Indian Point Unit 2 Spent Fuel Pool Time History

1974: Indian Point Unit 2 Commercial Operation
October 1, 1990: IP2 Spent Fuel Liner Perforation by Diver during Rack Cutting Operations (Leak not identified)
May 7, 1992: IP2 Spent Fuel Pool Liner discovered to be Leaking
June 9, 1992: Temporary Repair (underwater epoxy) installed
June 12, 1992: Permanent repair (steel box over remaining bracket and perforation) installed

Reference 1: NRC letter to Con Edison "Resolution of Spent Fuel Storage Safety Issues: Issuance of Final Staff Report and Notification of Staff Plans to Perform Plant-Specific, Safety Enhancement Backfit Analysis, Indian Point Generating Unit No. 2 (TAC No. M95848)", dated October 9, 1996

Reference 2: Con Edison letter to NRC "Comments Regarding NRC letter; "Resolution of Spent Fuel Storage Safety Issues: Issuance of Final Staff Report and Notification of Staff Plans to Perform Plant-Specific, Safety Enhancement Backfit Analysis, Indian Point Generating Unit No. 2 (TAC No. M95848) dated October 9, 1996", dated November 18, 1996

Reference 3: Procedure HPP-81000-27, "Tool Rack Removal and Instrumentation Relocation for Indian Point 2 Spent Fuel Pool", dated September 25, 1990

Within Reference 1, the NRC observed the absence of spent fuel pool liner leakage identification piping (tell-tales) at IP2. The document also states the NRC will examine how liner leakage is monitored at IP2, and that the NRC will conduct a technical evaluation to determine the need for further regulatory analysis. Further regulatory analysis documentation has not been identified.

Within Reference 2, Con Edison provides comments regarding leak detection capability at IP2 in response to Reference 1. Leak detection capability is through level instrumentation and alarm in the CCR, and operator observation of spent fuel pool level twice per shift and when alarming. Additionally, the potential for leakage through the spent fuel pool liner is addressed in the FSAR, Section 14.2.1.3 Fuel Cask Drop Accident. The analysis assumes puncture of the pool liner and some cracking of the concrete below as a result of the cask being dropped. Additionally, since the pool is founded on solid rock and since the bottom of the pool is approximately 24 feet below the surrounding grade, very little water can be lost from the pool. The capacity of the makeup demineralized water supply to the pool is 150 gpm. Based on this, Con Edison believed that appropriate detection and monitoring capability exist for spent fuel pool leakage. Further regulatory analysis documentation has not been identified.

A search was performed in the COIN_NP_ACTWO table (aka MINIMO) and searches from MAXIMO. Only two work orders were identified that address IP2 Spent Fuel Pool Leakage. These are NP 9260104 and NP 9262203:

NP 9260104: "INVESTIGATE SPENT FUEL PIT LEAK, THIS WO FOR INTIAL INVEST-IGATION, WORK GROUP TO BE CHANGED BASED O"

NP 9262203: "INVESTIGATE DAMAGE TO SPENT FUEL POOL WALL VIA CORE BORE PROCEDURE 8904-019-5-001"

"Review and Certification Log" for document number HPP-81000-27, "Tool Rack Removal and Instrumentation Relocation for Indian Point 2 Spent Fuel Pool" (Reference 3) identifies work order number 90-49035 and modification procedure number CPG-90-60381-c.

Obtaining hard copies of these work orders has not been successful.

Additionally, interviews were conducted with long standing plant personnel. These plant personnel could not recall any IP2 spent fuel pool liner leakage other than that of 1992.

Based on information within these databases and interviews with plant personnel, no other leak history or modifications/repairs was identified beyond that of 1992.