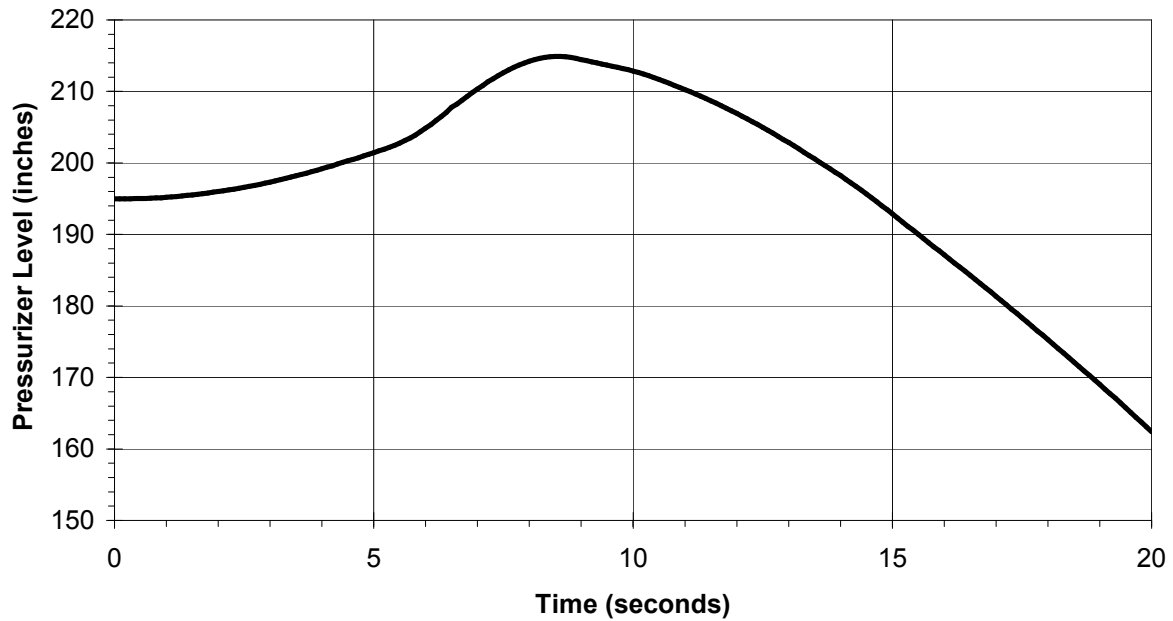
**Figure 15-119. Loss of Coolant Flow Accidents - Two RCP Coastdown from Four RCP Initial Conditions Analysis - Power**



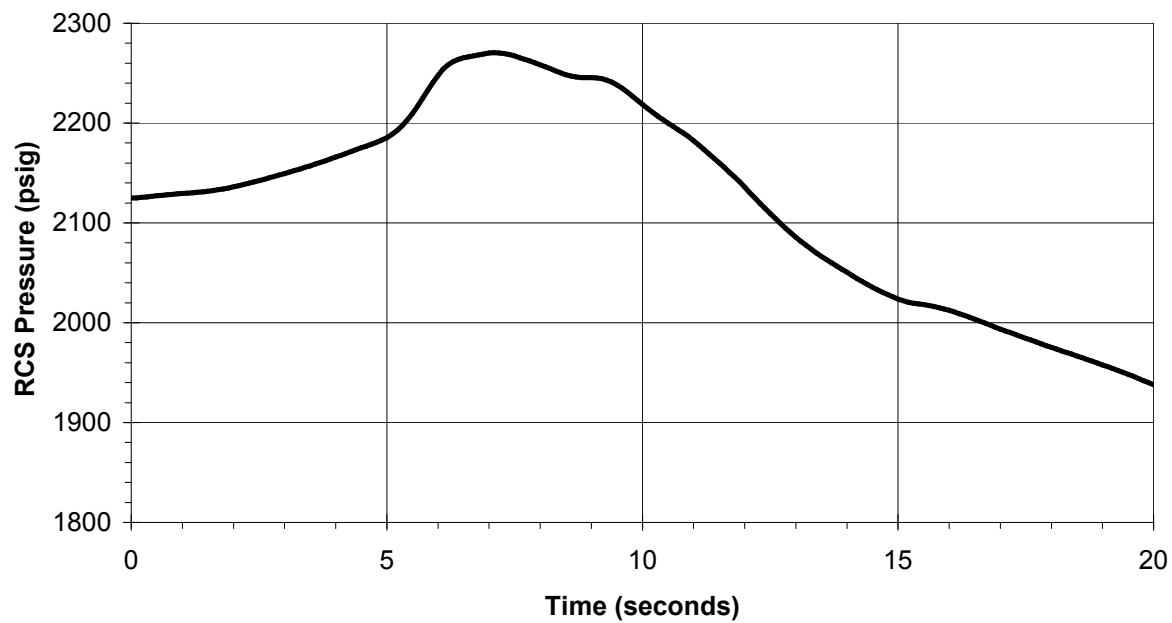
**Figure 15-120. Loss of Coolant Flow Accidents - Two RCP Coastdown from Four RCP Initial Conditions Analysis - RCS Temperature**



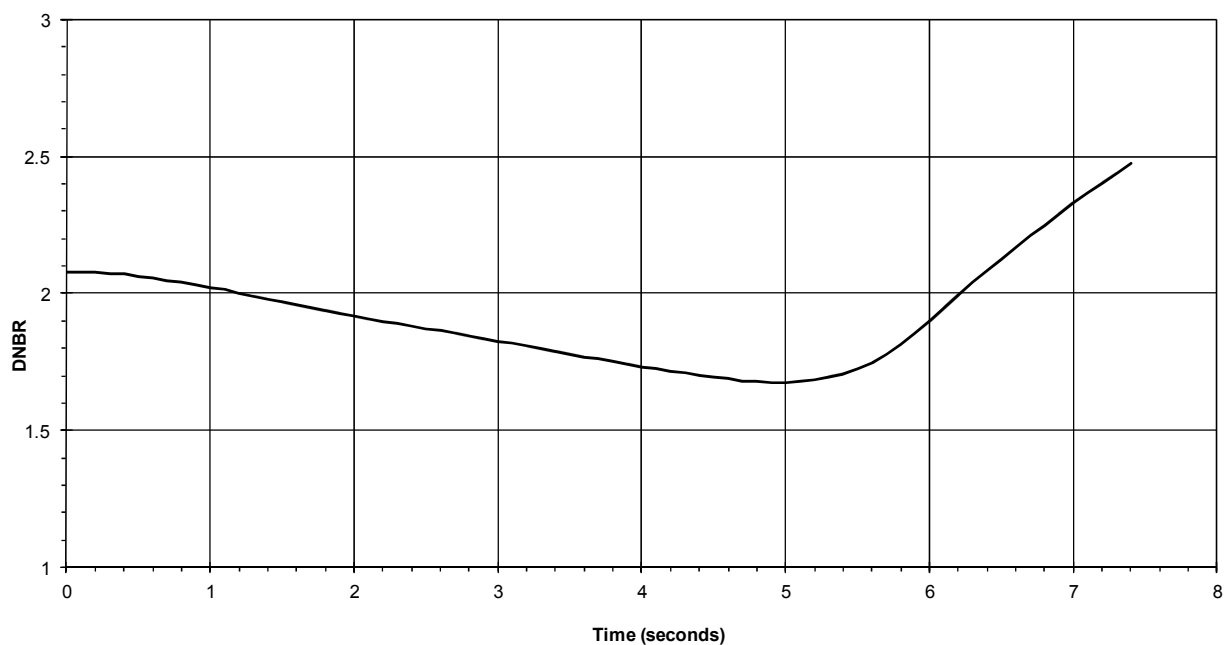
**Figure 15-121. Loss of Coolant Flow Accidents - Two RCP Coastdown from Four RCP Initial Conditions Analysis - Pressurizer Level**



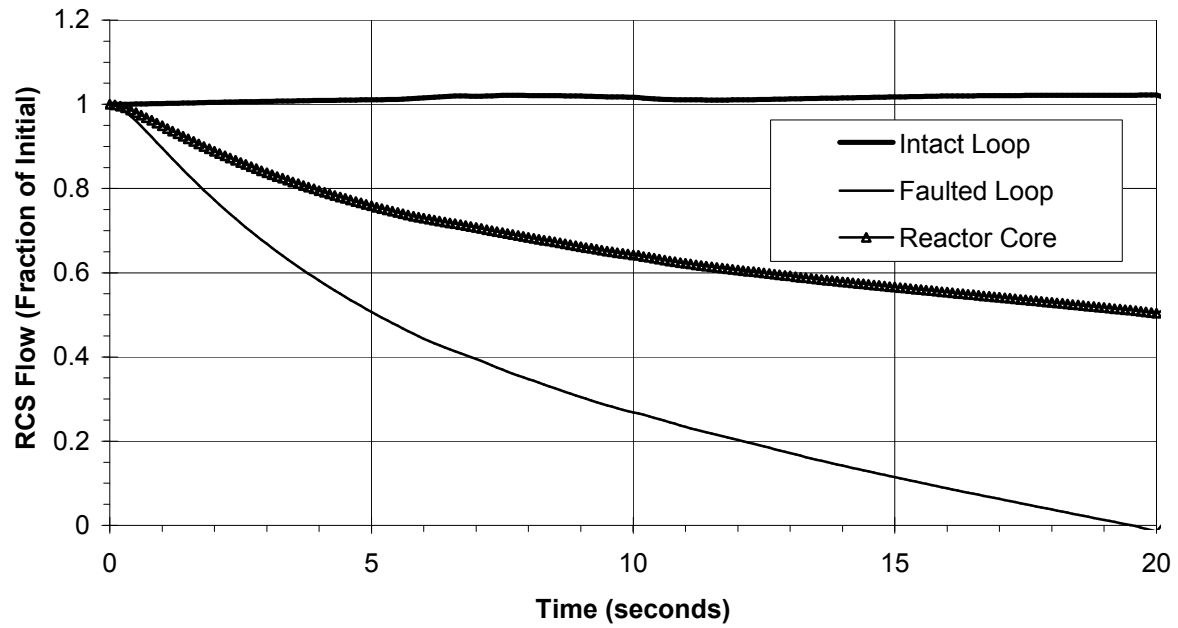
**Figure 15-122. Loss of Coolant Flow Accidents - Two RCP Coastdown from Four RCP Initial Conditions Analysis - RCS Pressure**



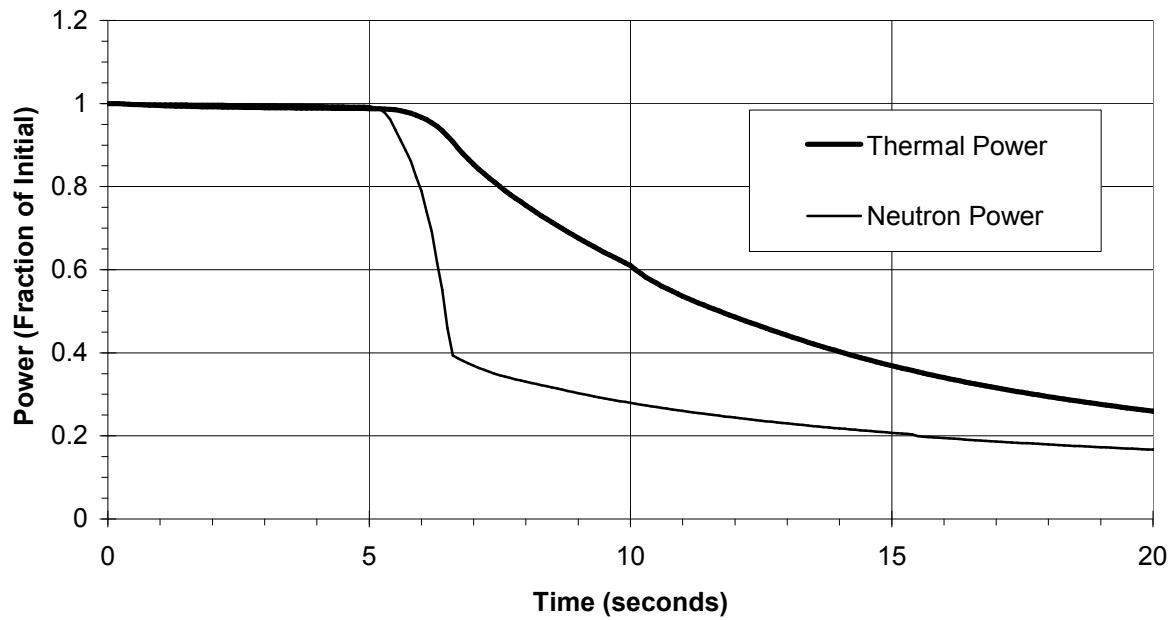
**Figure 15-123. Loss of Coolant Flow Accidents - Two RCP Coastdown from Four RCP Initial Conditions Analysis - DNBR**



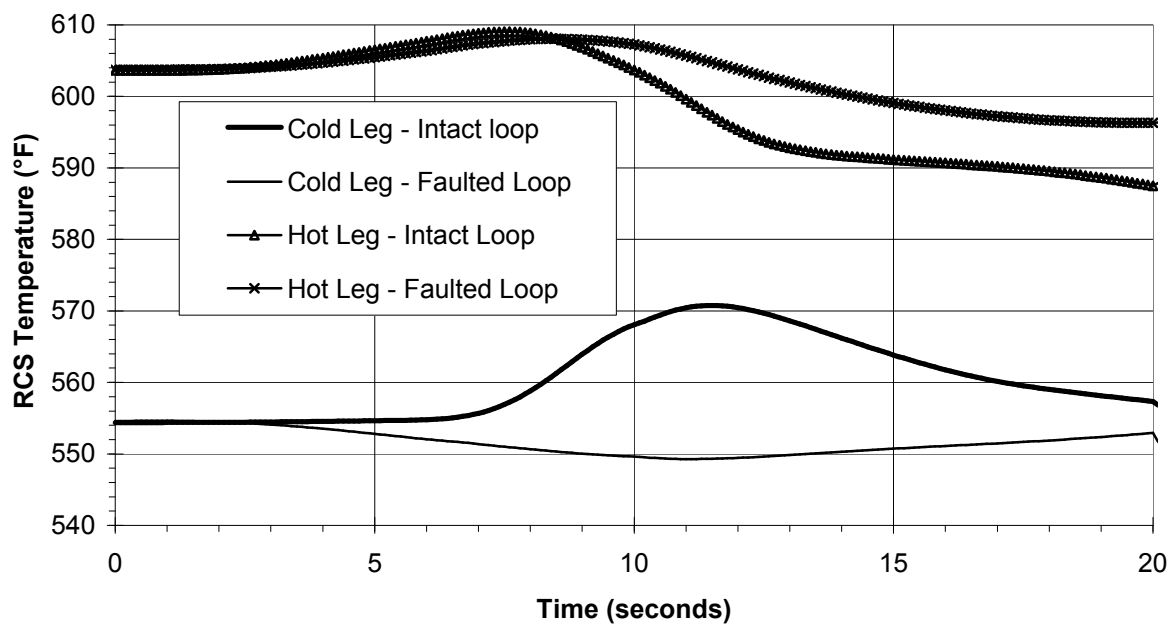
**Figure 15-124. Loss of Coolant Flow Accidents - One RCP Cooldown from Three RCP Initial Conditions Analysis - RCS Flow**



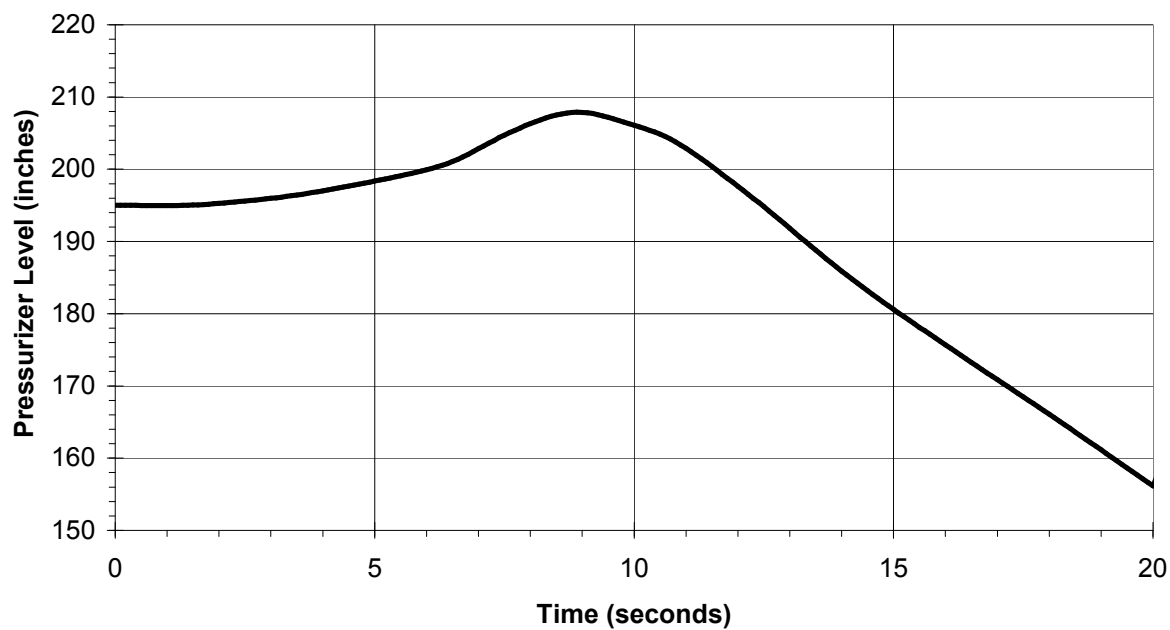
**Figure 15-125. Loss of Coolant Flow Accidents - One RCP Cooldown from Three RCP Initial Conditions Analysis - Power**



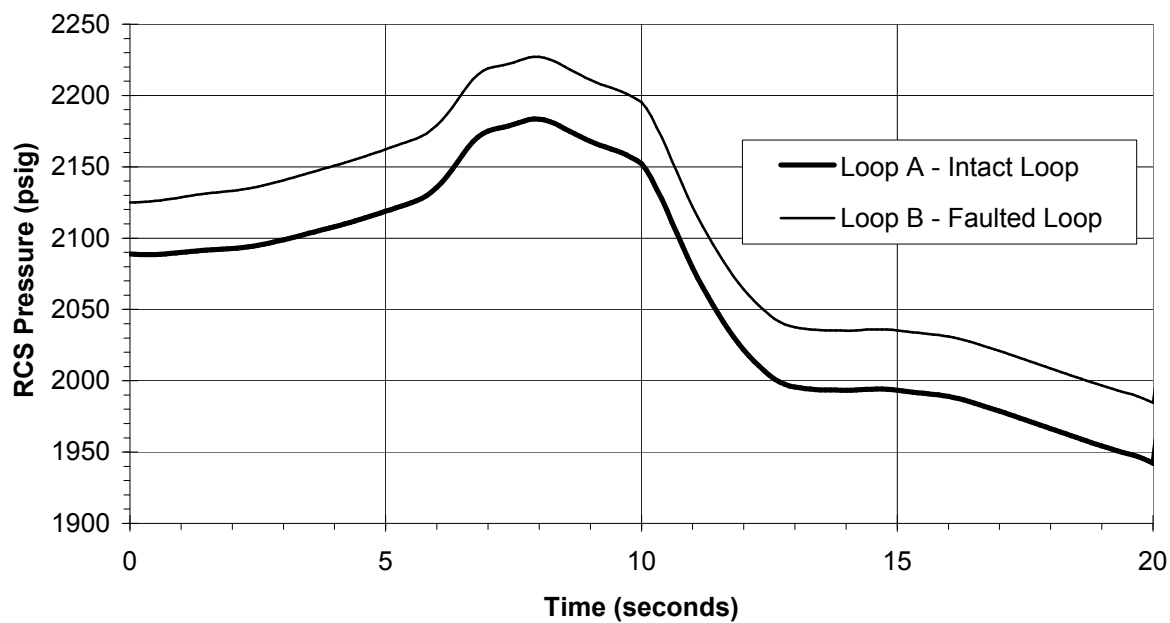
**Figure 15-126. Loss of Coolant Flow Accidents - One RCP Coastdown from Three RCP Initial Conditions Analysis - RCS Temperature**



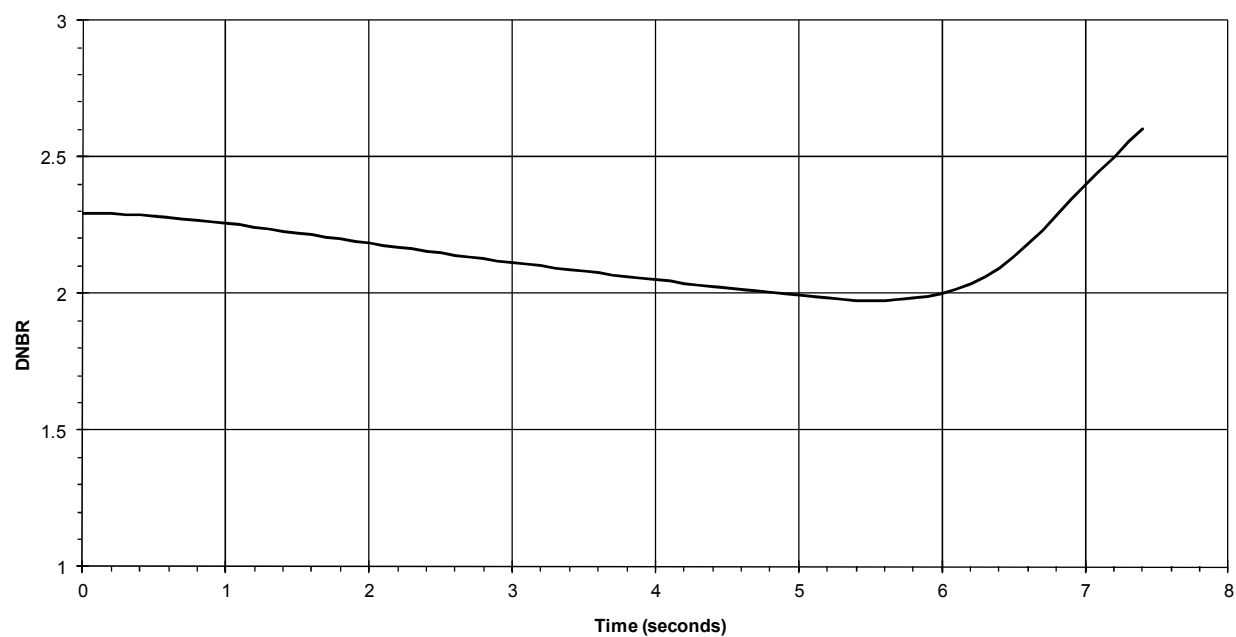
**Figure 15-127. Loss of Coolant Flow Accidents - One RCP Coastdown from Three RCP Initial Conditions Analysis - Pressurizer Level**



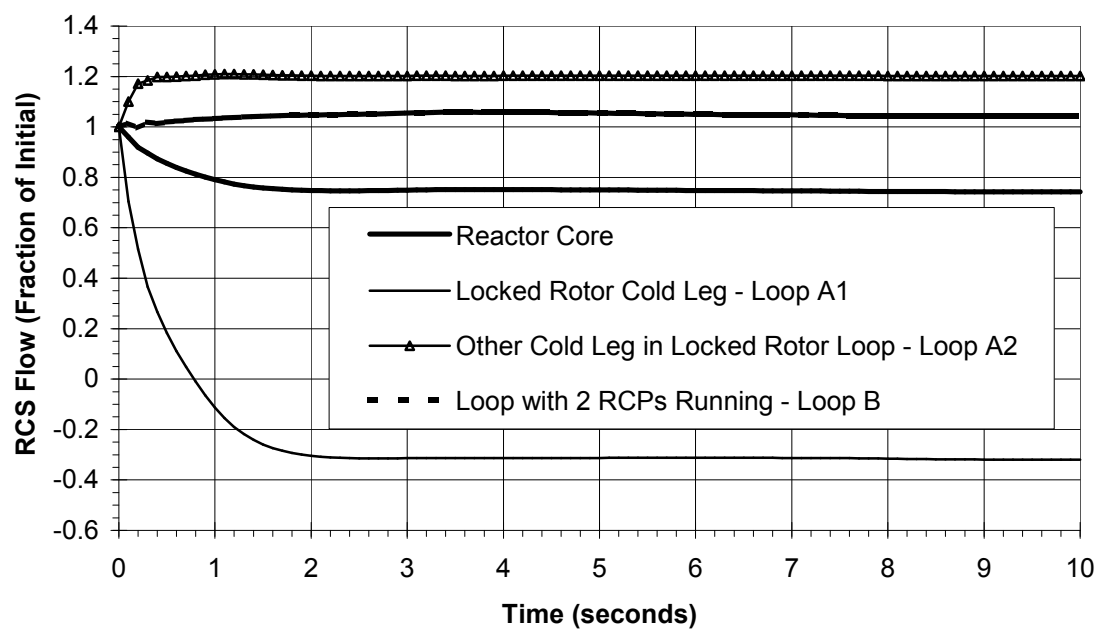
**Figure 15-128. Loss of Coolant Flow Accidents - One RCP Cooldown from Three RCP Initial Conditions Analysis - RCS Pressure**



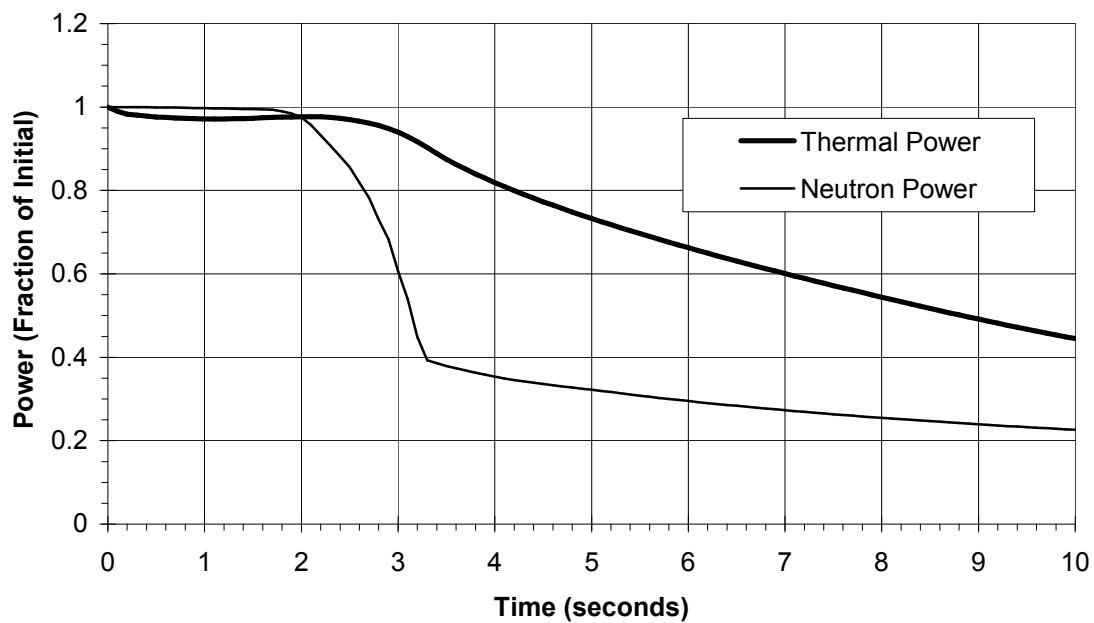
**Figure 15-129. Loss of Coolant Flow Accidents - One RCP Coastdown from Three RCP Initial Conditions Analysis - DNBR**



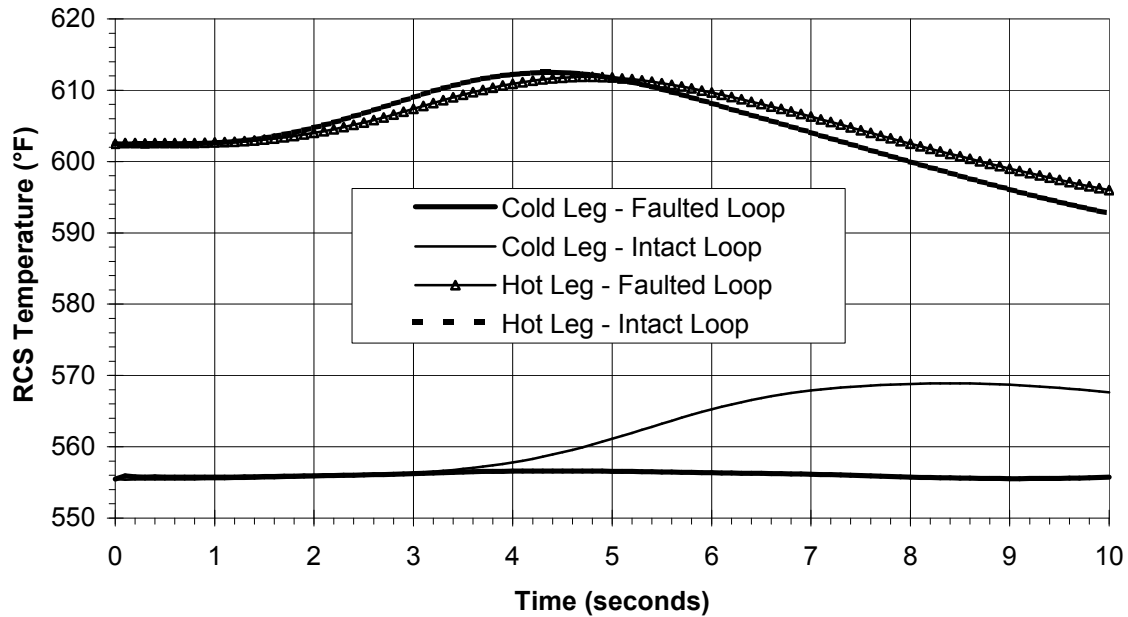
**Figure 15-130. Loss of Coolant Flow Accidents - Locked Rotor From Four RCP Initial Conditions Analysis - RCS Flow**



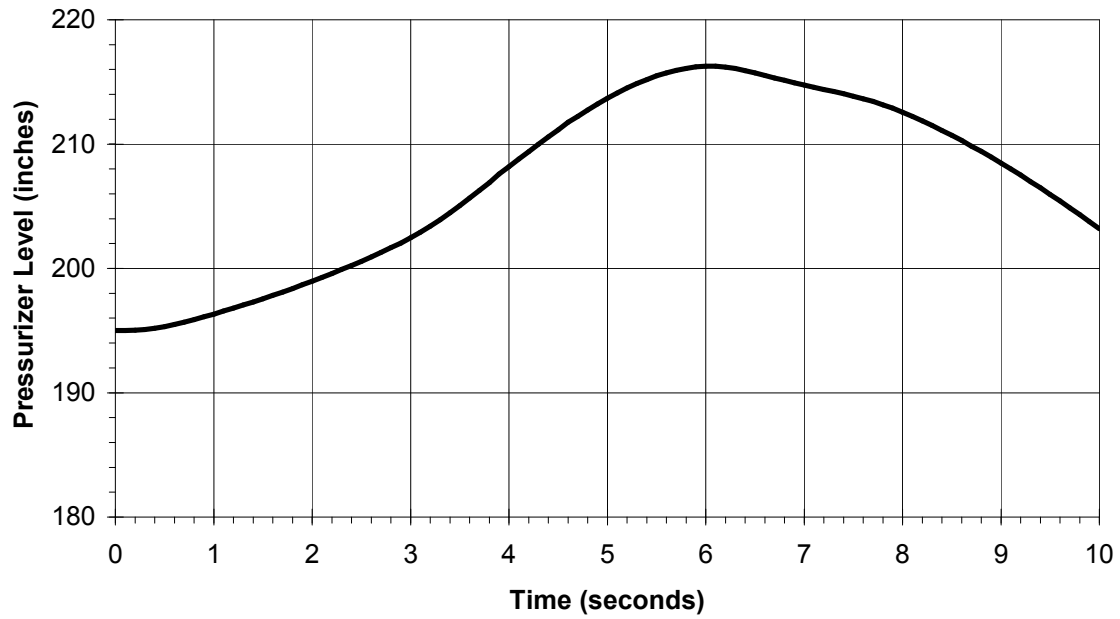
**Figure 15-131. Loss of Coolant Flow Accidents - Locked Rotor From Four RCP Initial Conditions Analysis - Power**



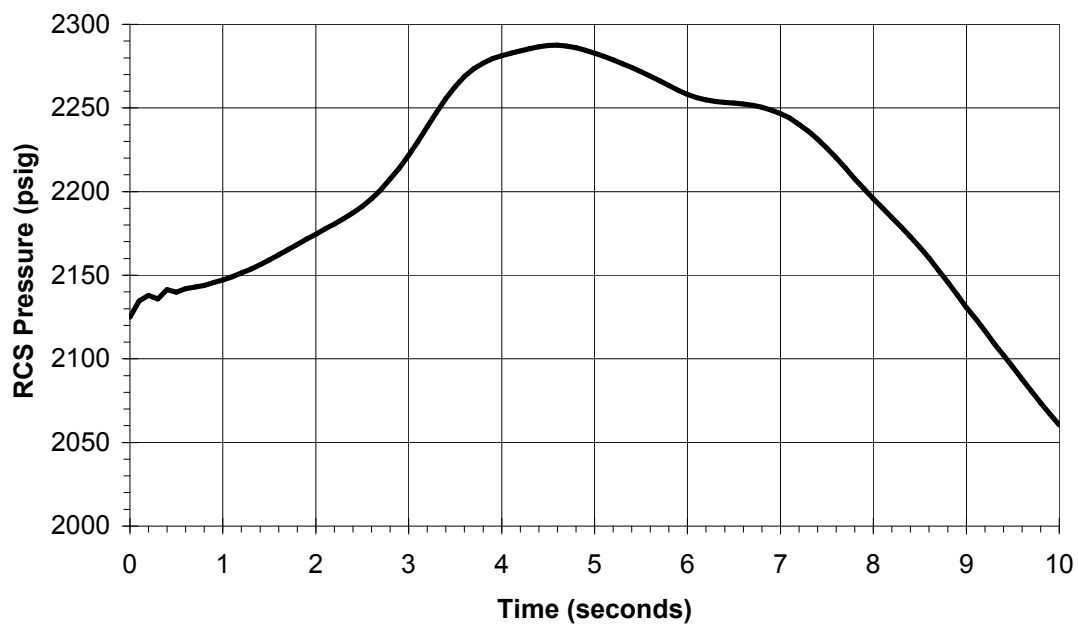
**Figure 15-132. Loss of Coolant Flow Accidents - Locked Rotor From Four RCP Initial Conditions Analysis - RCS Temperature**



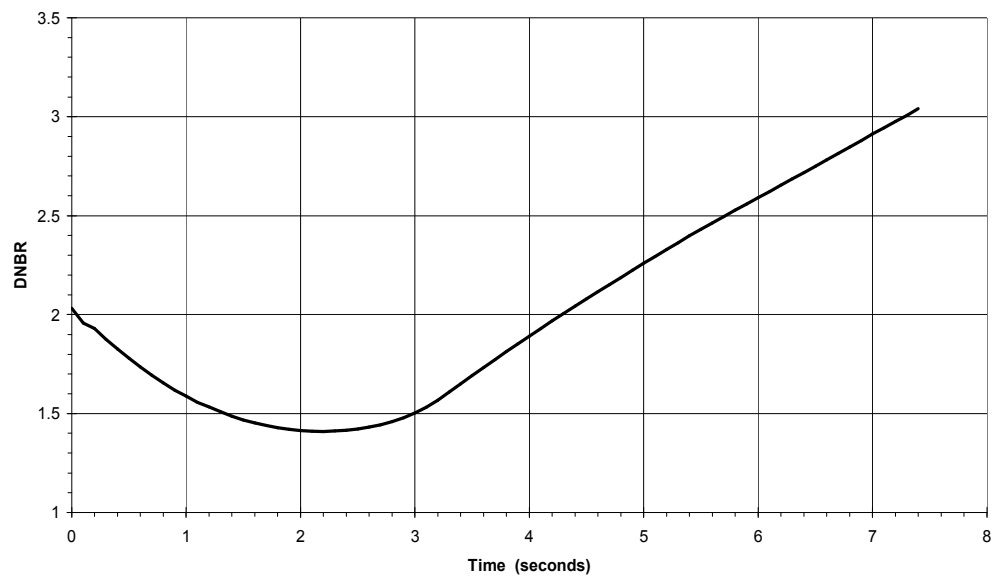
**Figure 15-133. Loss of Coolant Flow Accidents - Locked Rotor From Four RCP Initial Conditions Analysis - Pressurizer Level**



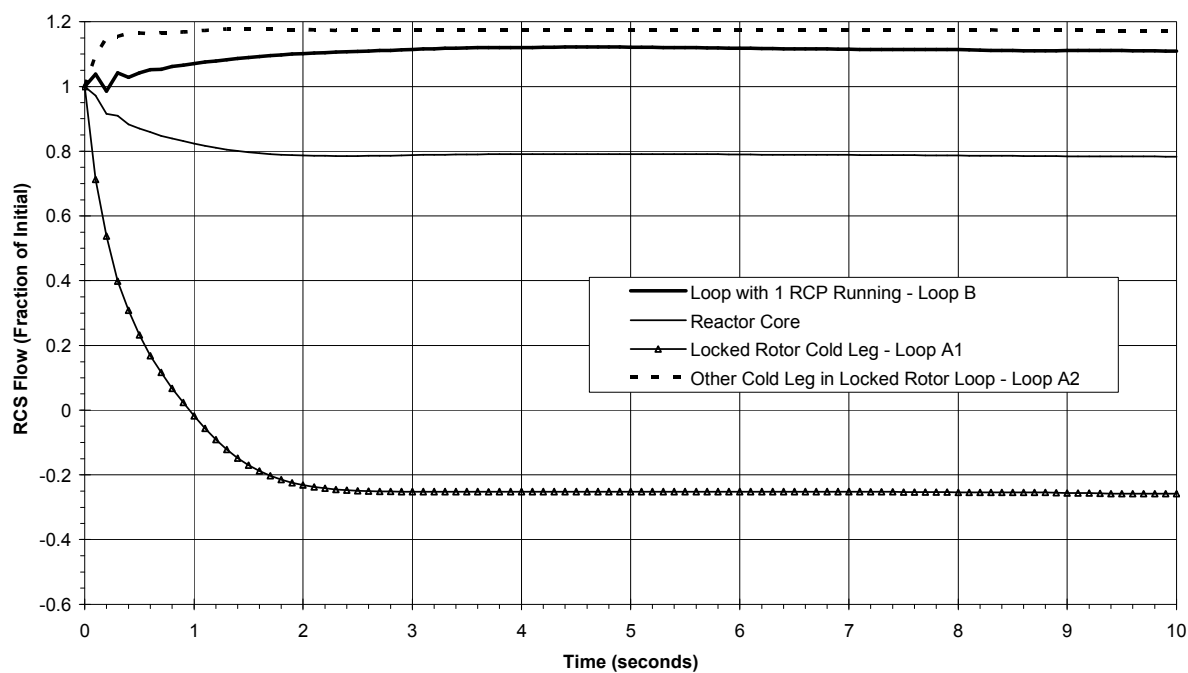
**Figure 15-134. Loss of Coolant Flow Accidents - Locked Rotor From Four RCP Initial Conditions Analysis - RCS Pressure**



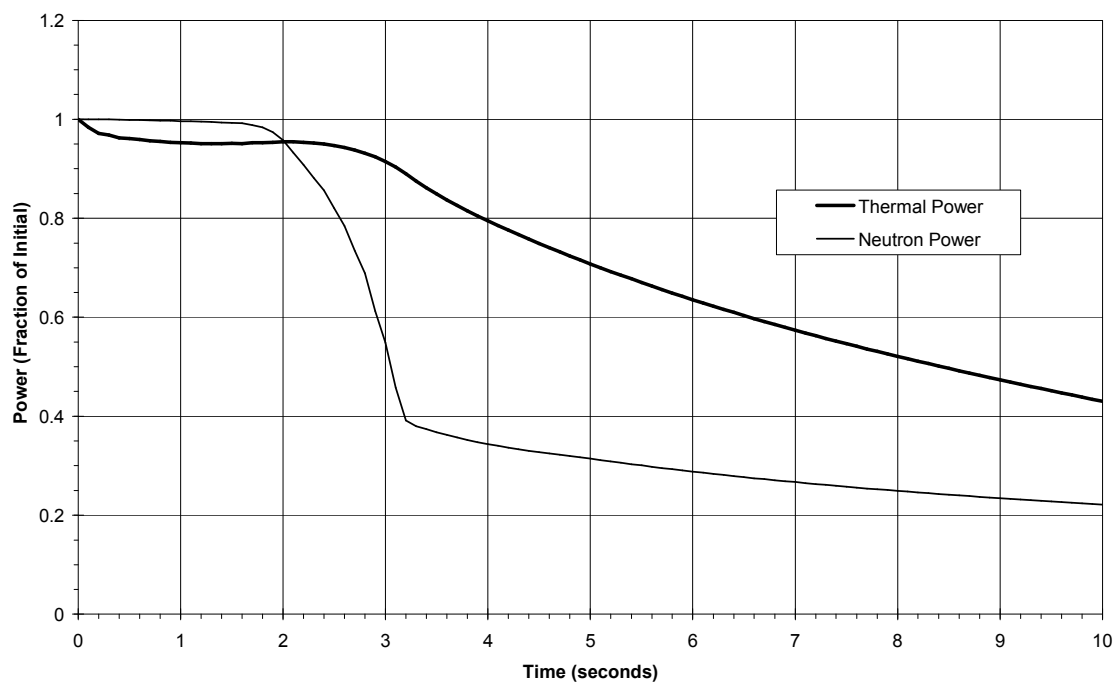
**Figure 15-135. Loss of Coolant Flow Accidents - Locked Rotor From Four RCP Initial Conditions Analysis - DNBR**



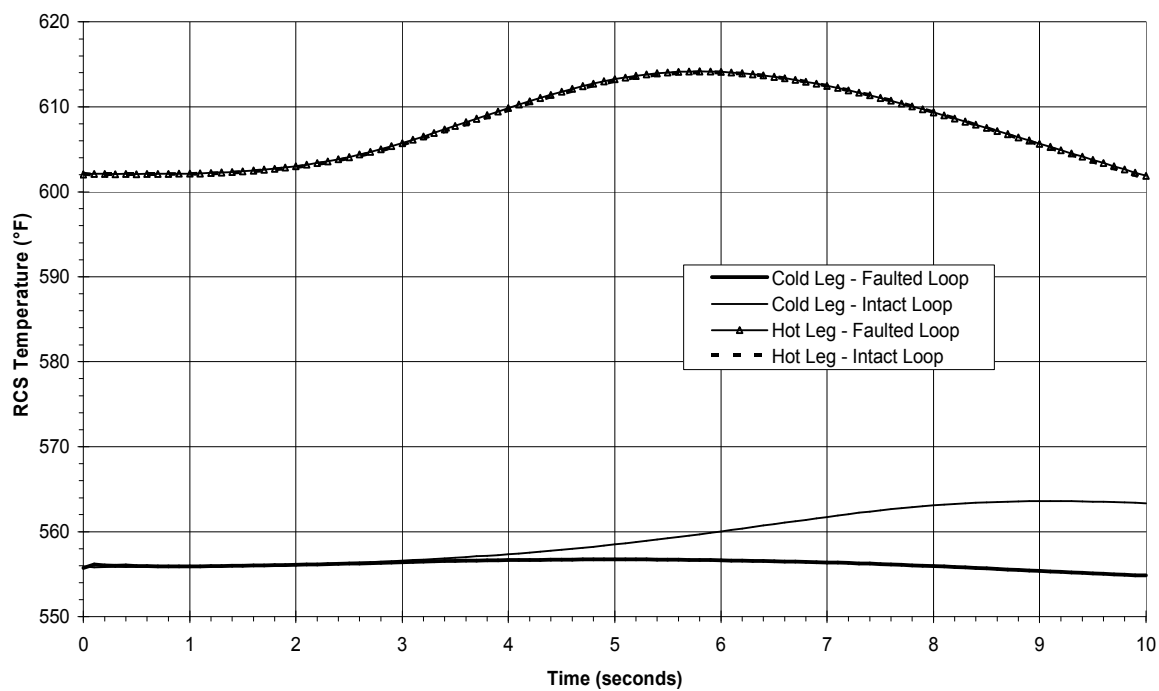
**Figure 15-136. Loss of Coolant Flow Accidents - Locked Rotor From Three RCP Initial Conditions Analysis - RCS Flow**



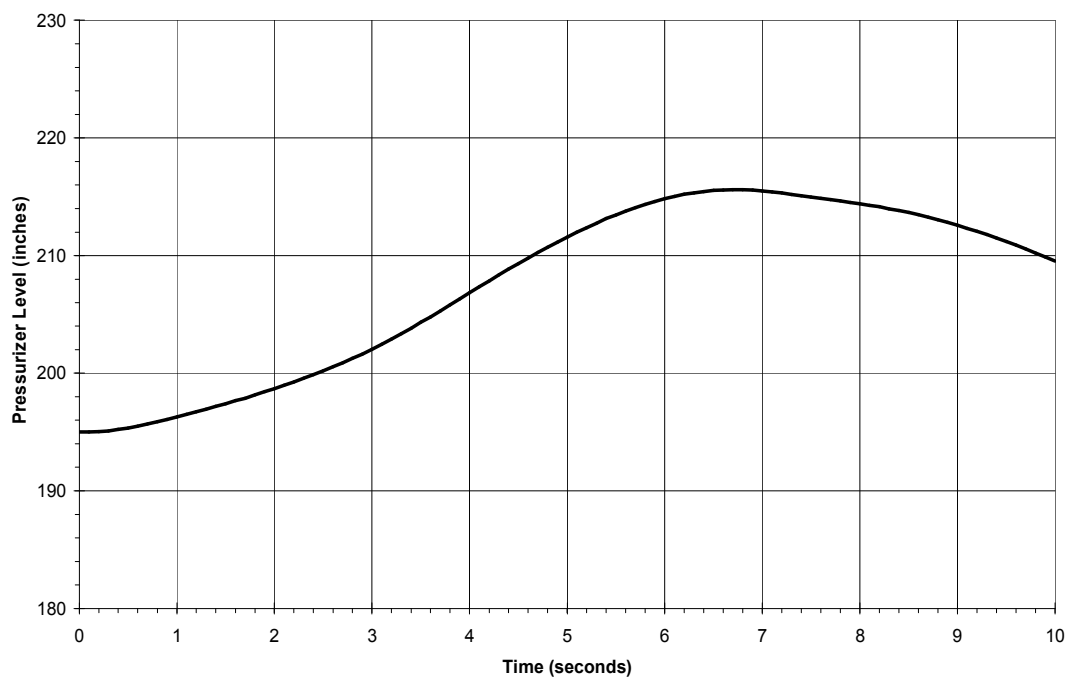
**Figure 15-137. Loss of Coolant Flow Accidents - Locked Rotor From Three RCP Initial Conditions Analysis - Power**



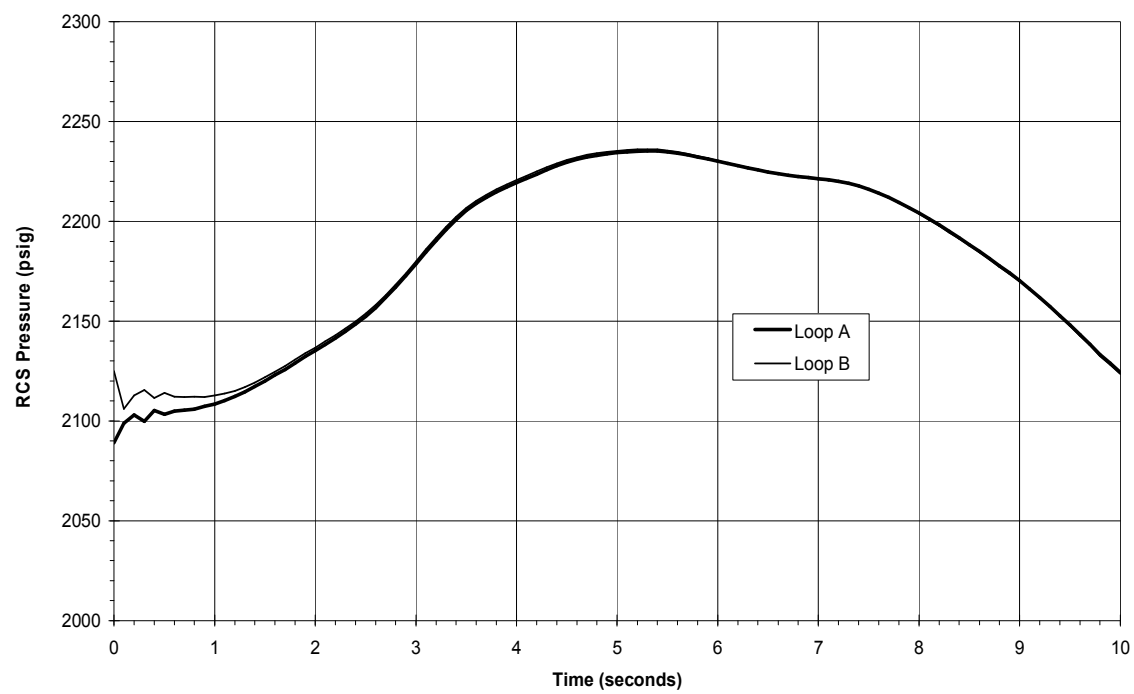
**Figure 15-138. Loss of Coolant Flow Accidents - Locked Rotor From Three RCP Initial Conditions Analysis - RCS Temperatures**



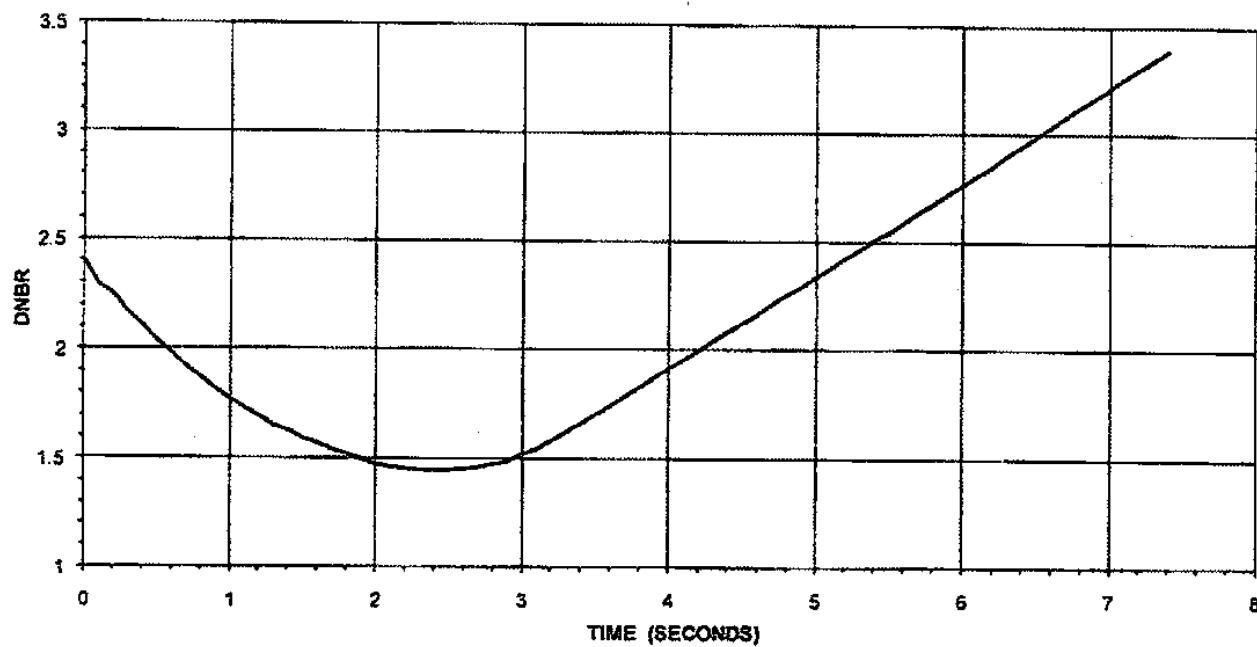
**Figure 15-139. Loss of Coolant Flow Accidents - Locked Rotor From Three RCP Initial Conditions Analysis - Pressurizer Level**



**Figure 15-140. Loss of Coolant Flow Accidents - Locked Rotor From Three RCP Initial Conditions Analysis - RCS Pressure**

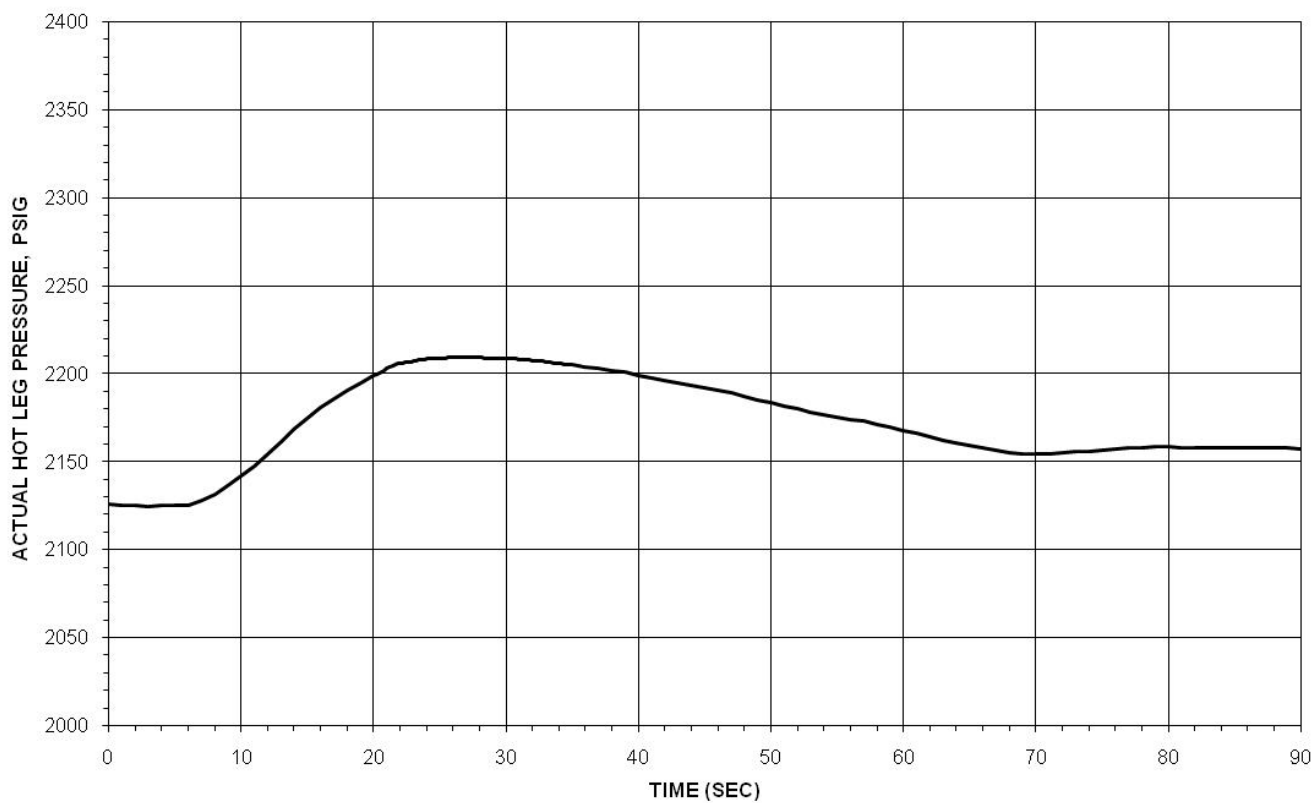


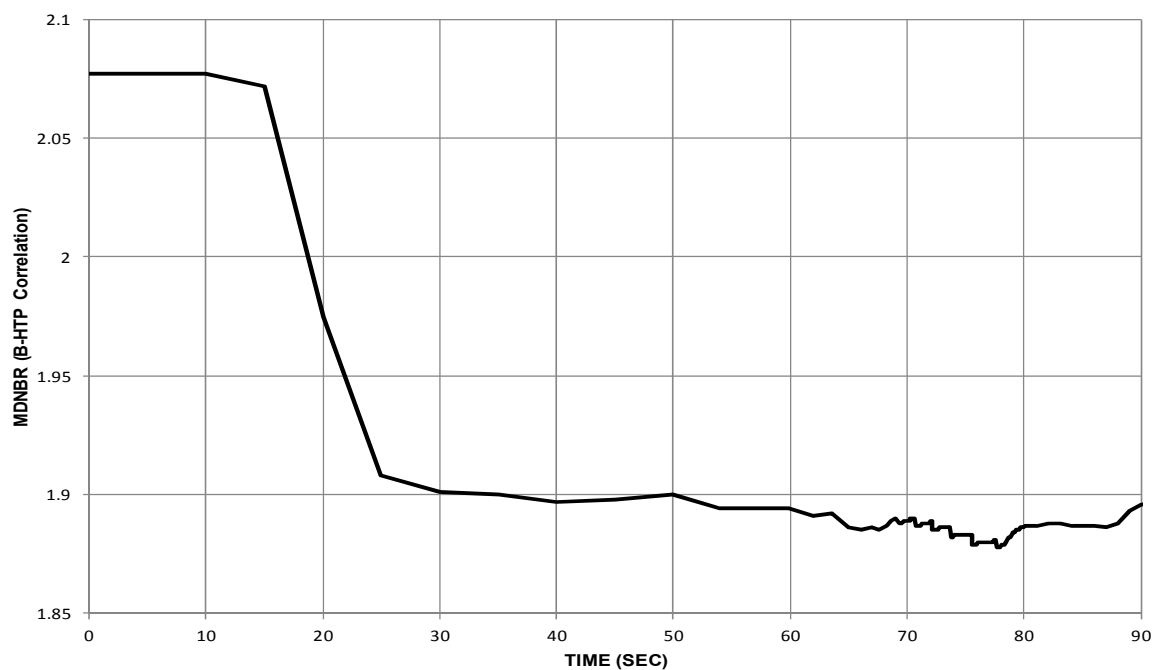
**Figure 15-141. Loss of Coolant Flow Accidents - Locked Rotor From Three RCP Initial Conditions Analysis - DNBR**

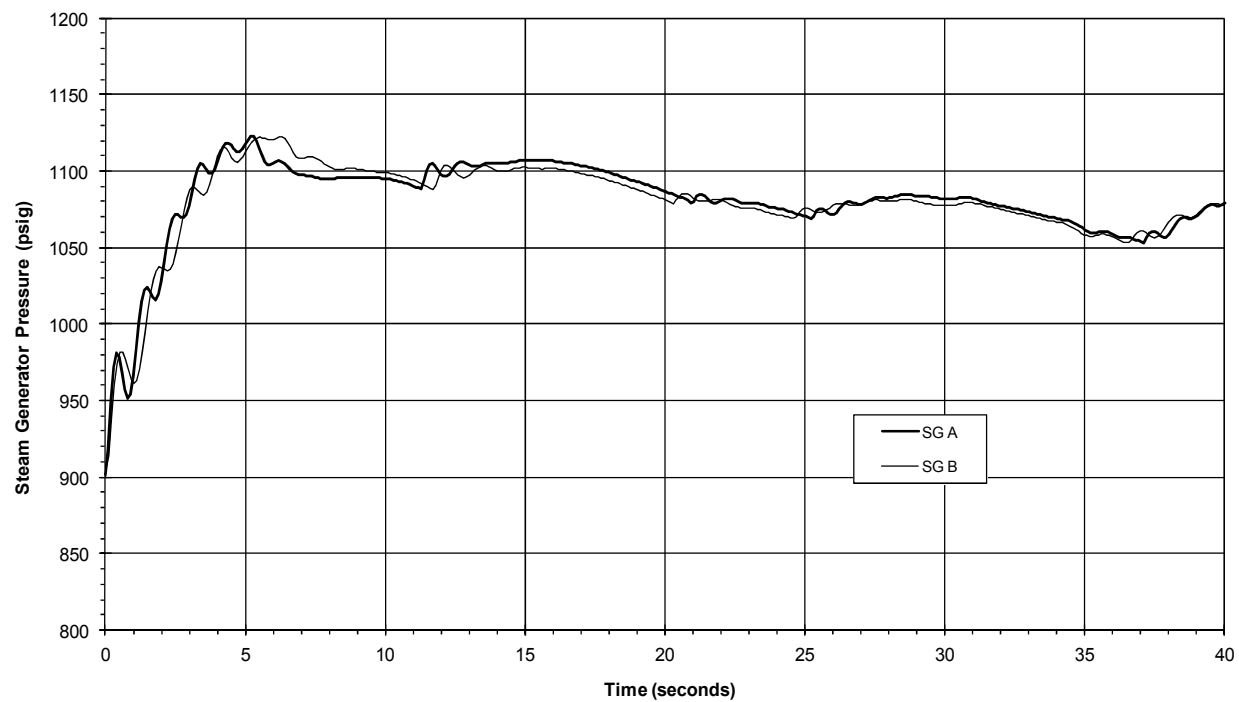


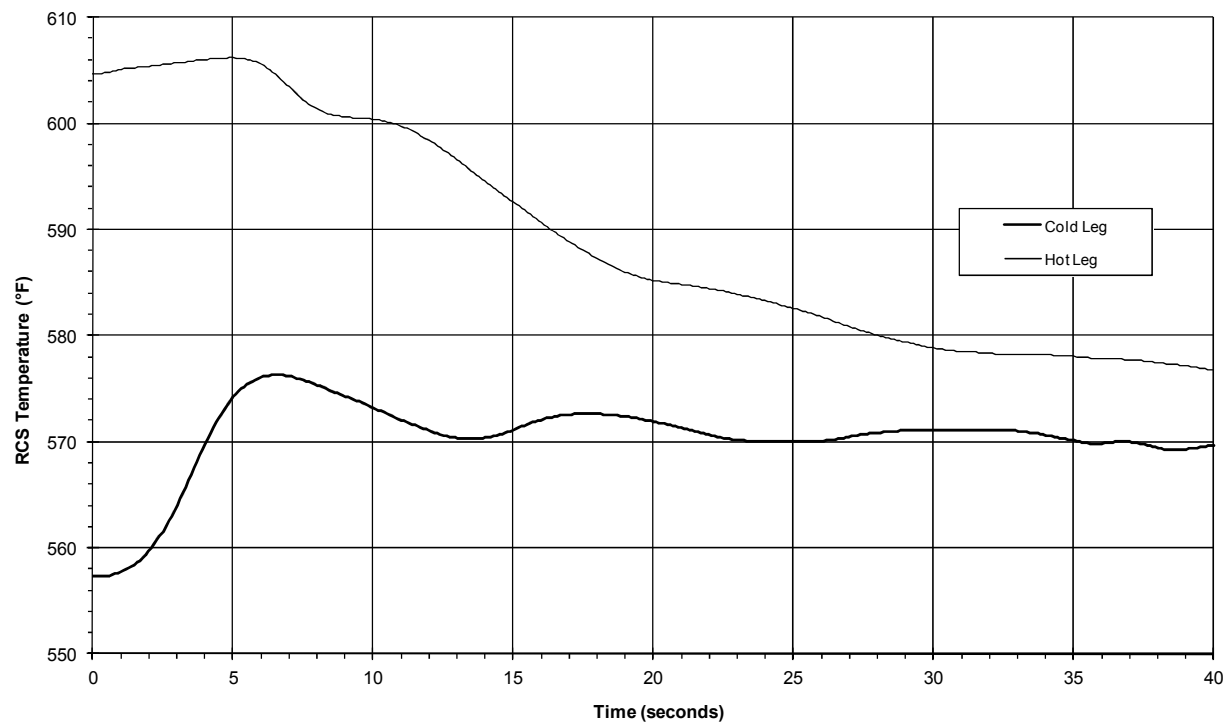
**Figure 15-142. Intentionally Blank**

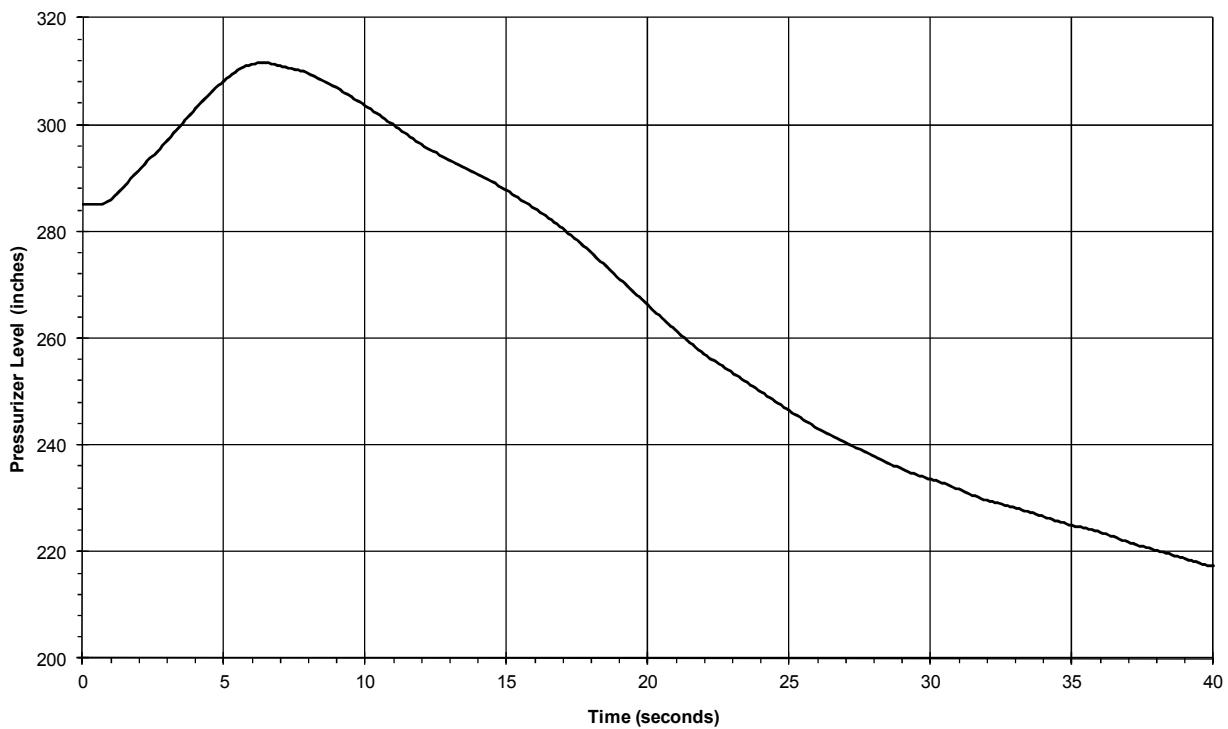
Intentionally Blank

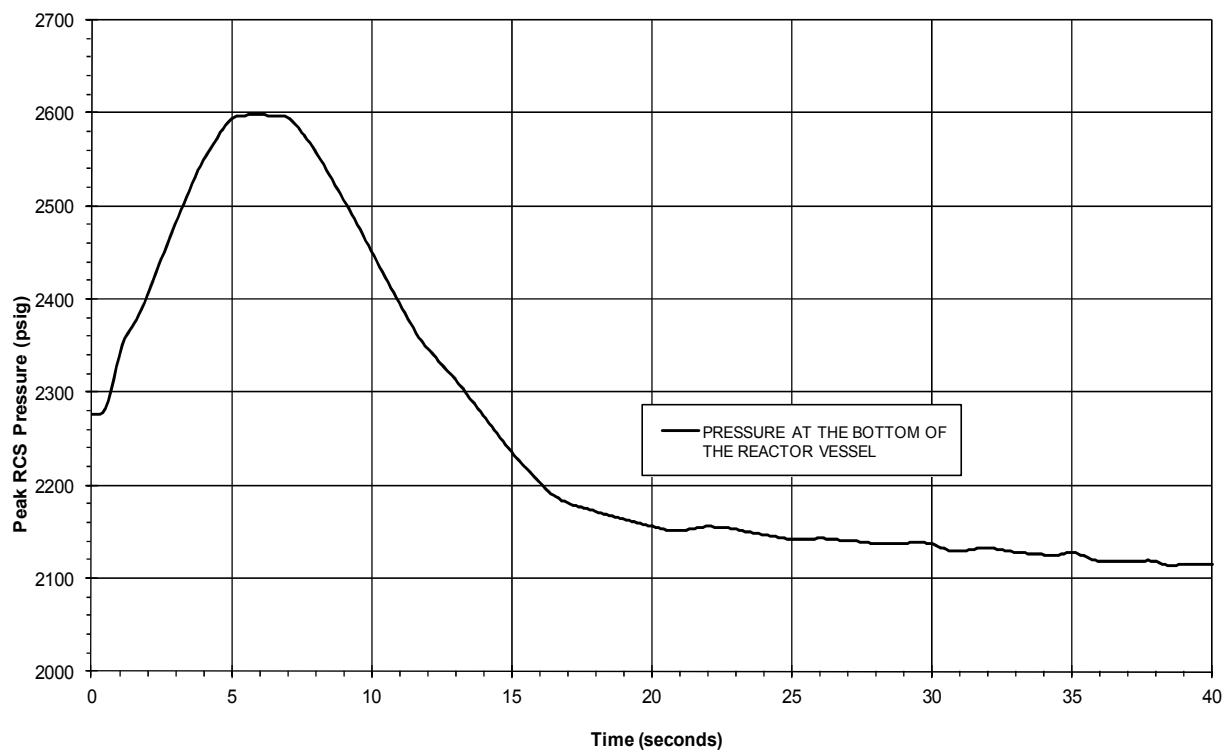
**Figure 15-143. Control Rod Misalignment Accidents - Dropped Rod - RCS Pressure**

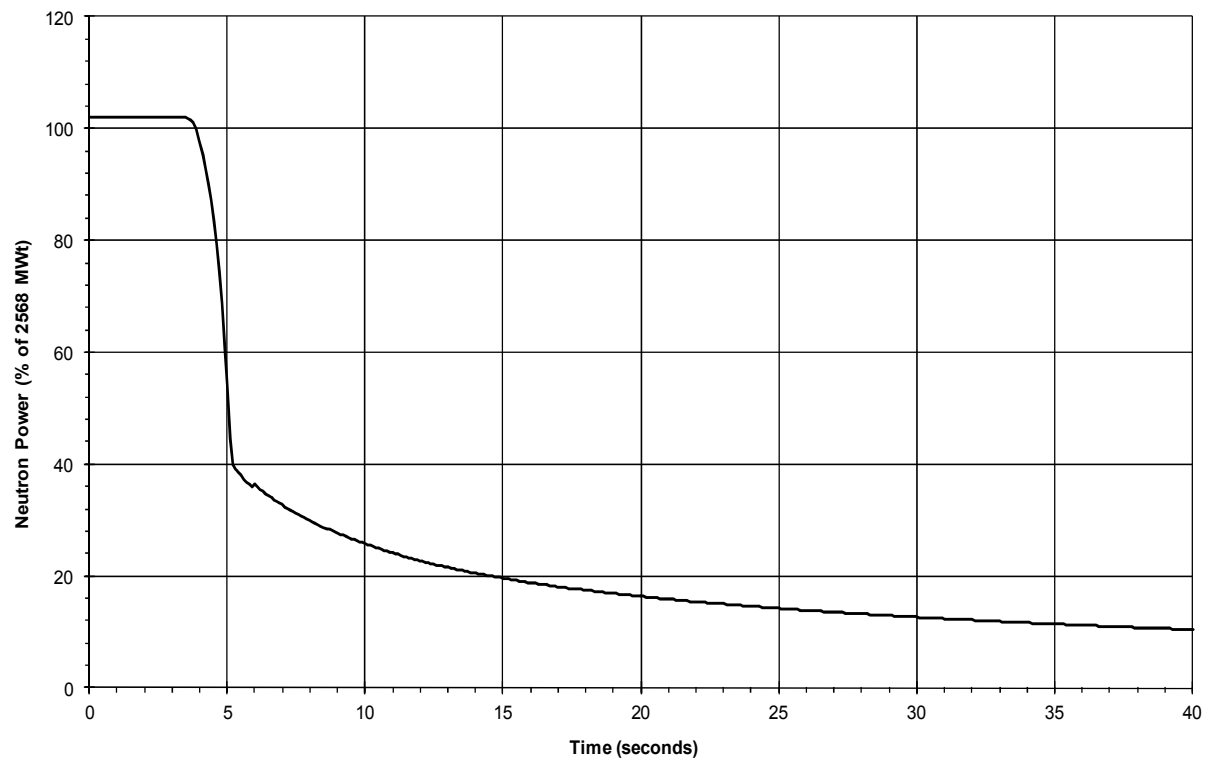
**Figure 15-144. Control Rod Misalignment Accidents - Dropped Rod - DNBR**

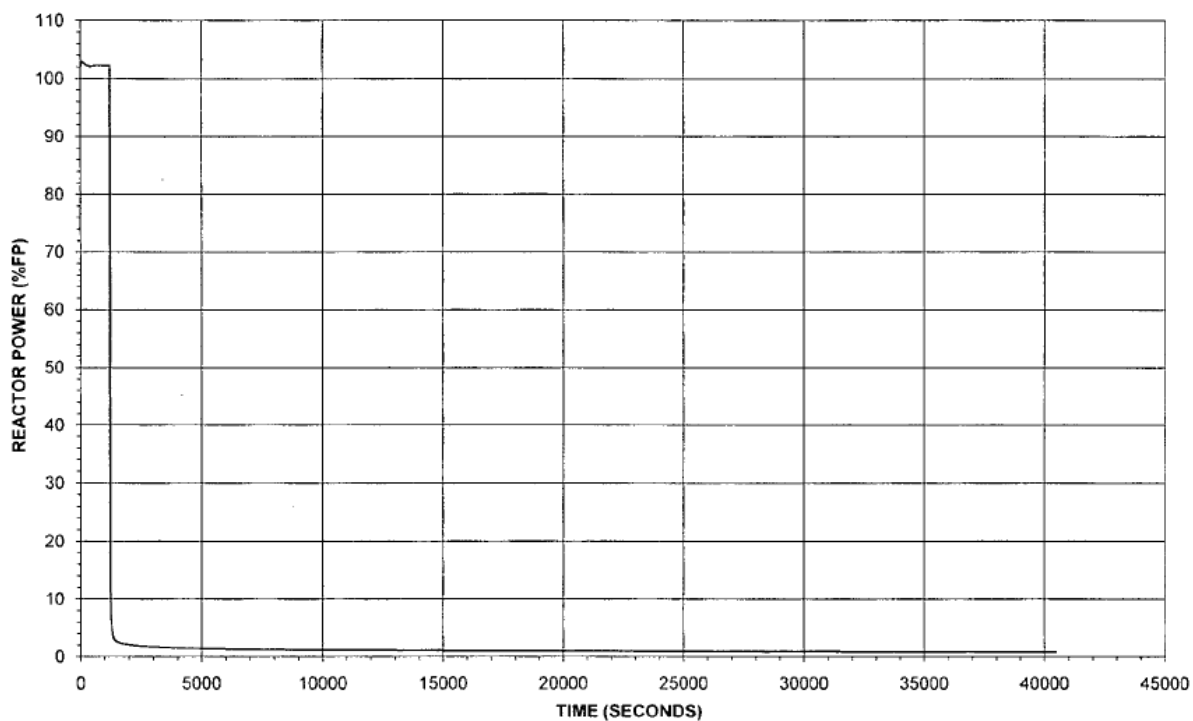
**Figure 15-145. Turbine Trip Accident - Steam Generator Pressure**

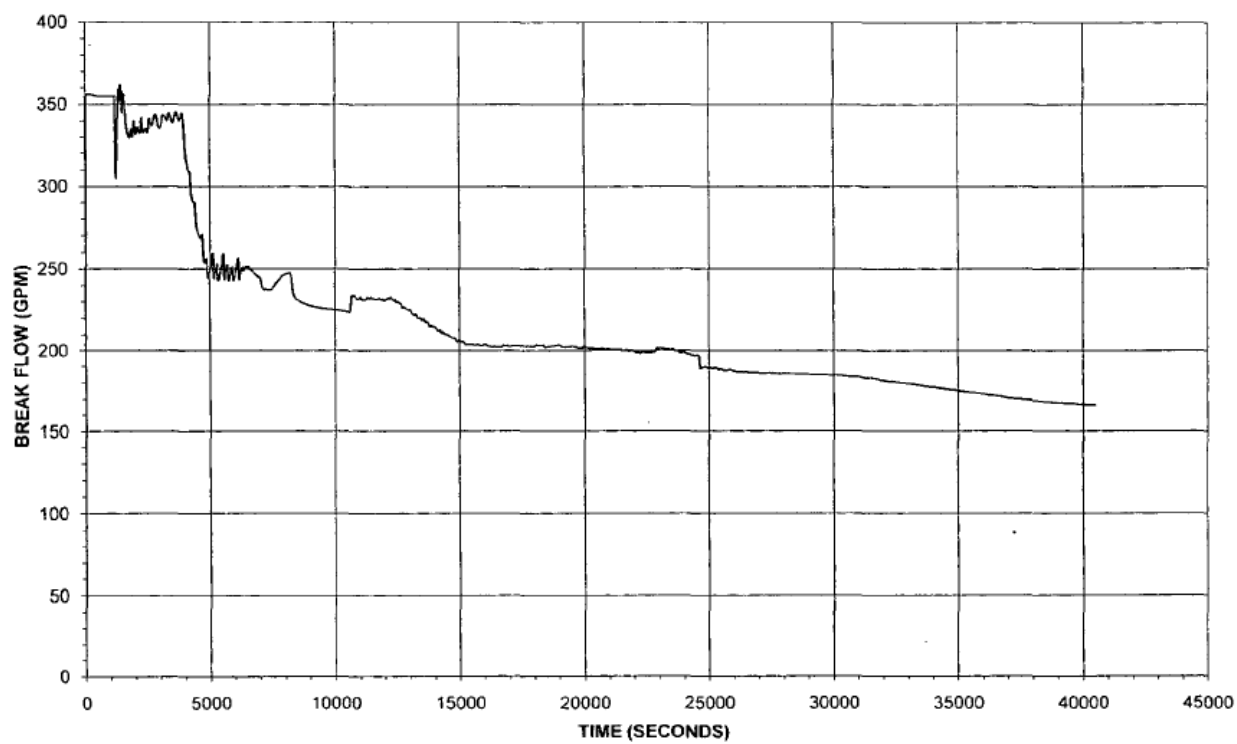
**Figure 15-146. Turbine Trip Accident - RCS Temperatures**

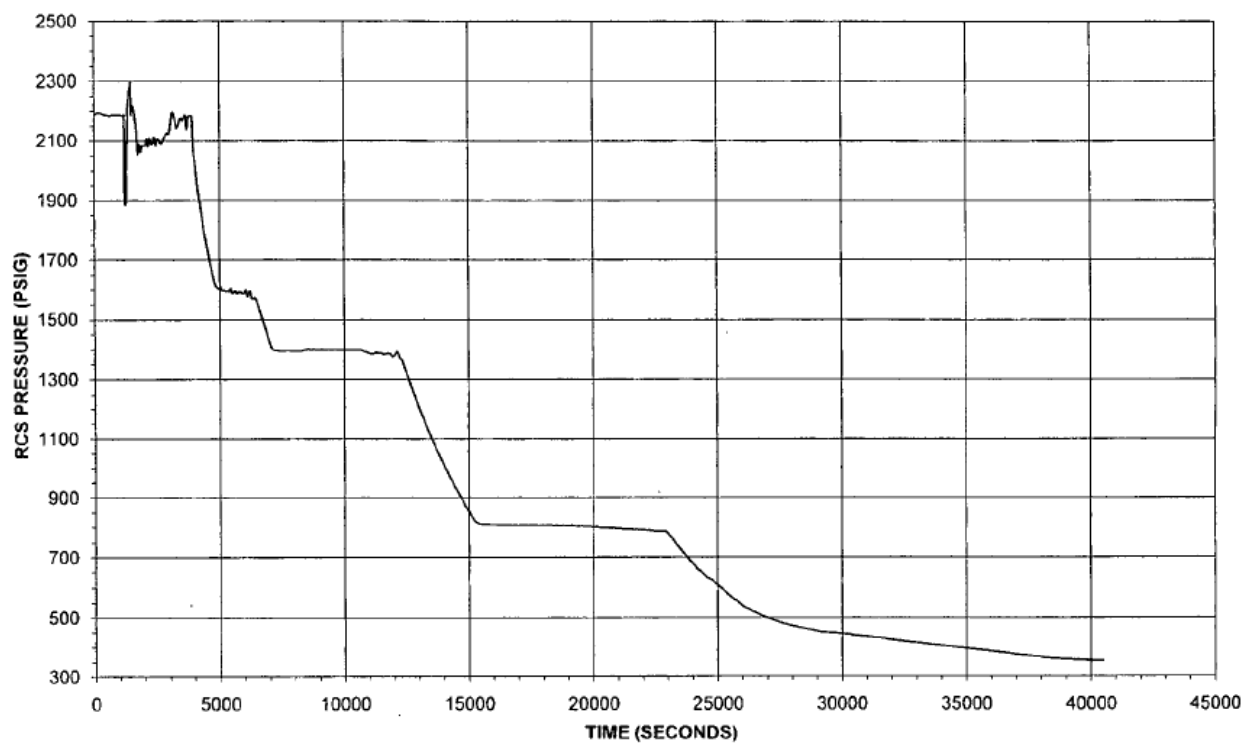
**Figure 15-147. Turbine Trip Accident - Pressurizer Level**

**Figure 15-148. Turbine Trip Accident - RCS Pressure**

**Figure 15-149. Turbine Trip Accident - Power**

**Figure 15-150. Steam Generator Tube Rupture - Power**

**Figure 15-151. Steam Generator Tube Rupture - Break Flow**

**Figure 15-152. Steam Generator Tube Rupture - RCS Pressure**

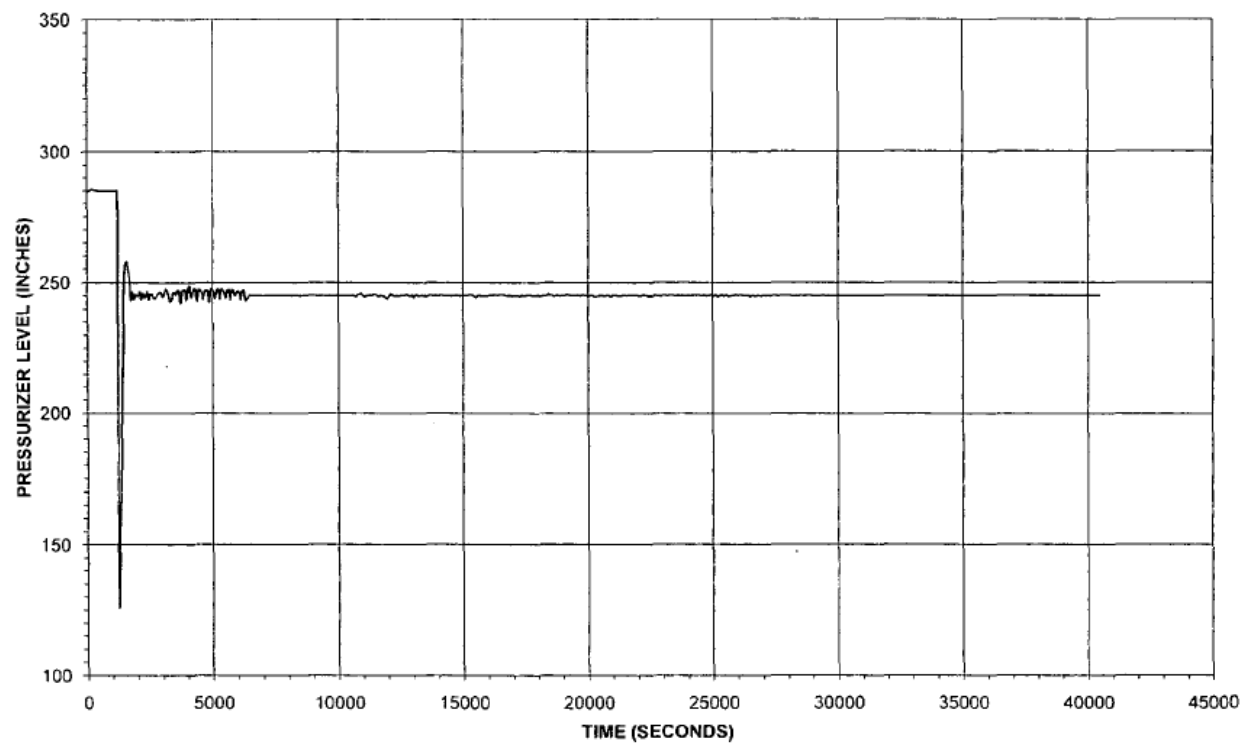
**Figure 15-153. Steam Generator Tube Rupture - Pressurizer Level**

Figure 15-154. Steam Generator Tube Rupture - Steam Generator Pressure

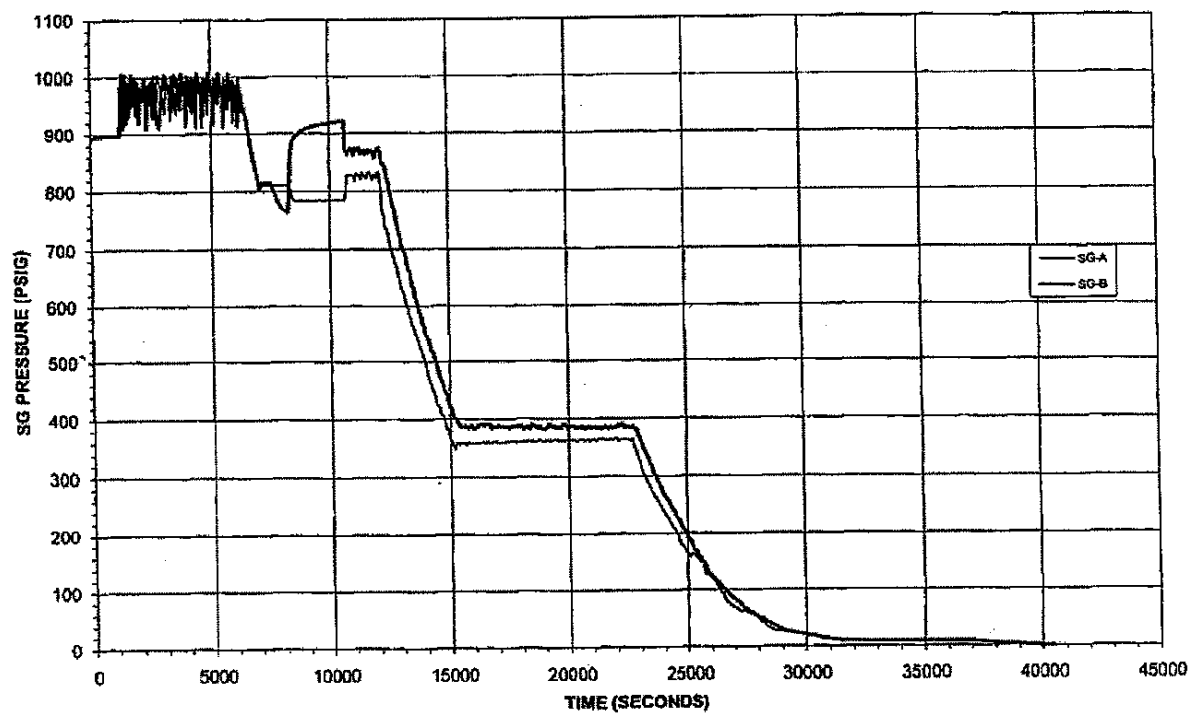
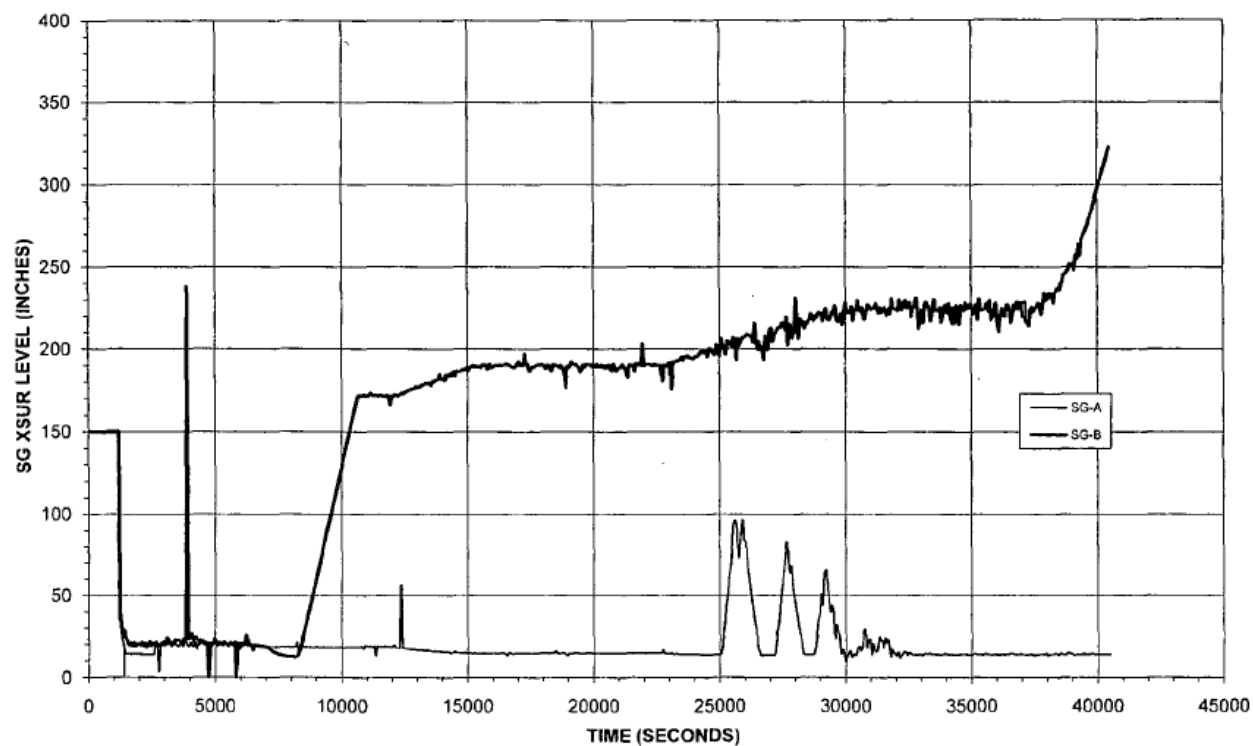


Figure 15-155. Steam Generator Tube Rupture - Steam Generator Level



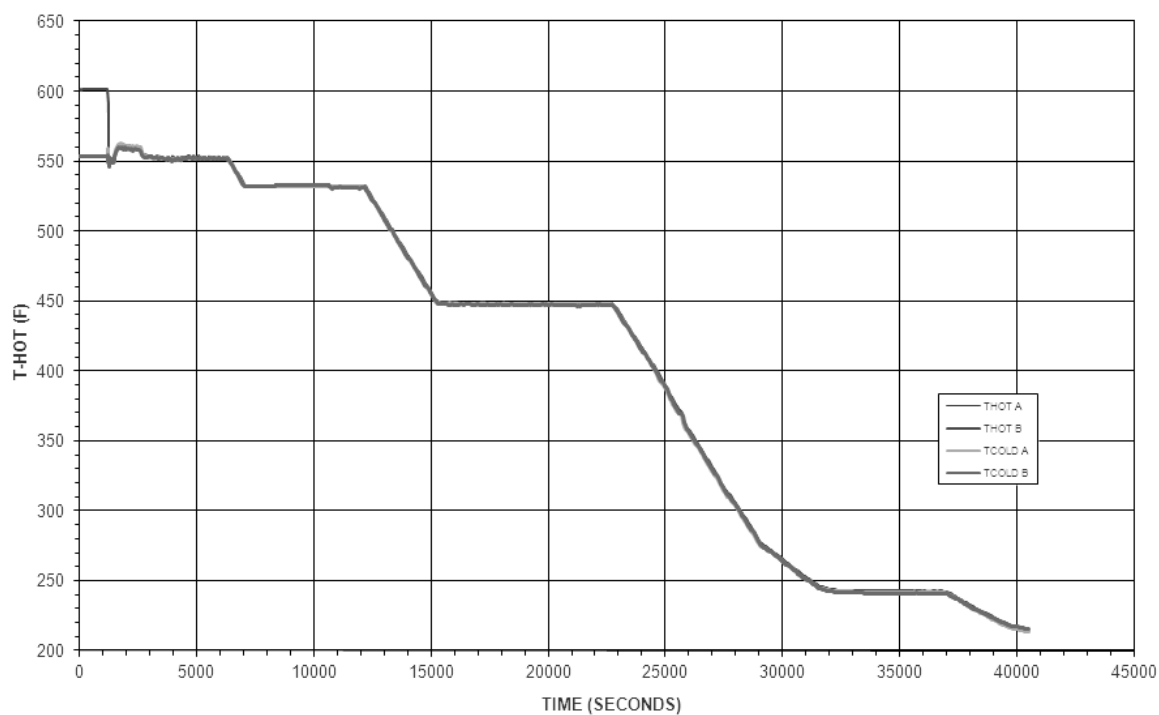
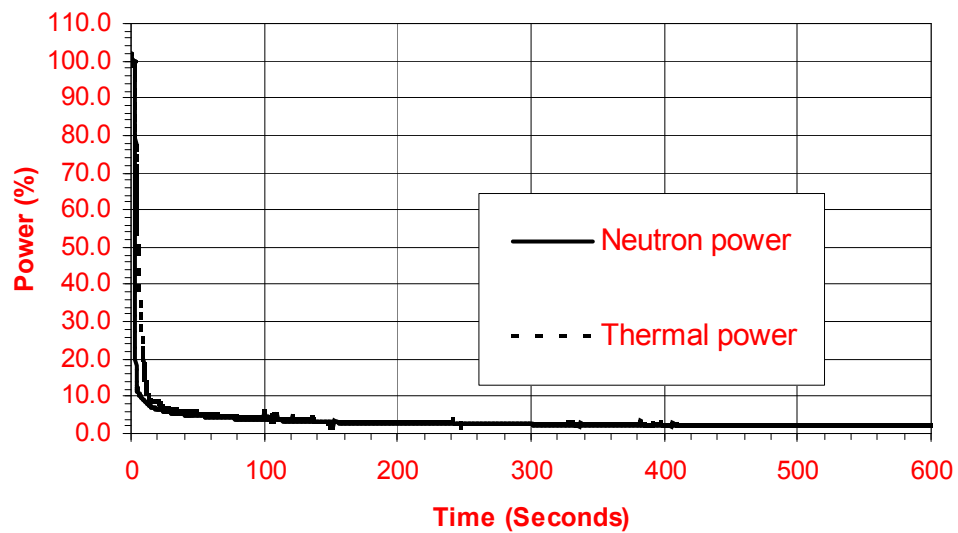
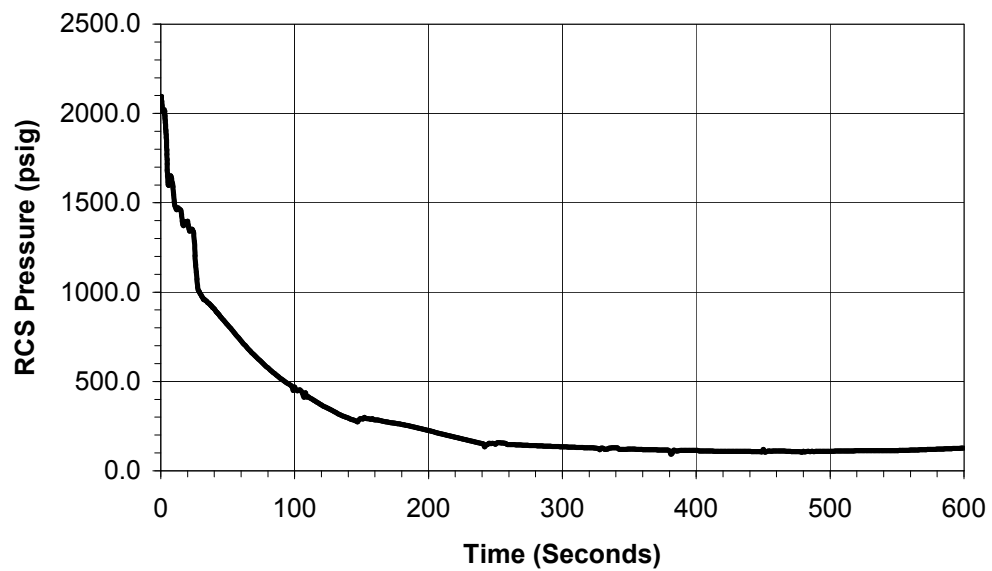
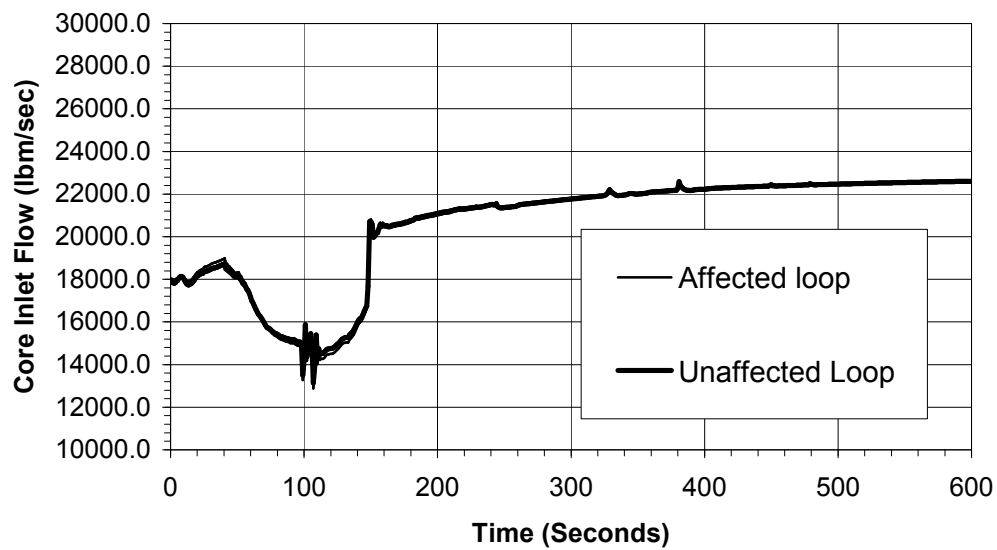
**Figure 15-156. Steam Generator Tube Rupture - RCS Temperatures**

Figure 15-157. Steam Line Break Accident - With Offsite Power - Power

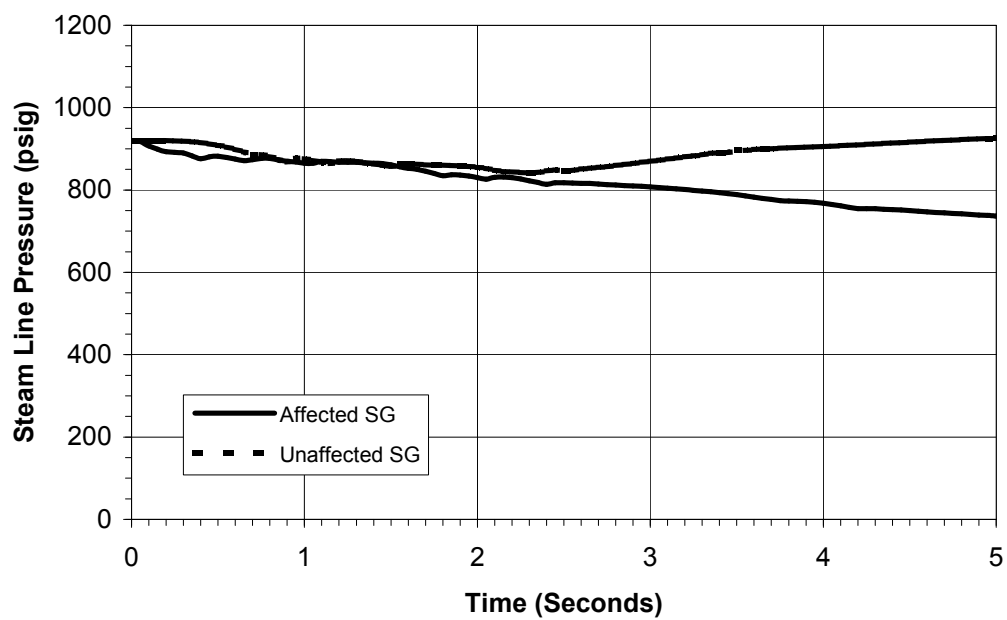


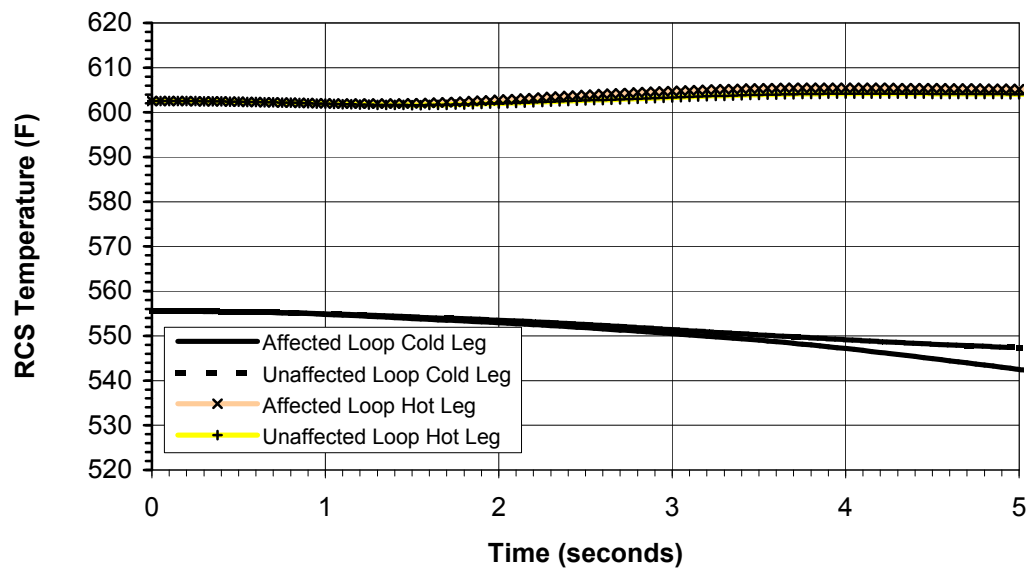
**Figure 15-158. Steam Line Break Accident - With Offsite Power - RCS Pressure**

**Figure 15-159. Steam Line Break Accident - With Offsite Power - Core Inlet Flow**

**Figure 15-160. Deleted Per 2003 Update**

**(31 DEC 2003)**

**Figure 15-161. Steam Line Break Accident - Without Offsite Power - Steam Line Pressure**

**Figure 15-162. Steam Line Break Accident - Without Offsite Power - RCS Temperatures**

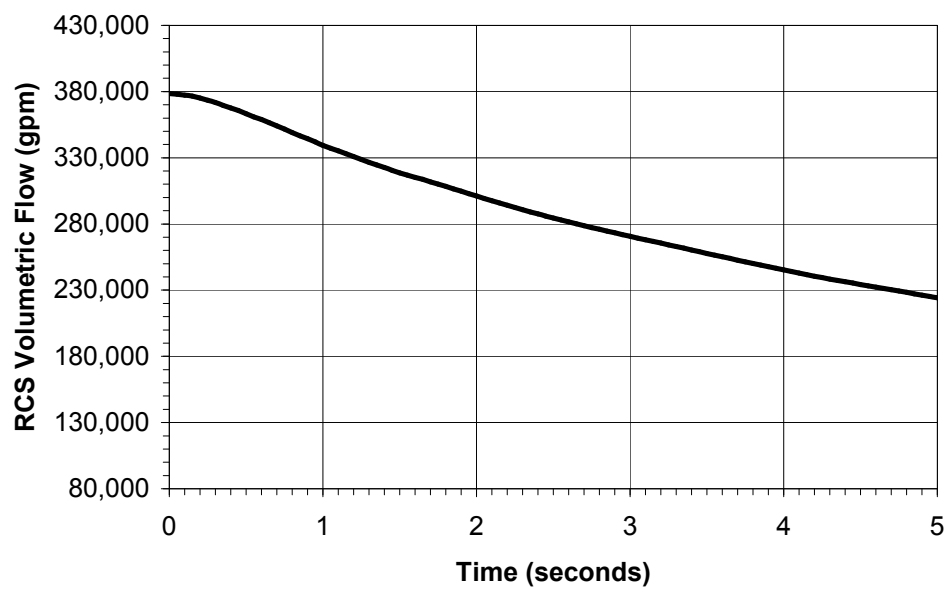
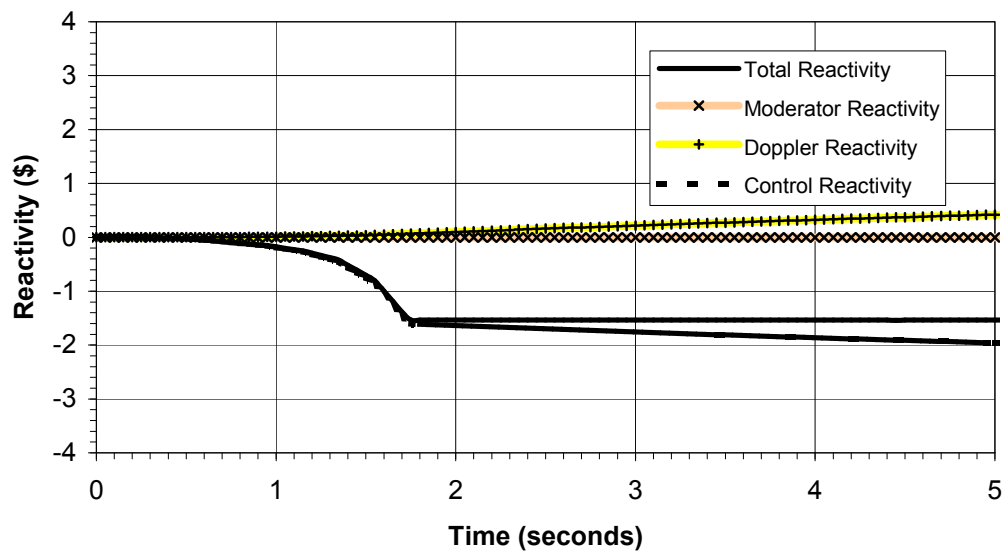
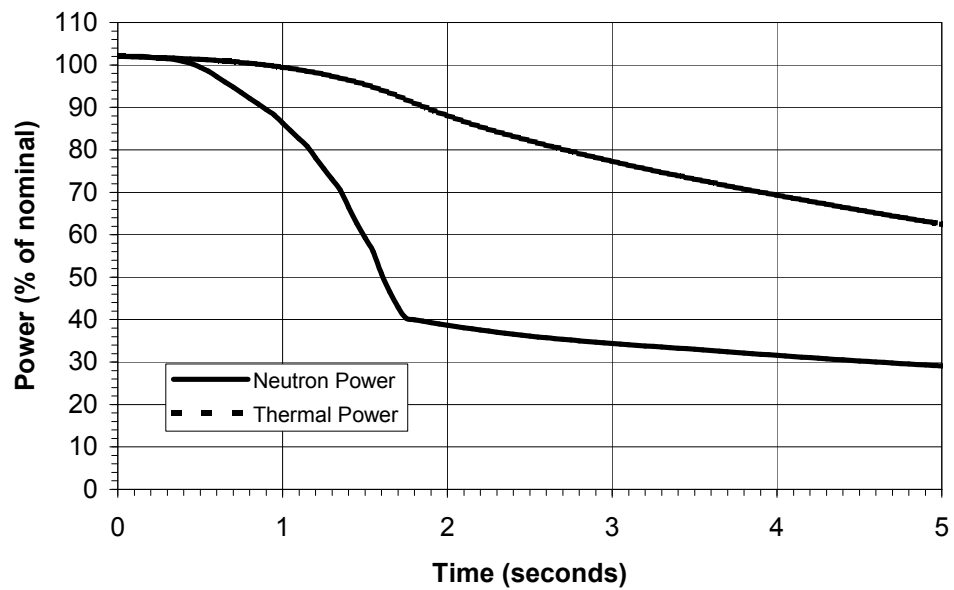
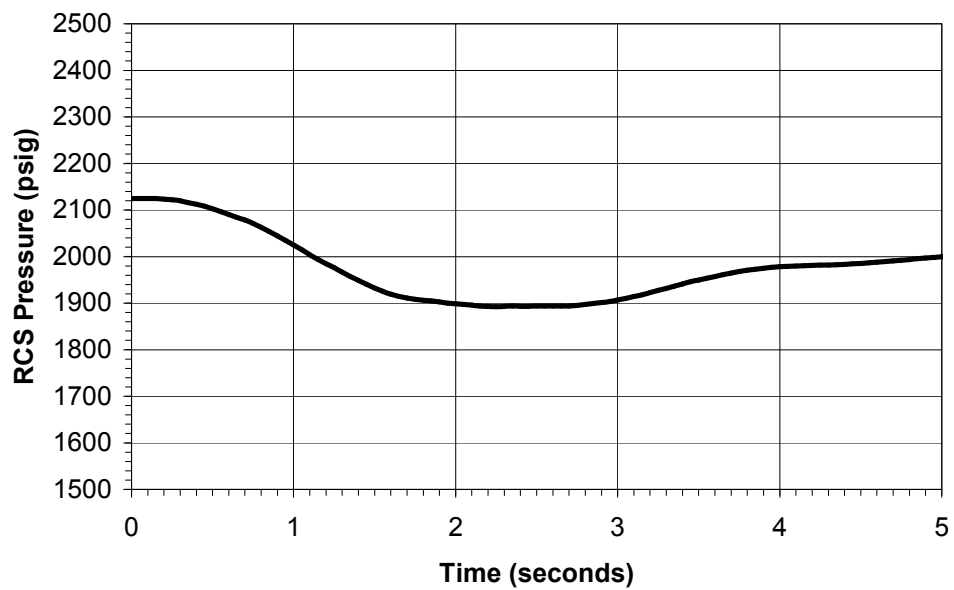
**Figure 15-163. Steam Line Break Accident - Without Offsite Power - RCS Flow**

Figure 15-164. Steam Line Break Accident - Without Offsite Power - Reactivity



**Figure 15-165. Steam Line Break Accident - Without Offsite Power – Power**

**Figure 15-166. Steam Line Break Accident - Without Offsite Power - RCS Pressure**

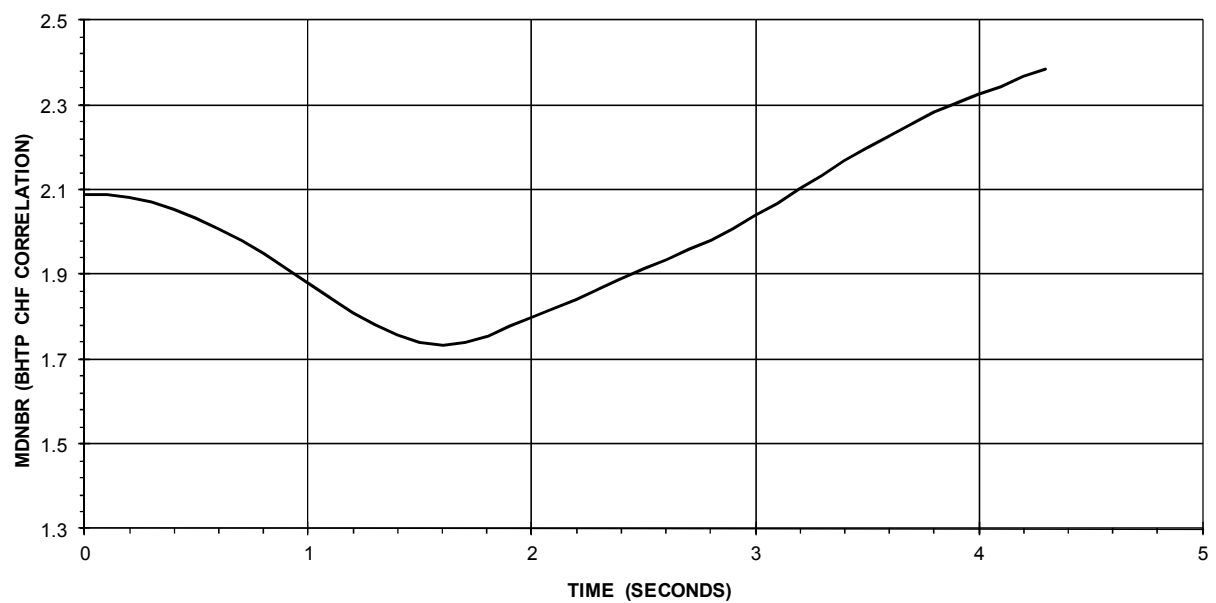
**Figure 15-167. Steam Line Break Accident - Without Offsite Power - DNBR**

Figure 15-168. Small Steam Line Break - Steam Mass Flows

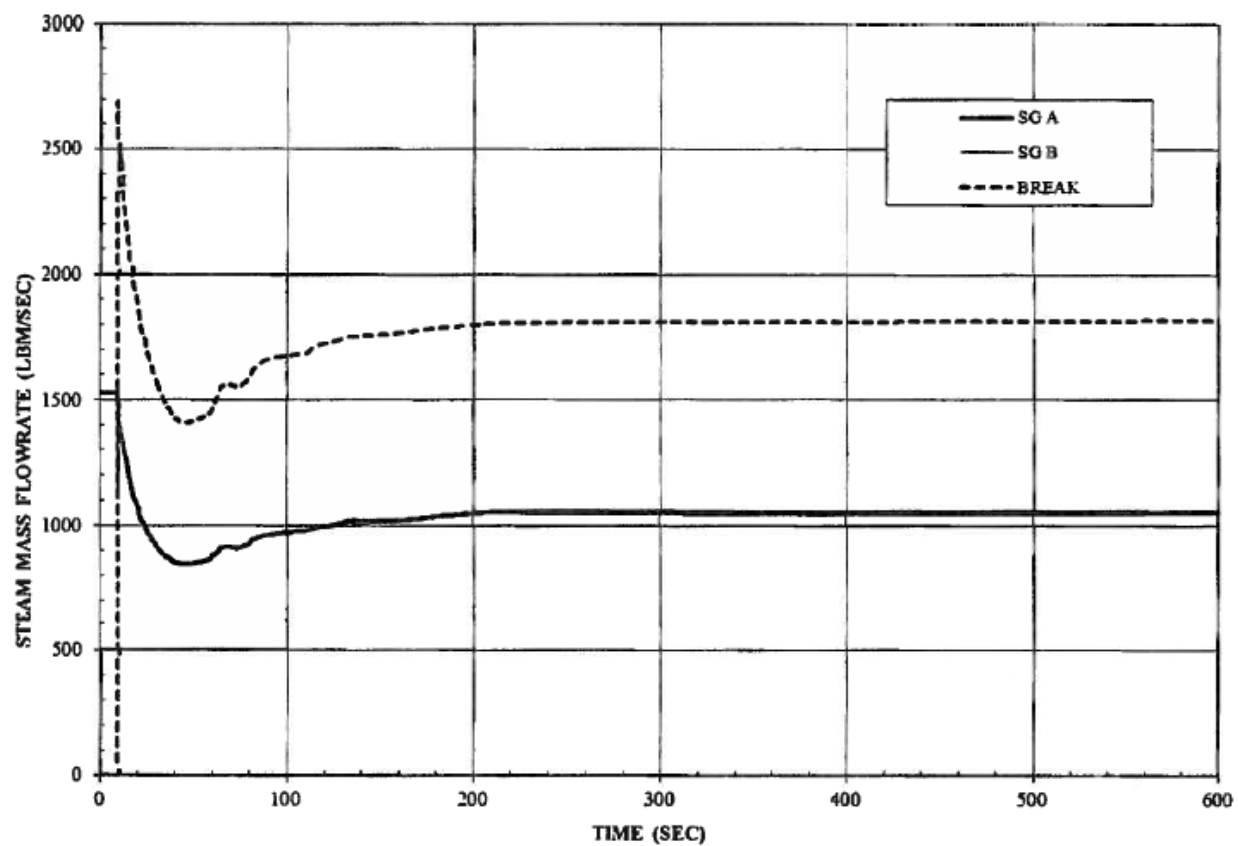


Figure 15-169. Small Steam Line Break - Steam Line Pressures

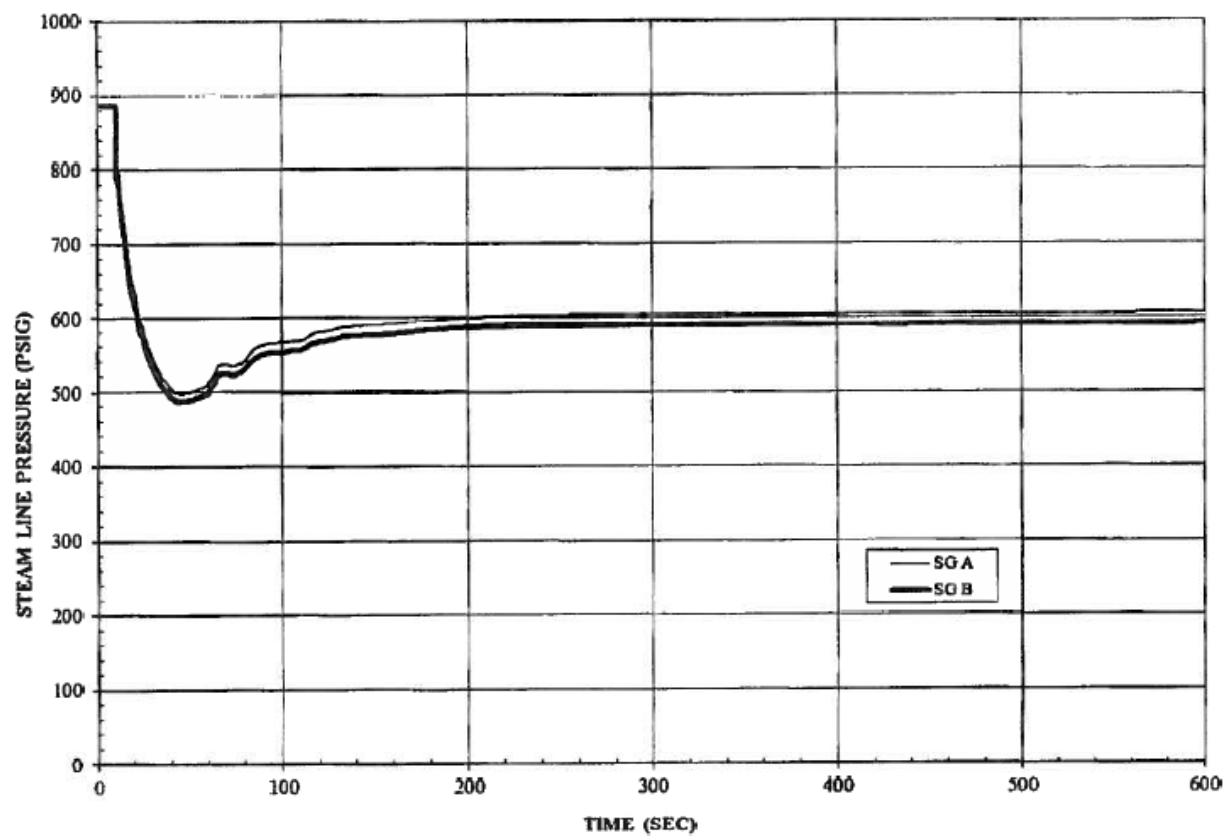


Figure 15-170. Small Steam Line Break - Main Feedwater Mass Flows

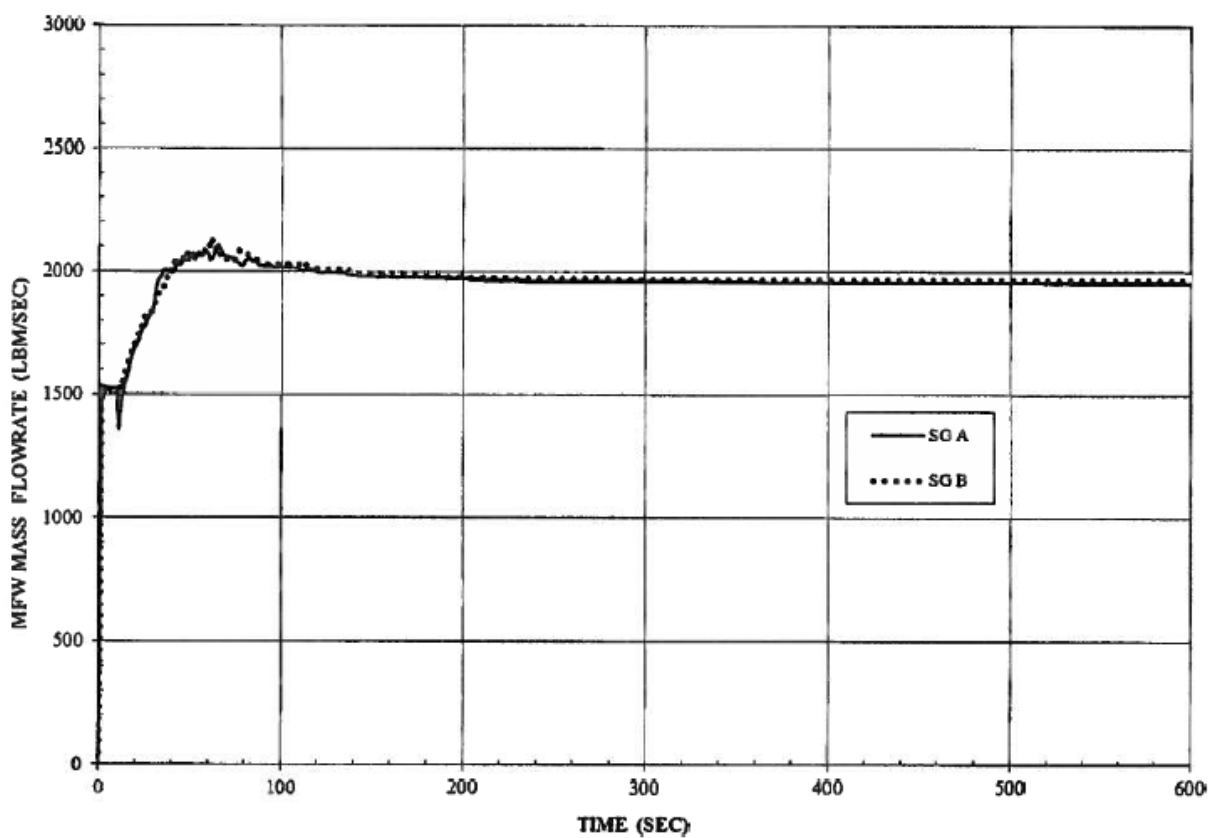


Figure 15-171. Small Steam Line Break – RCS Temperatures

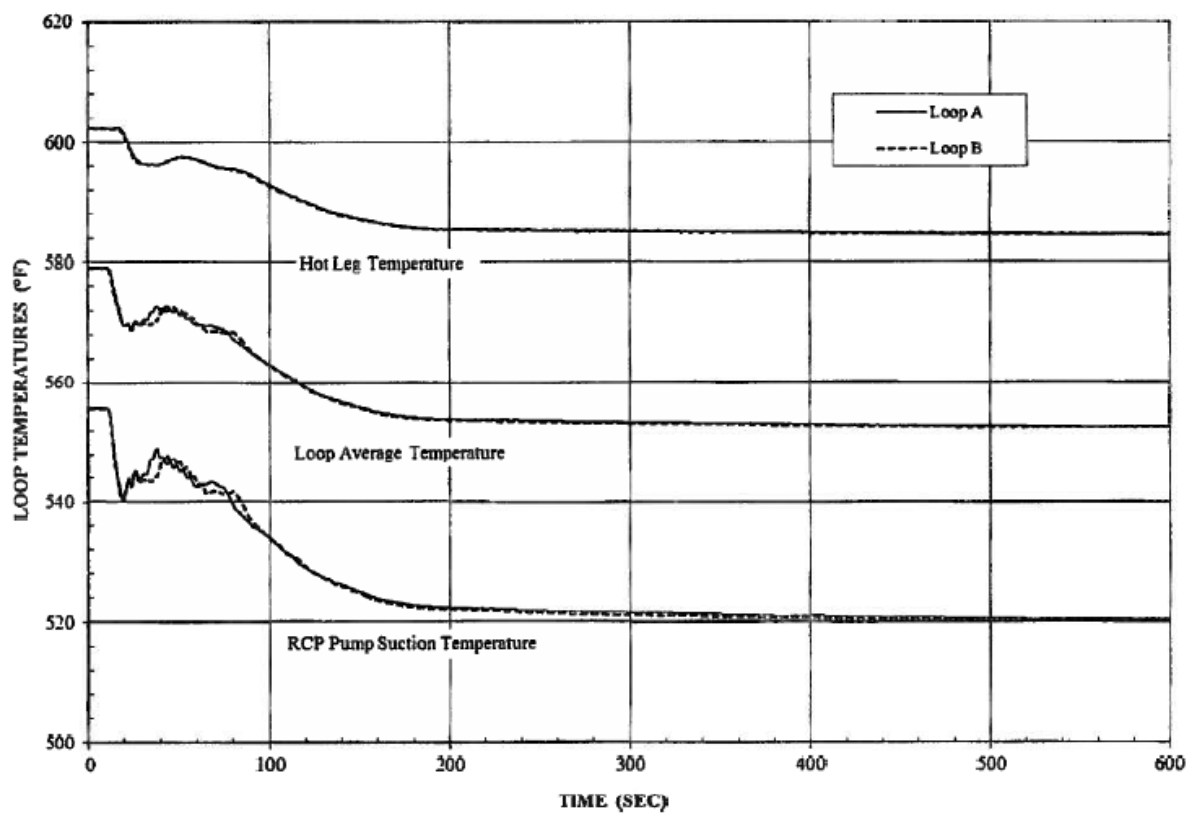


Figure 15-172. Small Steam Line Break – Core Average Power

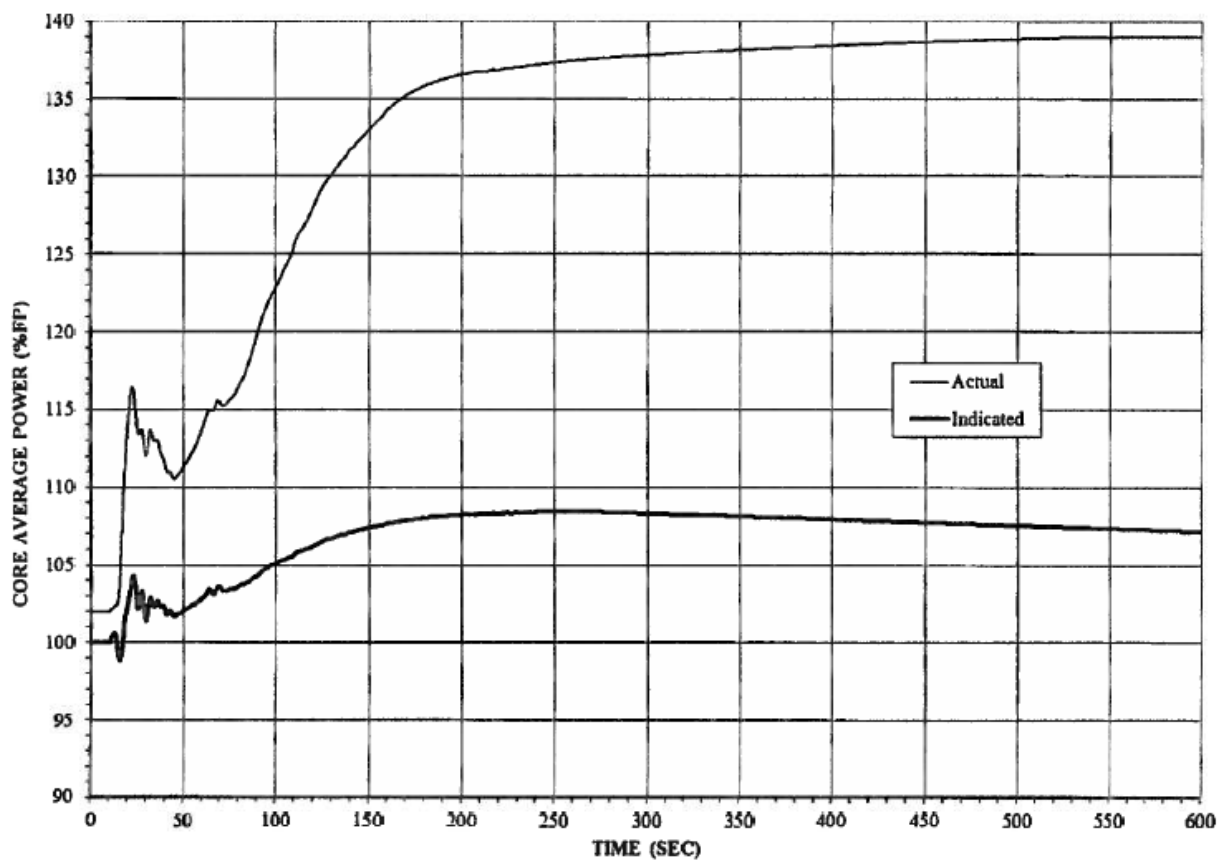
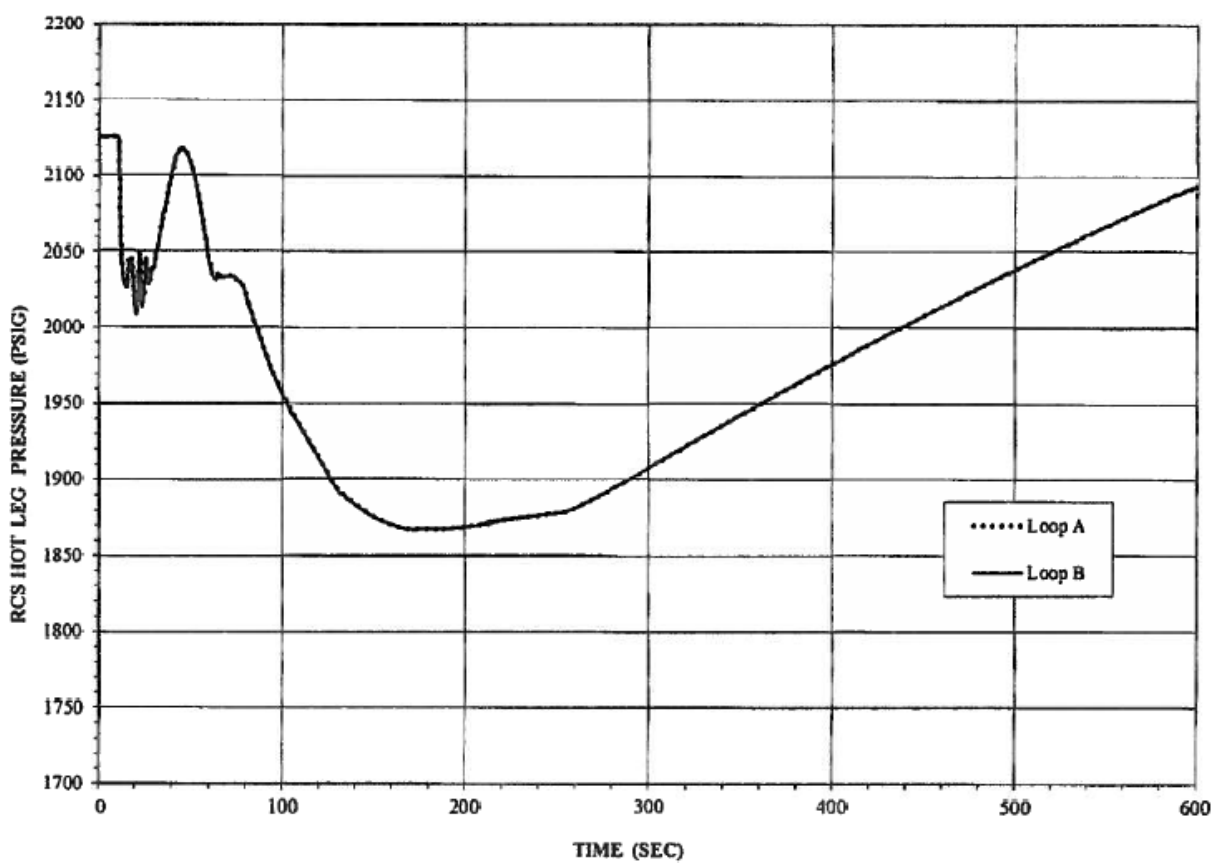
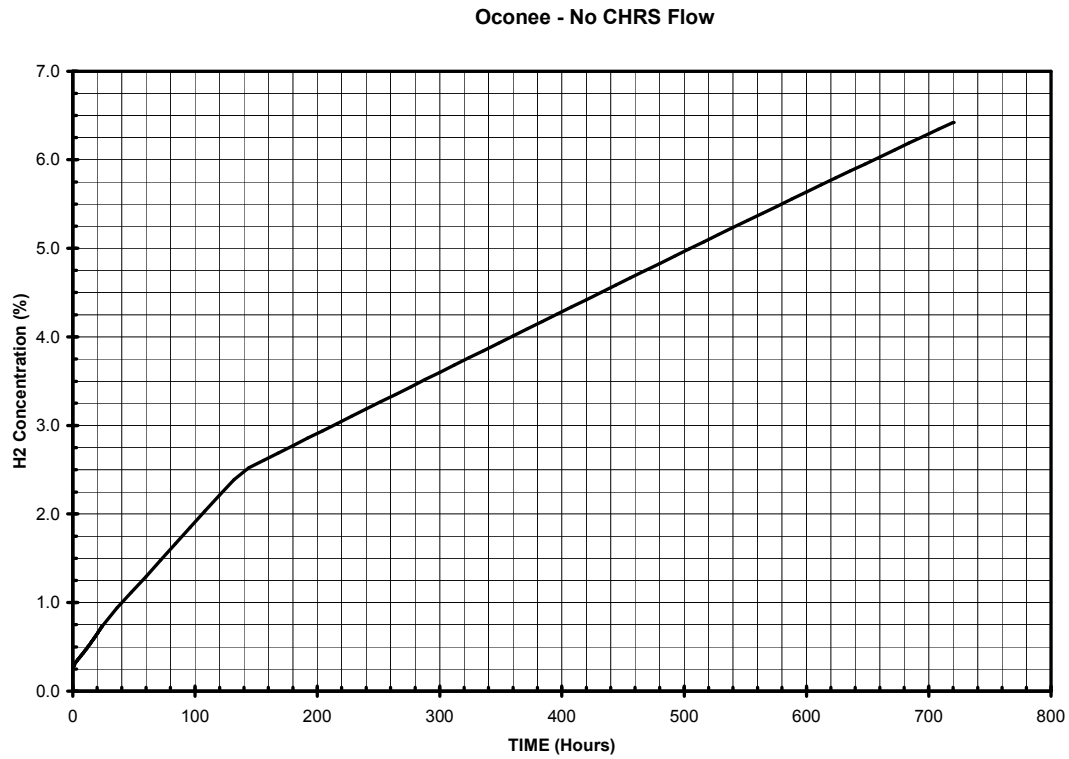


Figure 15-173. Small Steam Line Break - RCS Hot Leg Pressure



**Figure 15-174. Deleted Per 2014 Update**

**Figure 15-175. Oconee - No CHRS Flow**

**Figure 15-176. Deleted per 2001 Update**

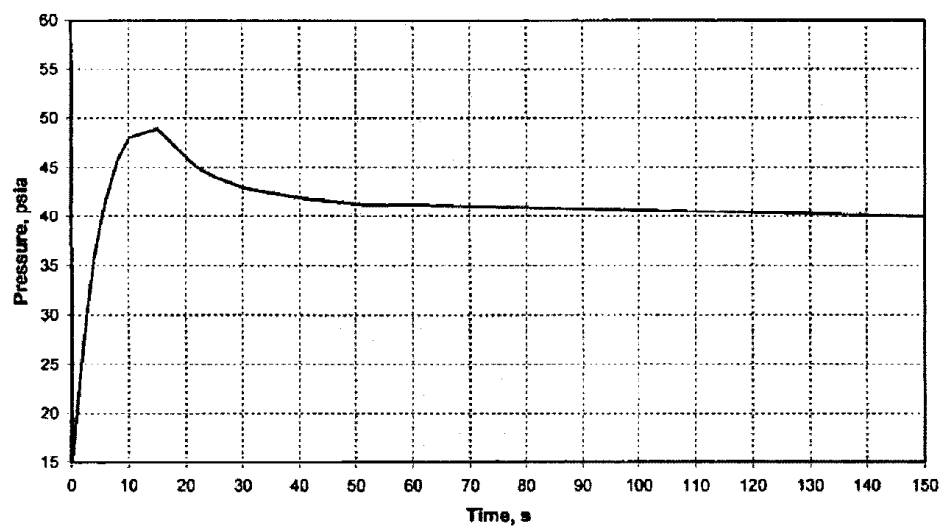
**Figure 15-177. Lower Bound Containment Pressure Used in Large Break LOCA**

Figure 15-178. Deleted Per 2014 Update

Figure 15-179. Deleted Per 2014 Update

Figure 15-180. Deleted Per 2014 Update

Figure 15-181. Deleted Per 2014 Update

Figure 15-182. Deleted Per 2014 Update

Figure 15-183. Deleted Per 2014 Update

Figure 15-184. Deleted Per 2014 Update

Figure 15-185. Deleted Per 2014 Update

Figure 15-186. Deleted Per 2014 Update

Figure 15-187. Deleted Per 2014 Update

Figure 15-188. Deleted Per 2014 Update

Figure 15-189. Deleted Per 2014 Update

Figure 15-190. Deleted Per 2014 Update

Figure 15-191. Deleted Per 2014 Update

Figure 15-192. Deleted Per 2014 Update

Figure 15-193. Deleted Per 2014 Update

Figure 15-194. Deleted Per 2014 Update

Figure 15-195. Deleted Per 2014 Update

Figure 15-196. Deleted Per 2014 Update

Figure 15-197. Deleted Per 2014 Update

Figure 15-198. Deleted Per 2014 Update

Figure 15-199. Deleted Per 2014 Update

Figure 15-200. Deleted Per 2014 Update

Figure 15-201. Deleted Per 2014 Update

Figure 15-202. Deleted Per 2014 Update

Figure 15-203. Deleted Per 2014 Update

Figure 15-204. Deleted Per 2014 Update

Figure 15-205. Deleted Per 2014 Update

Figure 15-206. Deleted Per 2014 Update

Figure 15-207. Deleted Per 2014 Update

Figure 15-208. Deleted Per 2014 Update

Figure 15-209. Deleted Per 2014 Update

Figure 15-210. Deleted Per 2014 Update

Figure 15-211. Deleted Per 2014 Update

Figure 15-212. Deleted Per 2014 Update

Figure 15-213. 52% of 2568 MWt, Full Core Mark-B-HTP SBLOCA Break Spectrum Analysis

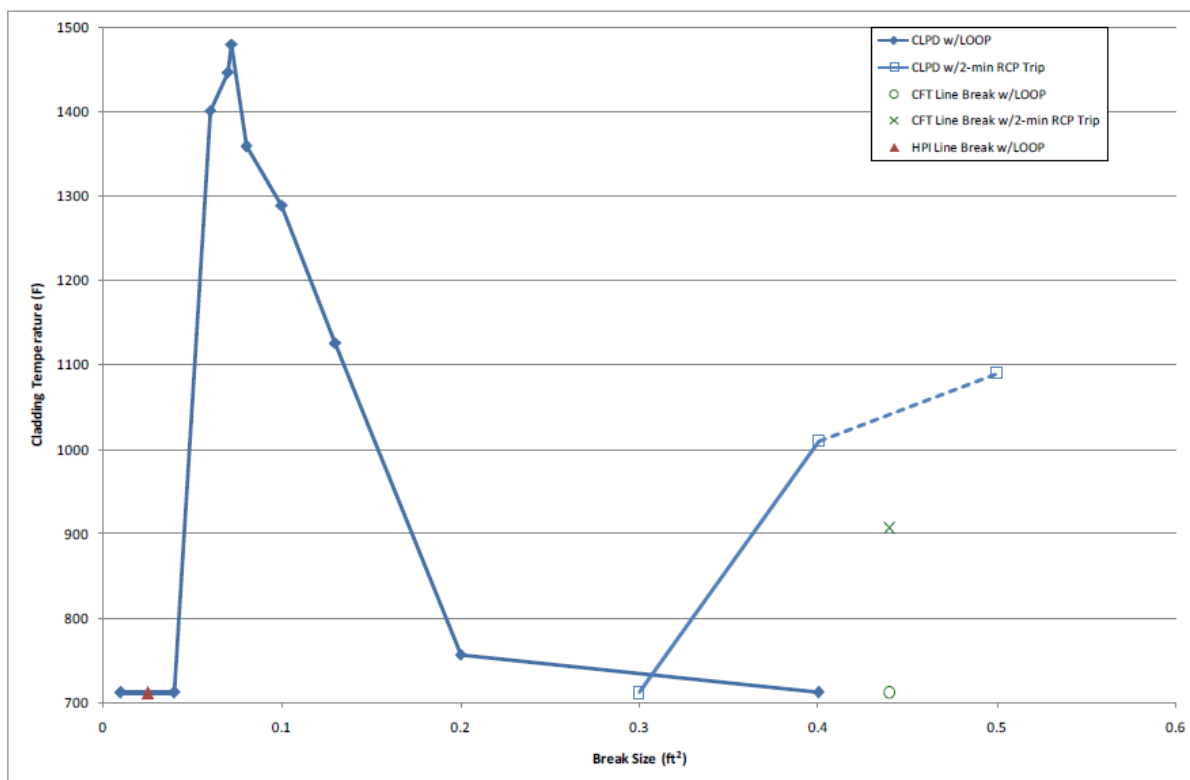
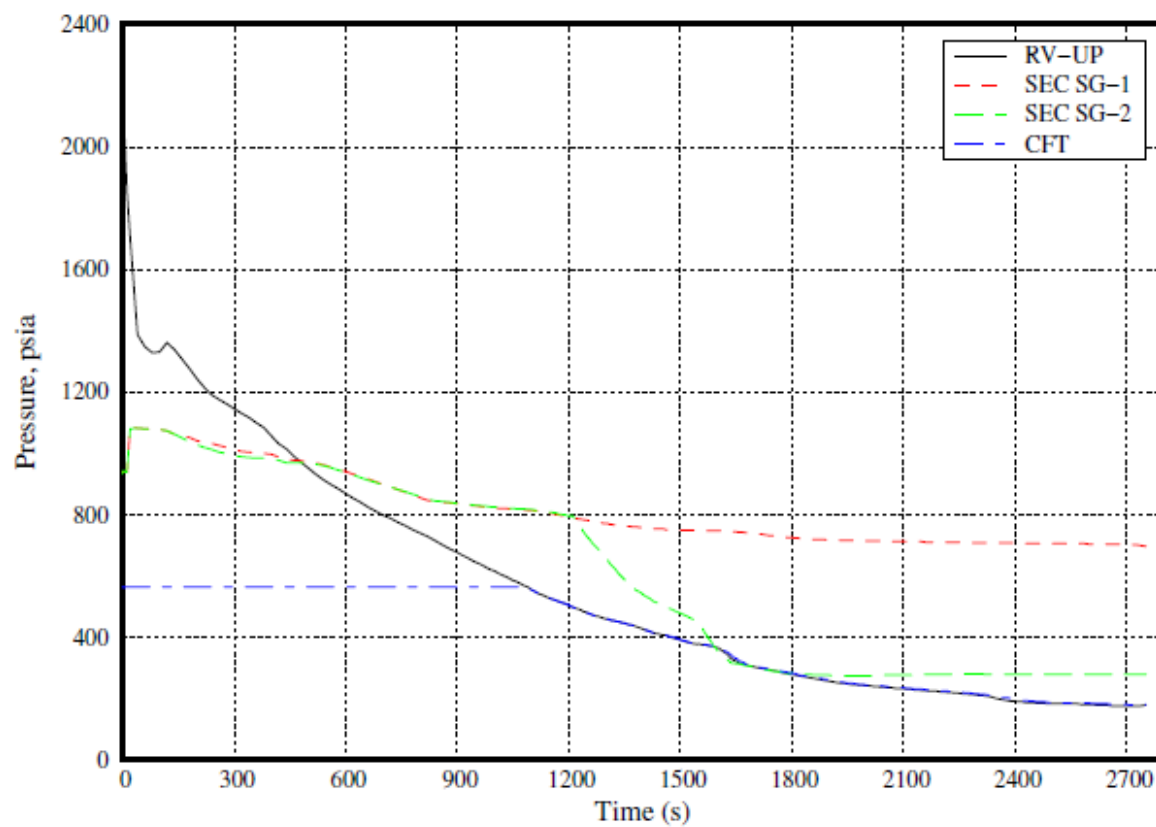


Figure 15-214. 0.072 ft<sup>2</sup> CLPD, 52% of 2568 MWt, Full-Core Mark-B-HTP SBLOCA - Pressure

**Figure 15-215. 0.072 ft<sup>2</sup> CLPD, 52% of 2568 MWt, Full Core Mark-B-HTP SBLOCA - Break and ECCS Mass Flow Rates**

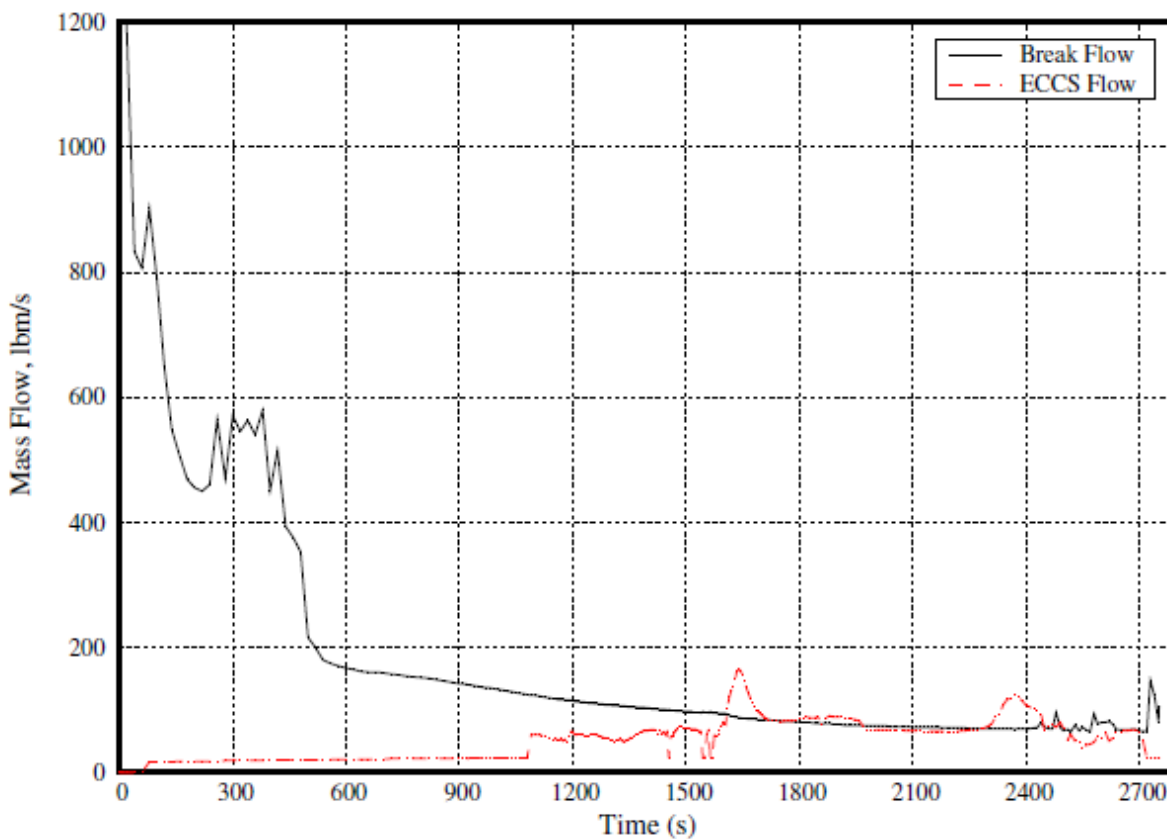
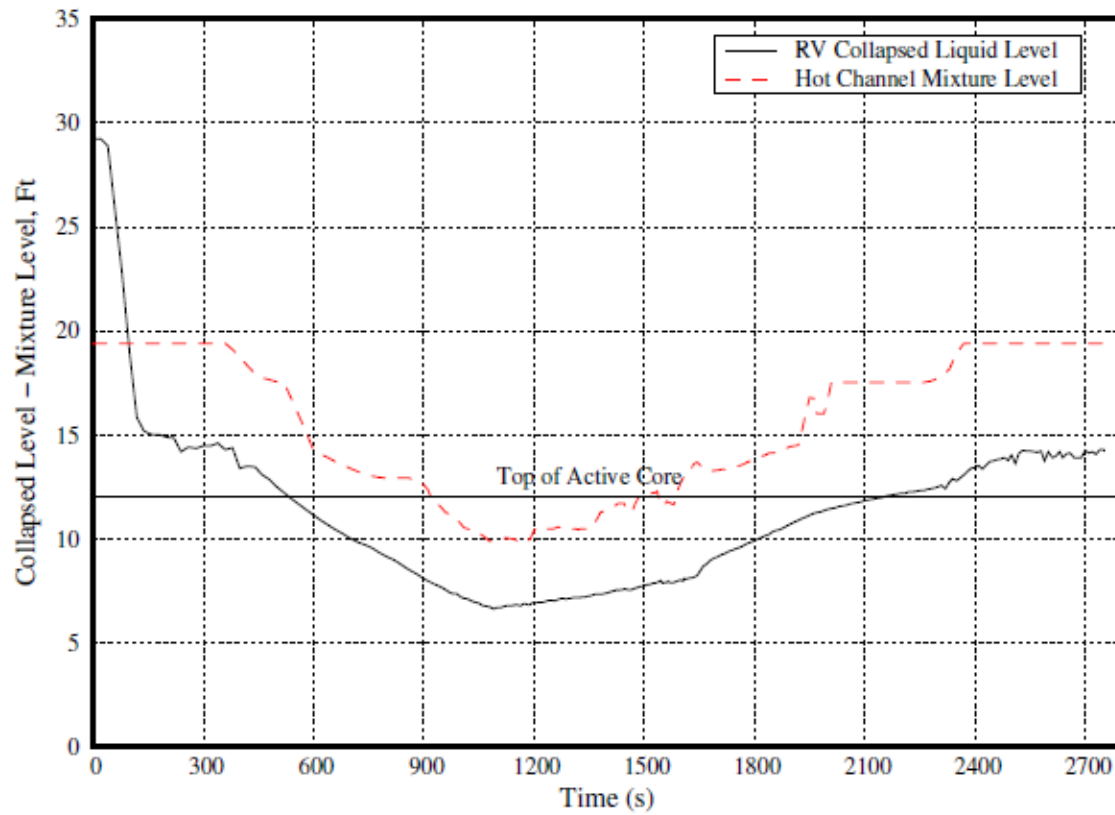
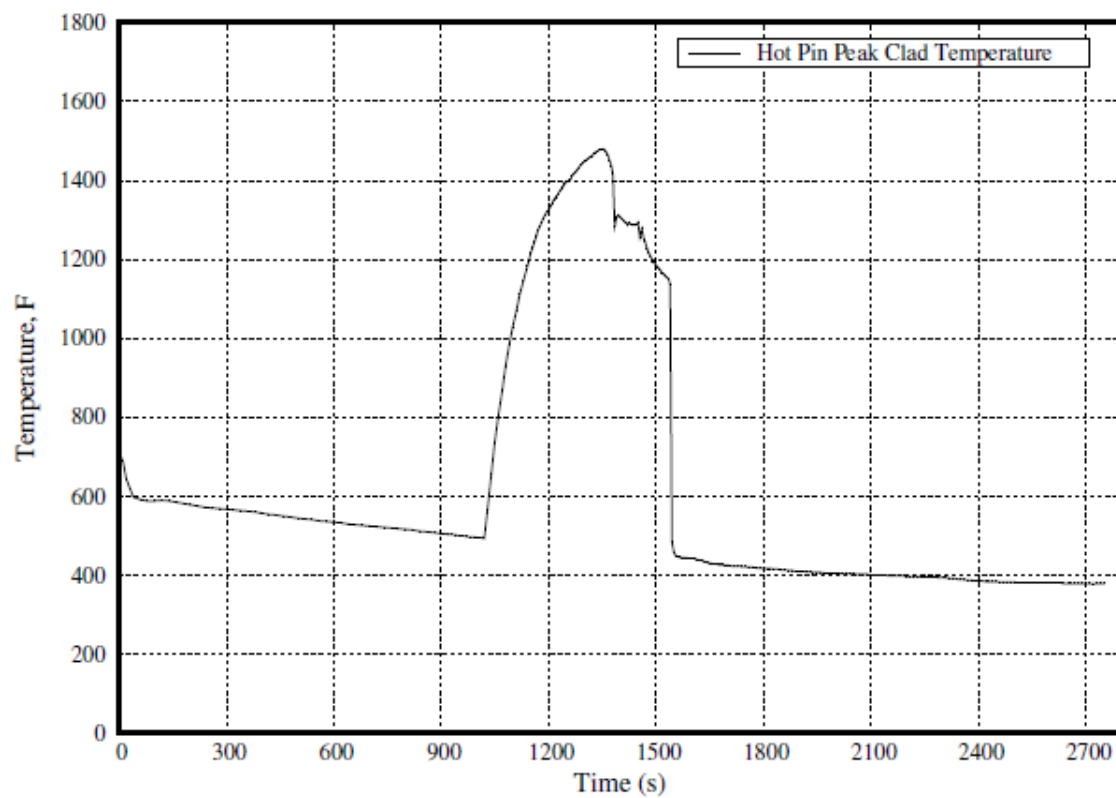


Figure 15-216. 0.072 ft<sup>2</sup> CLPD, 52% of 2568 MWt, Full Core Mark-B-HTP SBLOCA - RV Collapsed Liquid Level & Hot Channel Mixture Level



**Figure 15-217. 0.072 ft<sup>2</sup> CLPD, 52% of 2568 MWt, Full Core Mark-B-HTP SBLOCA - Peak Cladding Temperature**



**Figure 15-218. 0.072 ft<sup>2</sup> CLPD, 52% of 2568 MWt, Full Core Mark-B-HTP SBLOCA - Hot Channel Vapor Temperature at Core Exit**

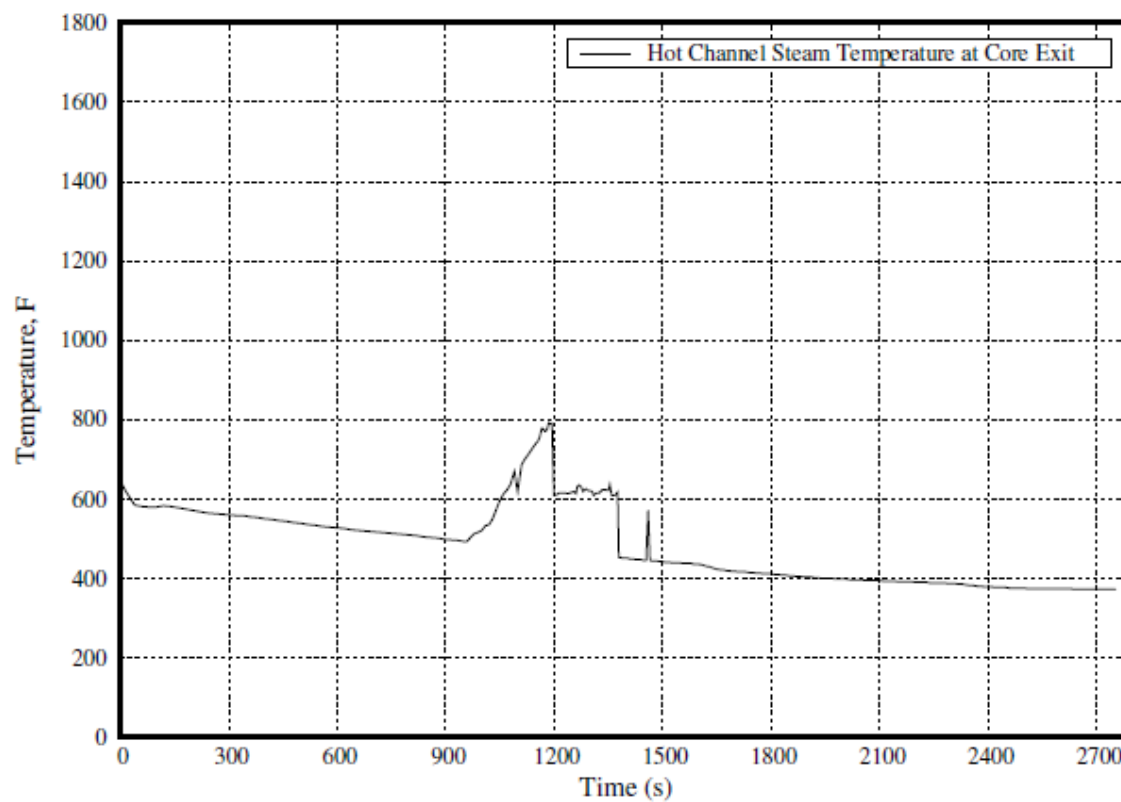
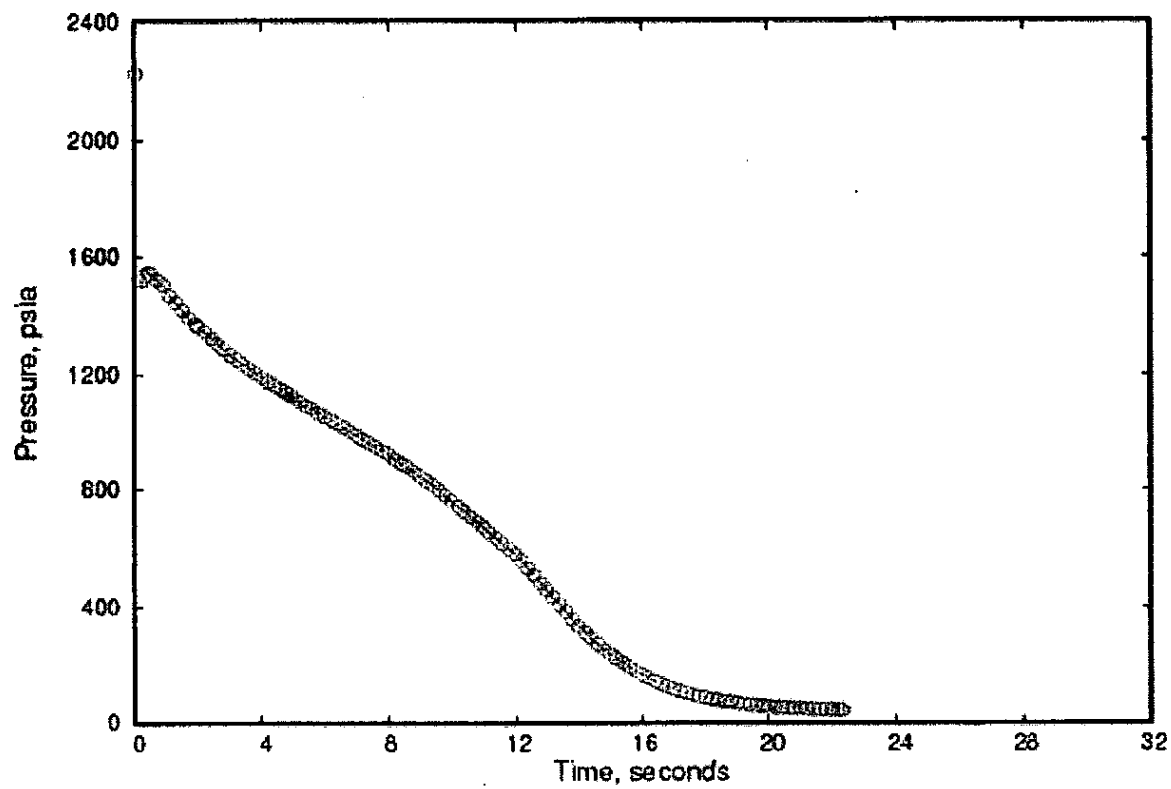


Figure 15-219. Mark-B-HTP Full-Core BOL LBLOCA – Reactor Vessel Upper Plenum Pressure



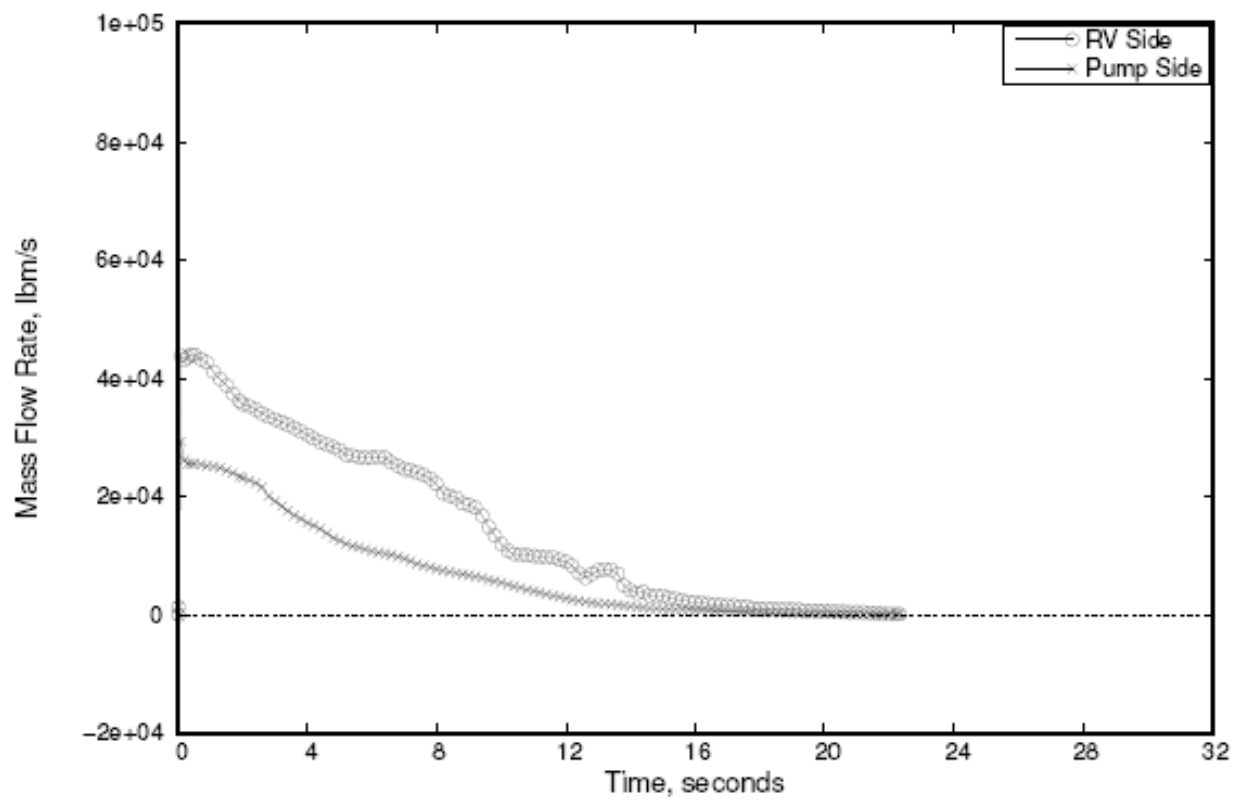
**Figure 15-220. Mark-B-HTP Full-Core BOL LBLOCA – Break Mass Flow Rates**

Figure 15-221. Mark-B-HTP Full-Core BOL LBLOCA – Hot Channel Mass Flow Rates

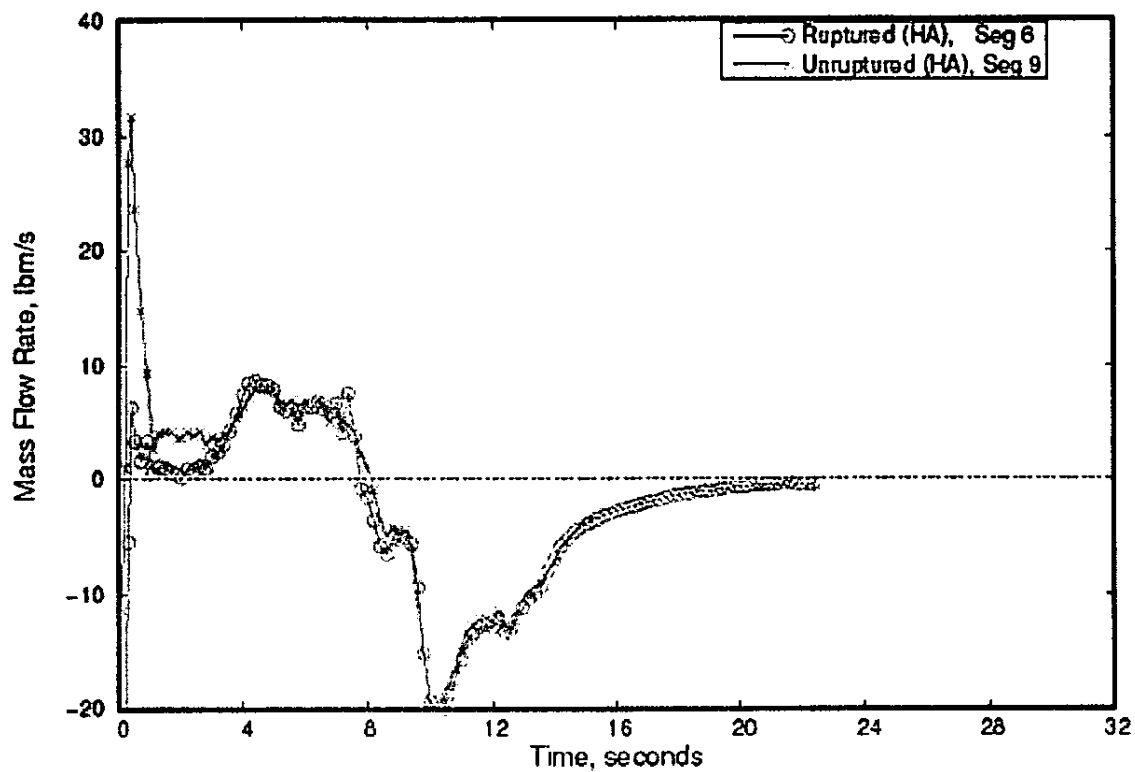


Figure 15-222. Mark-B-HTP Full-Core BOL LBLOCA – Core Flooding Rates

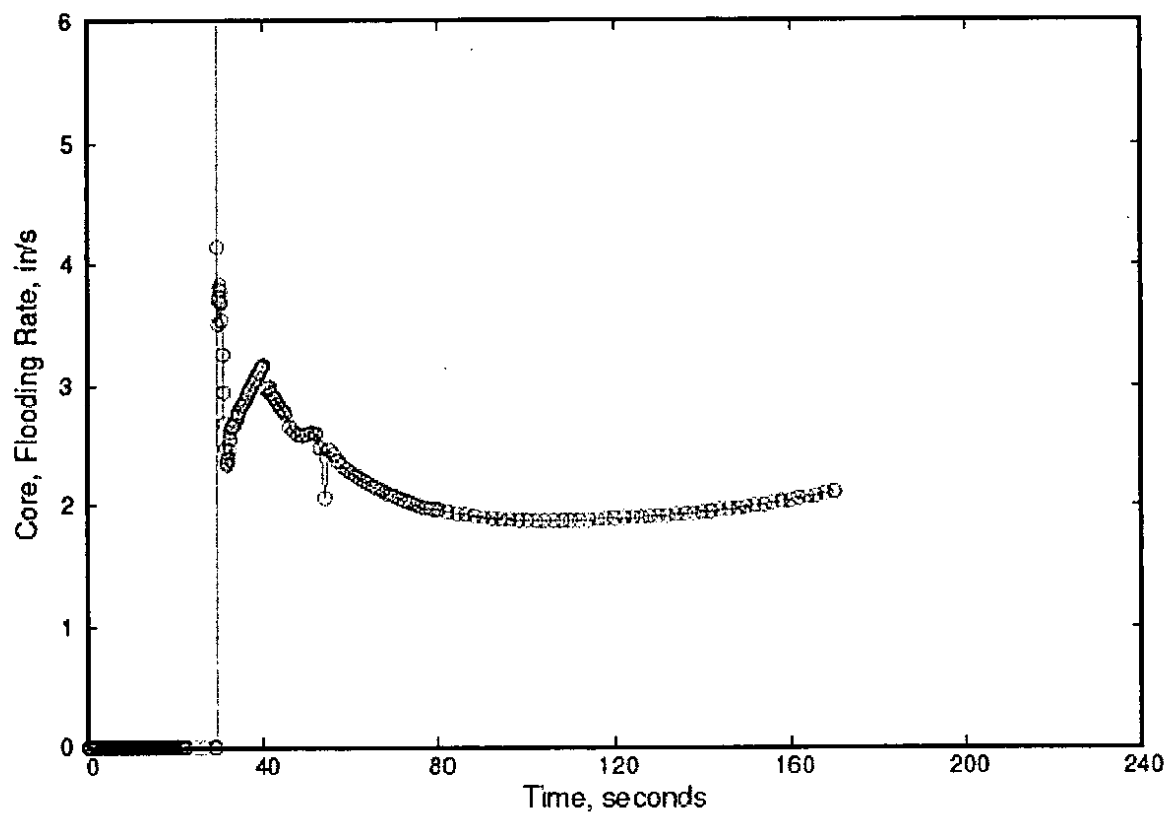
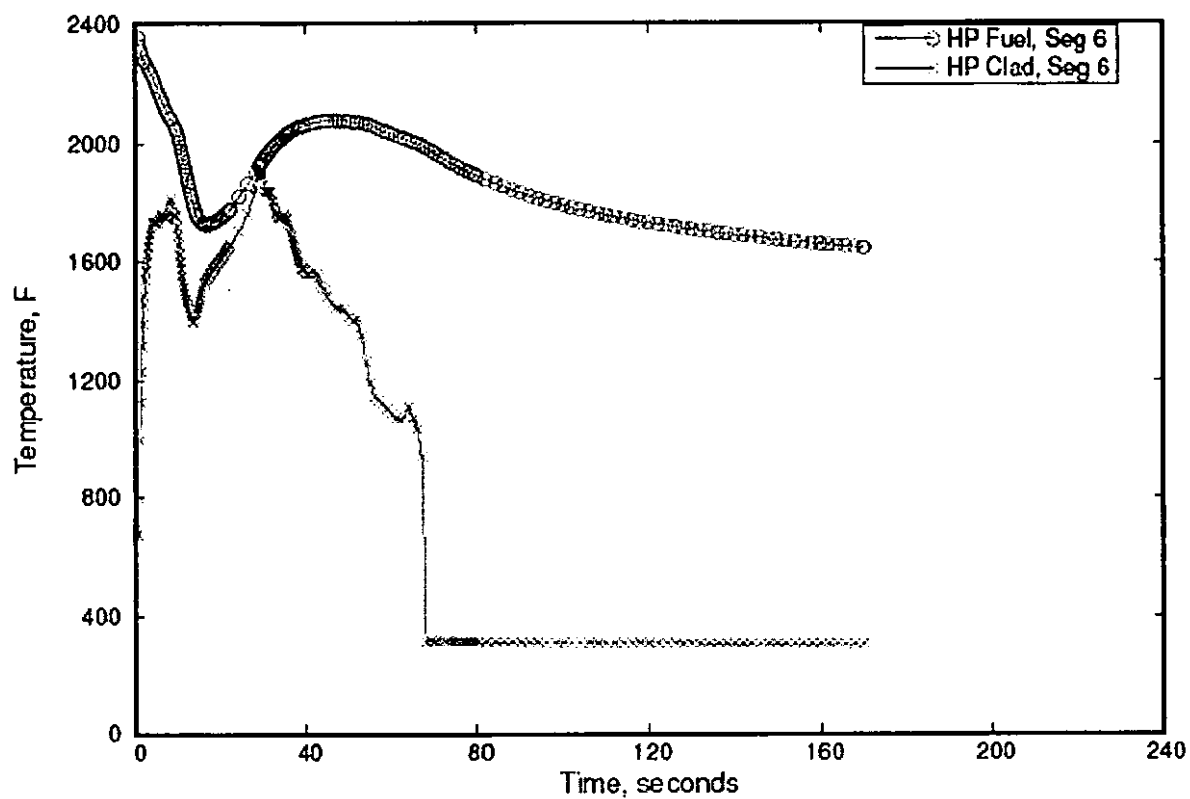
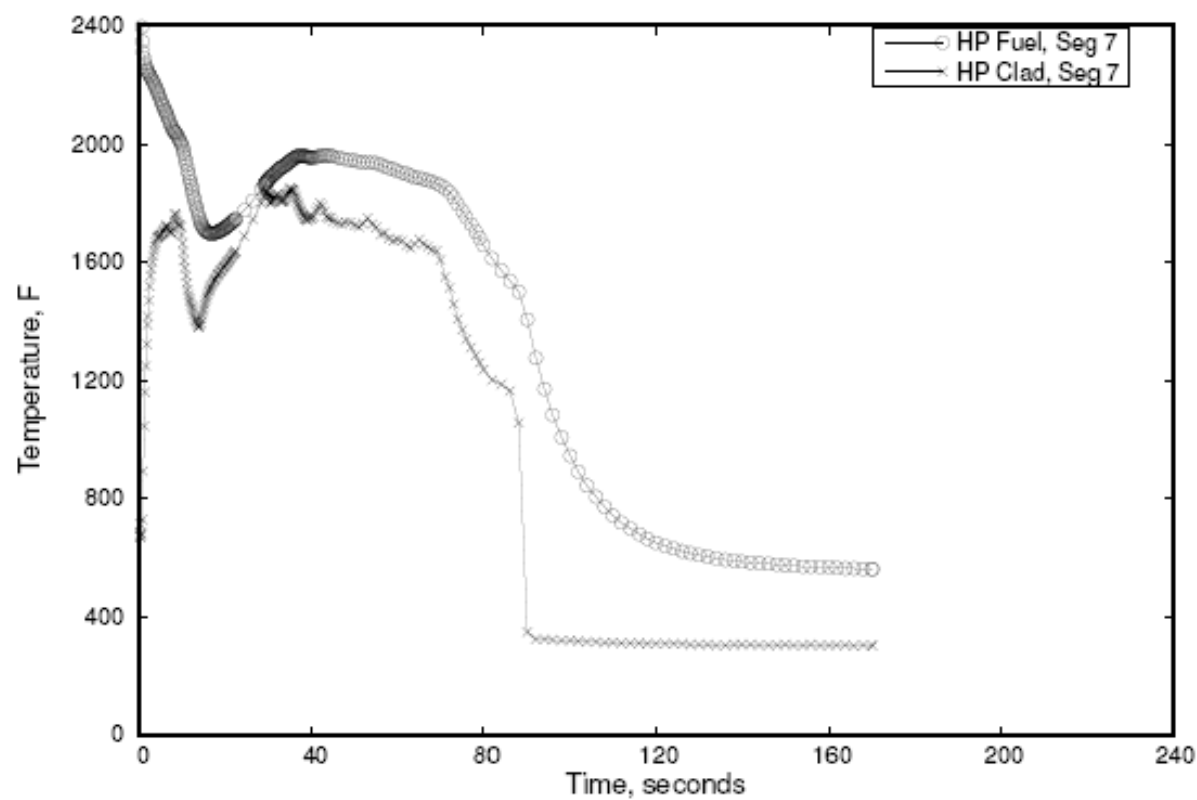


Figure 15-223. Mark-B-HTP Full-Core BOL LBLOCA – Hot Pin Fuel & Clad Temperatures at Ruptured Location



**Figure 15-224. Mark-B-HTP Full-Core BOL LBLOCA – Hot Pin Fuel & Clad Temperatures at Unruptured Location**



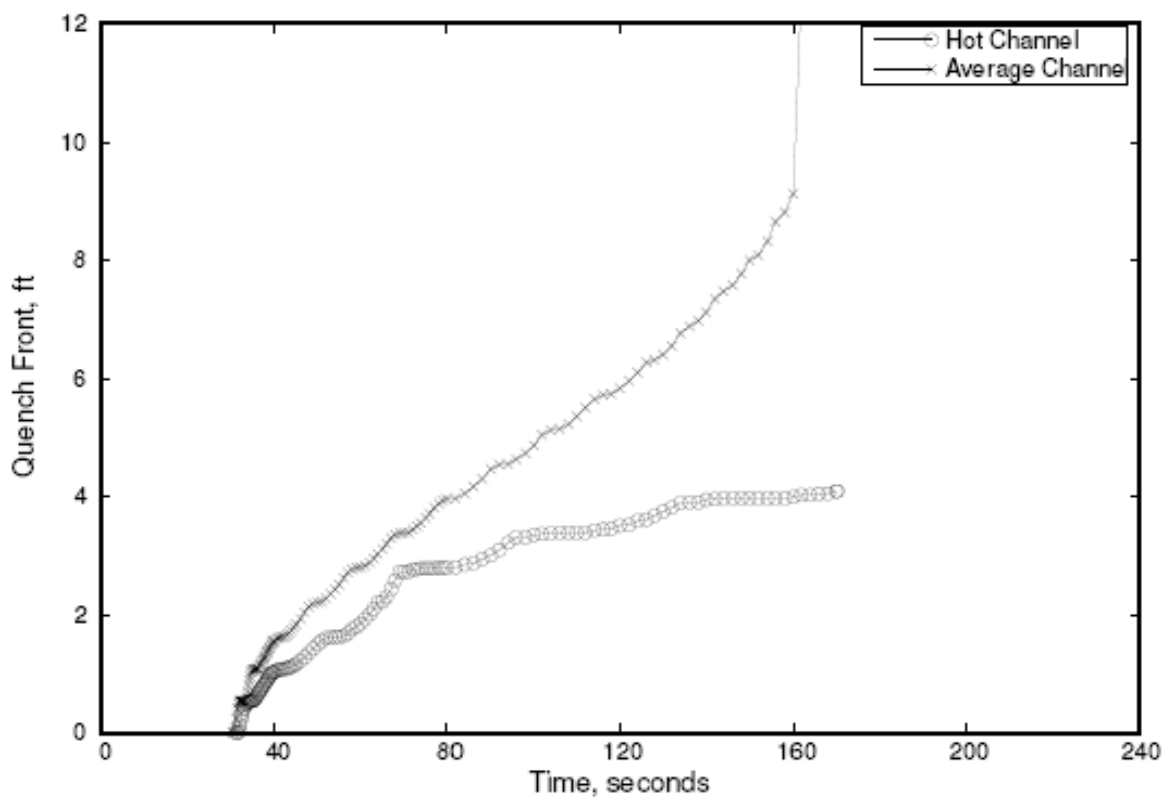
**Figure 15-225. Mark-B-HTP Full-Core BOL LBLOCA – Quench Front Advancement**

Figure 15-226. Mark-B-HTP Full-Core BOL LBLOCA – Hot Pin Heat Transfer Coefficients

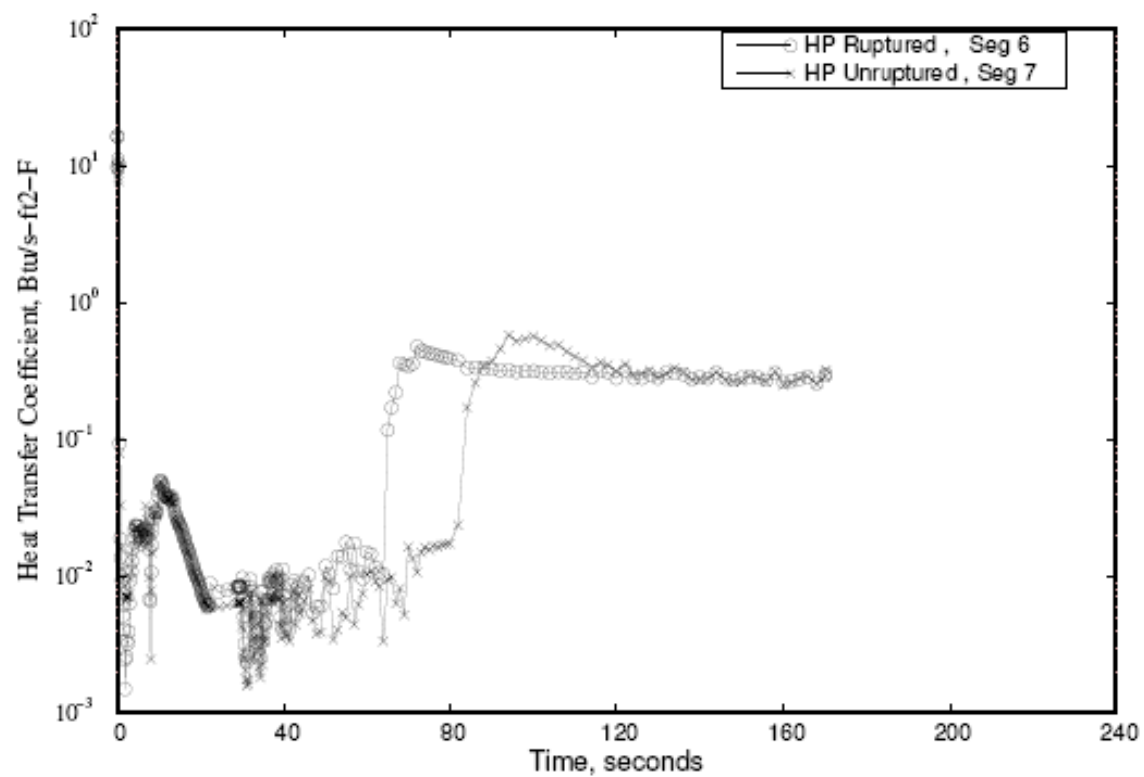


Figure 15-227. 102% of 2568 MWt, Full Core Mark-B-HTP SBLOCA Break Spectrum Analysis

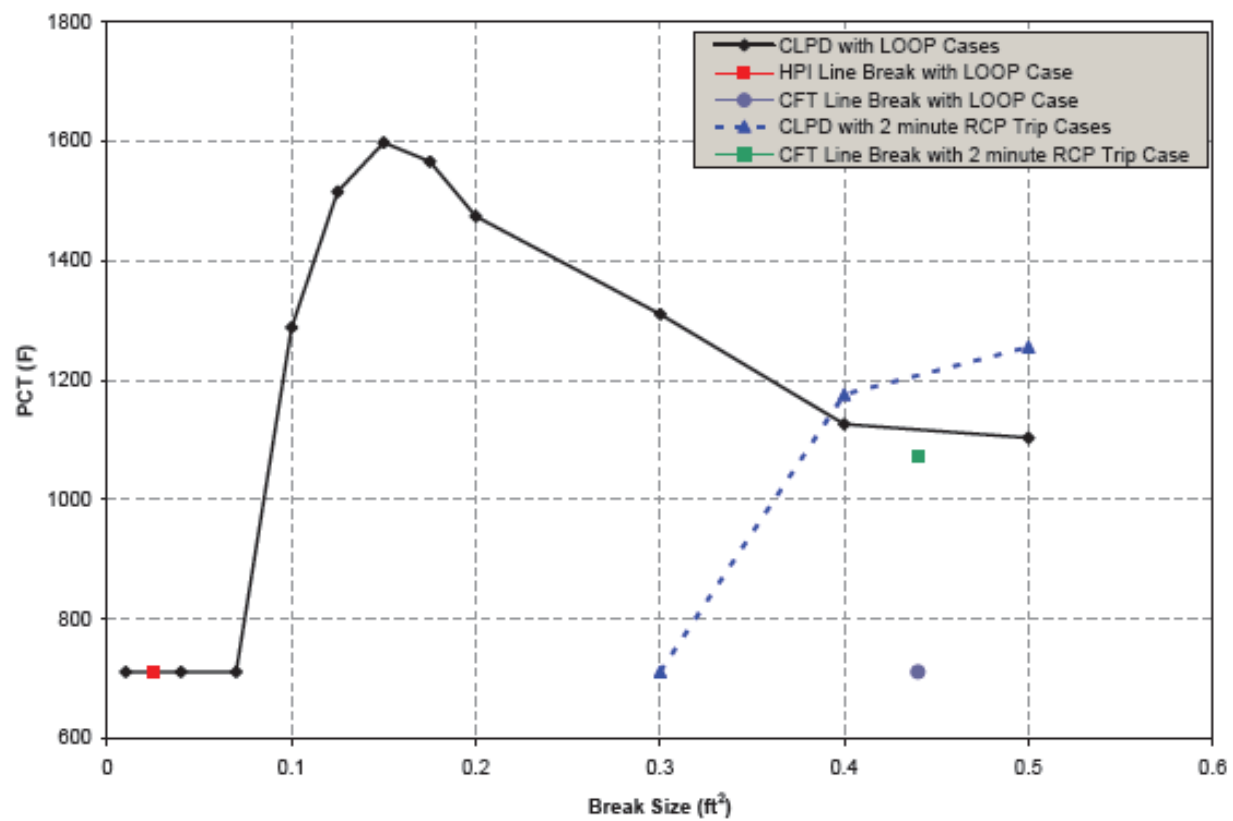
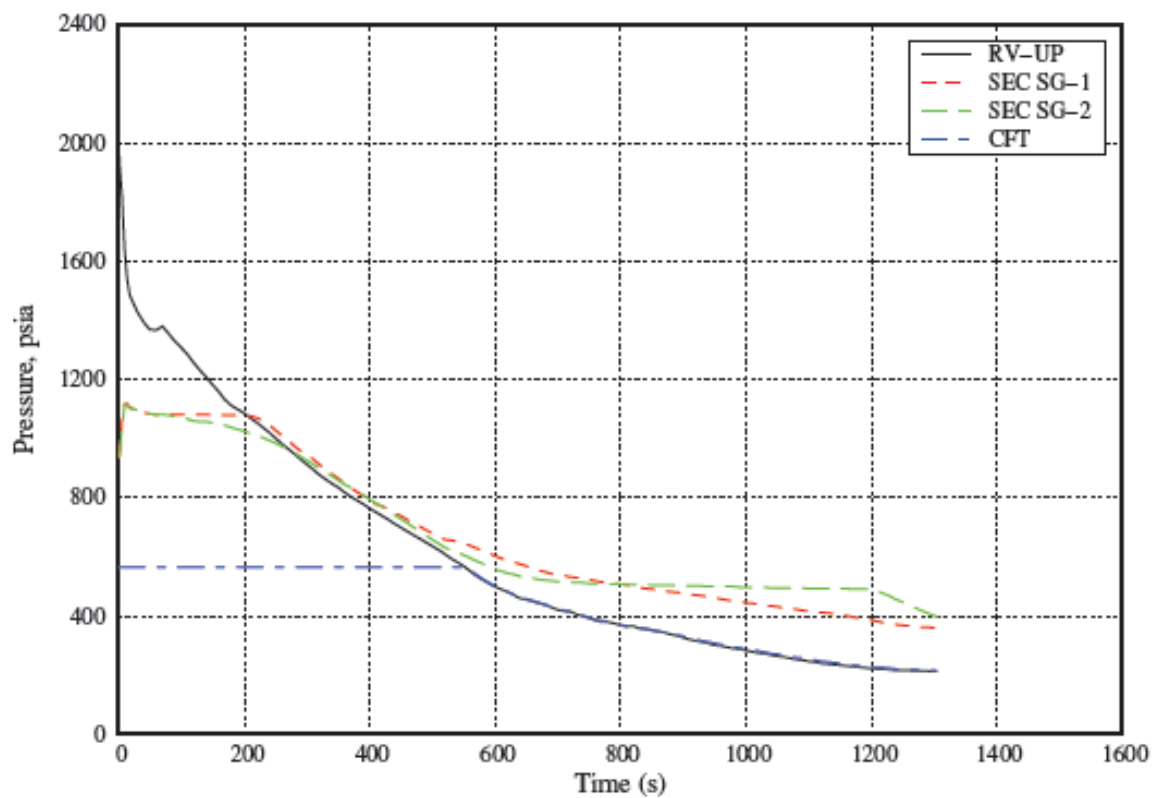
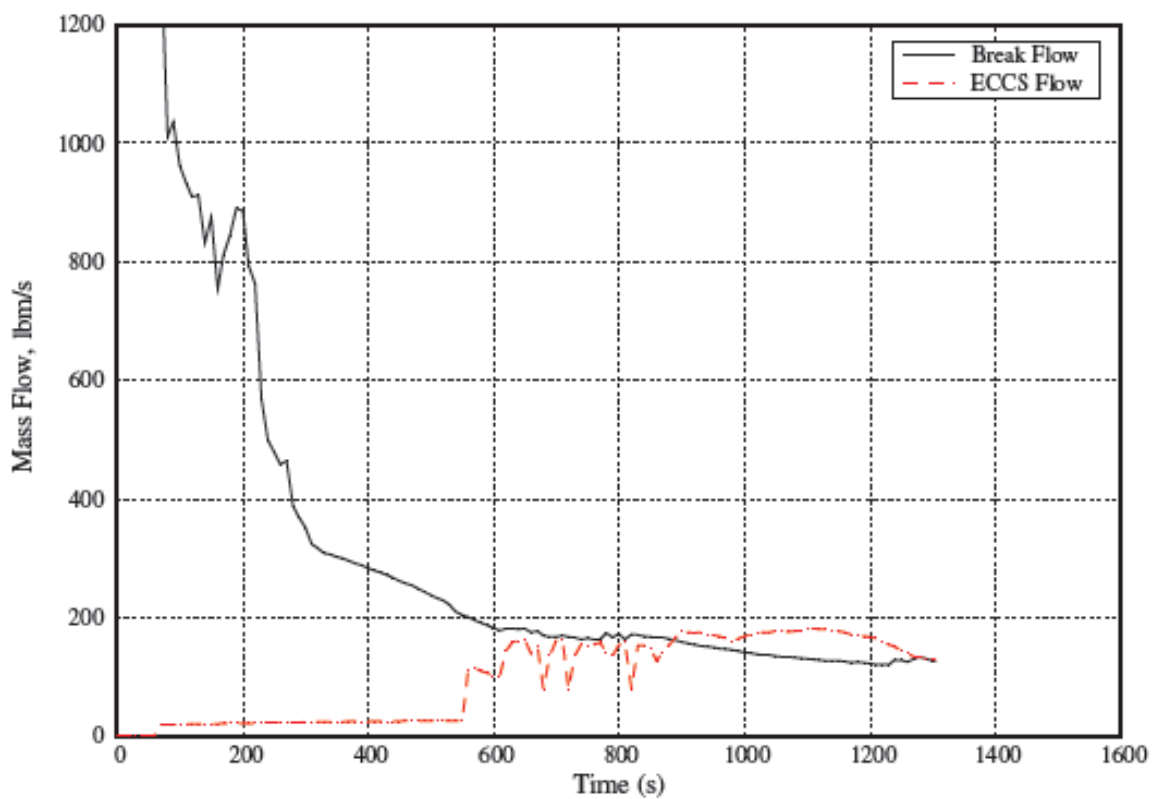
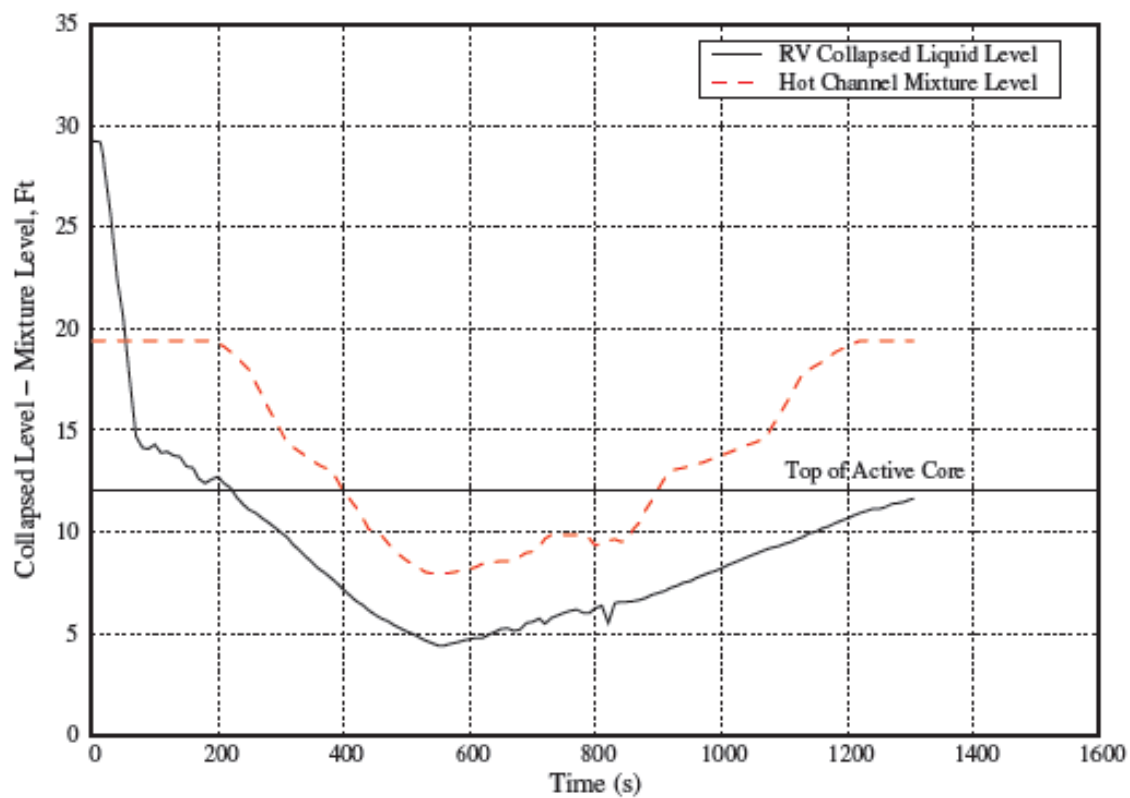


Figure 15-228. 0.15 ft<sup>2</sup> CLPD, 102% of 2568 MWt, Full Core Mark-B-HTP SBLOCA - Pressure

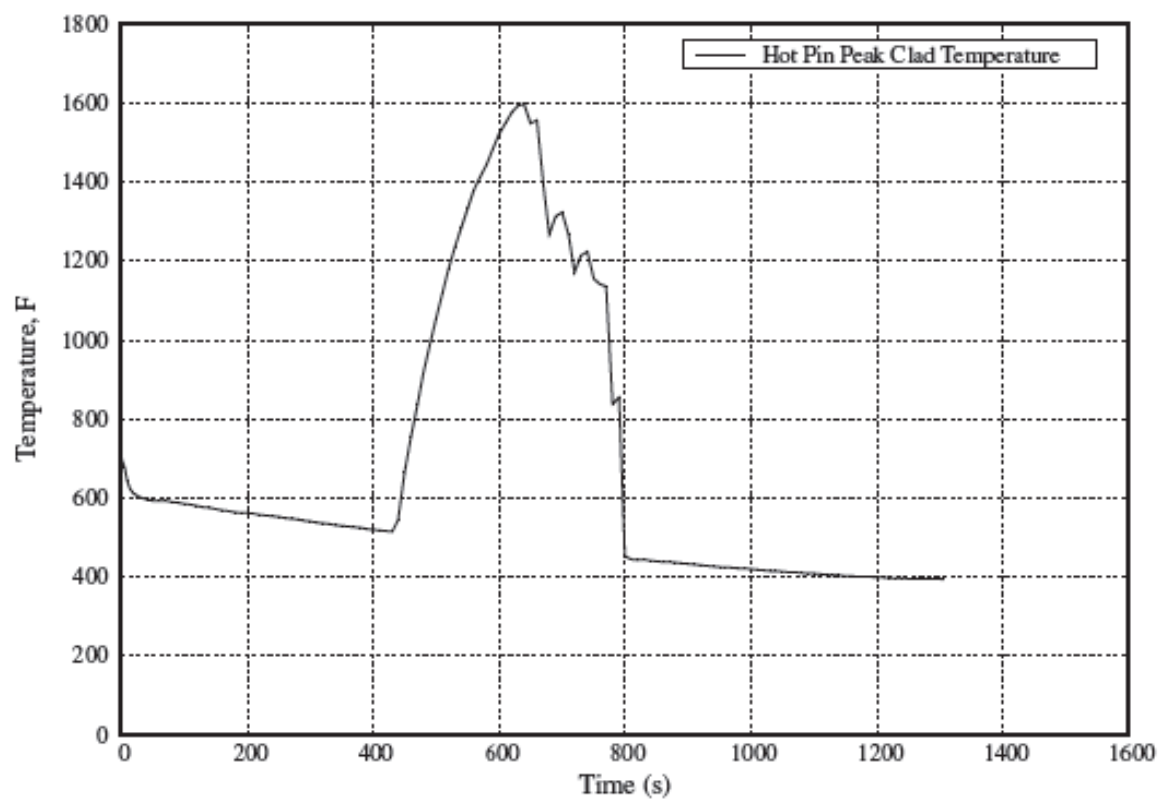
**Figure 15-229. 0.15 ft<sup>2</sup> CLPD, 102% of 2568 MWt, Full Core Mark-B-HTP SBLOCA – Break and ECCS Mass Flow Rates**



**Figure 15-230. 0.15 ft<sup>2</sup> CLPD, 102% of 2568 MWt, Full Core Mark-B-HTP SBLOCA – RVCollapsed Liquid Level & Hot Channel Mixture Level**



**Figure 15-231. 0.15 ft<sup>2</sup> CLPD, 102% of 2568 MWt, Full Core Mark-B-HTP SBLOCA – HotPin Peak Clad Temperature**



**Figure 15-232. 0.15 ft<sup>2</sup> CLPD, 102% of 2568 MWt, Full Core Mark-B-HTP SBLOCA – HotChannel Vapor Temperature at Core Exit**

