

IP2 DEFUELED SAFETY ANALYSIS REPORT

Appendix A

LICENSE RENEWAL

IP2 DEFUELED SAFETY ANALYSIS REPORT

A.1 INTRODUCTION

This appendix provides the information submitted in an Updated Final Safety Analysis Report Supplement as required by 10 CFR 54.21(d) for the Indian Point Energy Center (IPEC) License Renewal Application (LRA). The LRA contains the technical information required by 10 CFR 54.21(a) and (c). Appendix B of the IPEC LRA provides descriptions of the programs and activities that manage the effects of aging for the period of extended operation. Appendix B was used to prepare the original program and activity descriptions for the IP2 Updated Final Safety Analysis Report (UFSAR) Supplement and the applicable descriptions continue to be used for the IP2 Defueled Safety Analysis Report (DSAR) Supplement information in this appendix.

With inclusion of the Supplement in the DSAR, future changes to the descriptions of the programs and activities will be made in accordance with 10 CFR 50.59.

IP2 DEFUELED SAFETY ANALYSIS REPORT

A.2 AGING MANAGEMENT

The following information is integrated into the DSAR to document aging management programs and activities credited in the license renewal review.

A.2.0 Supplement for Renewed Operating License

The Indian Point Energy Center license renewal application (Reference A.2-1) and information in subsequent related correspondence provided sufficient basis for the NRC to make the findings required by 10 CFR 54.29 (Final Safety Evaluation Report) (Reference A.2-2). As required by 10 CFR 54.21(d), this supplement contains a summary description of the programs and activities for managing the effects of aging (Section A.2.1). After the Facility License was renewed, IP2 was permanently shut down and defueled. In addition, the Facility License was modified to denote that the renewed license would remain in effect until the Commission notifies the licensee in writing that the license is terminated. In accordance with the schedule defined in the Post-Shutdown Decommissioning Activities Report, the IP2 spent fuel will be transferred from the IP2 spent fuel pit to an Independent Spent Fuel Storage Installation.

A.2.1 Aging Management Programs and Activities

The integrated plant assessment for license renewal identified aging management programs necessary to provide reasonable assurance that components within the scope of license renewal will continue to perform their intended functions consistent with the current licensing basis (CLB). This section describes the aging management programs and activities. All aging management programs were implemented prior to entering the period of extended operation.

IPEC quality assurance (QA) procedures, review and approval processes, and administrative controls are implemented in accordance with the requirements of 10 CFR 50, Appendix B. The IPEC Quality Assurance Program applies to safety-related structures and components. Corrective actions and administrative (document) control for both safety-related and nonsafety-related structures and components are accomplished per the IPEC corrective action program and document control program and are applicable to all aging management programs and activities. The confirmation process is part of the corrective action program and includes reviews to assure that proposed actions are adequate, tracking and reporting of open corrective actions, and review of corrective action effectiveness. Any follow-up inspection required by the confirmation process is documented in accordance with the corrective action program. The corrective action, confirmation process, and administrative controls of the IPEC Quality Assurance Program are applicable to all aging management programs and activities.

The Operating Experience Program (OEP) and the Corrective Action Program (CAP) help to assure continued effectiveness of aging management programs through evaluations of operating experience. The OEP implements the requirements of NRC NUREG-0737, "Clarification of TMI Action Plan Requirements," Section I.C.5 and evaluates site and industry operating experience for impact on IPEC. The CAP implements the requirements of 10 CFR 50, Appendix B, Criterion XVI and is used to evaluate and effect appropriate actions in response to operating experience relevant to IPEC that indicates a condition adverse to quality or a non-conformance.

A.2.1.2 through A.2.1.34 Not Used

IP2 DEFUELED SAFETY ANALYSIS REPORT

A.2.1.35 Structures Monitoring Program

The Structures Monitoring Program is a program that performs inspections in accordance with 10 CFR 50.65 (Maintenance Rule) as addressed in Regulatory Guide 1.160 and NUMARC 93-01. Periodic inspections are used to monitor the condition of structures and structural commodities to ensure there is no loss of intended function.

The Structures Monitoring Program was enhanced to include the following.

- Guidance was added to the Structures Monitoring Program to inspect inaccessible concrete areas that are exposed by excavation for any reason. The site will also inspect inaccessible concrete areas in environments where observed conditions in accessible areas exposed to the same environment indicate that significant concrete degradation is occurring.
- Guidance to perform evaluation of groundwater samples was added to the Structures Monitoring Program. To assess the aggressiveness of groundwater to concrete, IPEC will obtain samples from at least five wells that are representative of the ground water surrounding below-grade site structures at least once every five years and perform an engineering evaluation of the results from those samples for sulfates, pH and chlorides. Additionally, to assess potential indications of spent fuel pool leakage, IPEC will sample for tritium in groundwater wells in close proximity to the IP2 spent fuel pool at least once every three months.
- Enhanced the Structures Monitoring Program to perform inspection of the degraded areas of the water control structure once every three years rather than the normal frequency of once every five years during the aging management period.

Enhancements were implemented prior to the period of extended operation.

A 2.1.36 to A.2.2 Not Used

A.2.3 References

- A.2-1 Letter from F. Dacimo, Indian Point Energy Center, to Document Control Desk, NRC, *License Renewal Application*, dated April 23, 2007.
- A.2-2 NRC Safety Evaluation Report (SER), *Related to the License Renewal of Indian Point Nuclear Generating Unit Nos. 2 and 3*, dated October 2009 Supplement 1, dated August 2011, and Supplement 2 dated November 2014.