

#### **Public Service Commission**

**Rory M. Christian** Chair and Chief Executive Officer

Three Empire State Plaza, Albany, NY 12223-1350 www.dps.ny.gov

James S. Alesi David J. Valesky John B. Maggiore Uchenna S. Bright Denise M. Sheehan Commissioners

June 13, 2024

**VIA EMAIL** 

Hon. Michelle L. Phillips Secretary to the Commission 3 Empire State Plaza Albany, NY 12223-1350

Re: Matter No. 21-01188 – In the Matter of the Indian Point Closure Task Force and Indian Point Decommissioning Oversight Board.

**Dear Secretary Phillips:** 

Please accept for filing in the above-captioned matter, the U.S. Nuclear Regulatory Commission's June 13, 2024 presentation to the Indian Point Decommissioning Oversight Board. Should you have any questions regarding this filing, please contact me. Thank you.

Respectfully submitted,

don Jul

Tom Kaczmarek **Executive Director** Indian Point Decommissioning Oversight Board



United States Nuclear Regulatory Commission

Protecting People and the Environment

### INDIAN POINT DECOMMISSIONING OVERSIGHT BOARD JUNE 13, 2024

PAUL KROHN, DIRECTOR DIVISION OF RADIOLOGICAL SAFETY AND SECURITY

ANTHONY DIMITRIADIS, CHIEF DIRHP BRANCH

KATHERINE WARNER, CHP, SENIOR HEALTH PHYSICIST

RICHARD TURTIL, ACTING BRANCH CHIEF, FINANCIAL ASSESSMENT BRANCH

## **ISFSI** Inspections



Inspection Manual Chapter 2690
 Inspection procedures implemented throughout the loading campaign in 2023
 All Casks safely placed on the ISFSI pad





## **ISFSI CASKS**

- Casks are designed to be strong and stable enough to perform their safety function
- NRC staff reviews the design and analysis of system under normal conditions and environmental conditions
- NRC staff reviews several different realistic combinations of loads.





## **ISFSI Cask**



- Inner canister with Overpack
- Various licensed dry storage systems are available
- Indian Point uses the Holtec system



## ISFSI pad storage



- ISFSI pad located on-site
- The ISFSI Pad has a dedicated full-time security force 24 hours a day, 365 days a year.



## **ISFSI Pad Construction**



 ISFSI pad under construction detailed engineering analysis, use of heavy steel rebar and a lot of concrete.



## **ISFSI NRC Inspections at Indian Point**

- At least 14 NRC inspections
  conducted since 2008 when
  the site began loading
  ISFSIs
- Inspectors are trained and qualified in ISFSI
- NRC Inspection Reports are available to the public in ADAMS





## Spent Fuel moved to ISFSI Pad



Spent Fuel moved from Spent Fuel Pool to ISFSI pad

- Total number of casks = 127
- Unit 1 = 5
- Unit 2 = 63
- Unit 3 = 59
- Plus 10-15 casks to store GTCC waste



### **Emergency Preparedness (EP) Requirements**

- EP requirements are not being eliminated.
- The EP requirements are aligned to the risk to the public, which is primarily associated with the storage location of the spent fuel



#### I. Fuel Loading and Low Power Testing

The NRC requires licensee emergency plans to be in place prior to operation. Because there is a limited radiological source term and because more than 10 hours is available before a potential release could occur, no findings and determinations on the state of offsite emergency planning is required to issue a license for low power testing and operation up to 5 percent of rated power.

Requirements for offsite plans

#### II. Power Operations

Emergency plans onsite and offsite must meet the 16 planning standards of 10 CFR 50.47(b). Plans are periodically inspected and are exercised biennially with participation by offsite response organizations (OROs). The NRC and FEMA evaluate the adequacy of these plans to verify that reasonable assurance of the public health and safety is maintained.

#### III. Decommissioning

The risk of a radiological release significantly decreases as the spent fuel decays, while increasingly more time becomes available to implement mitigation strategies, and if necessary, to initiate protective actions offsite. The NRC is in rulemaking to propose a graded approach to EP that is commensurate to the reduction in radiologic risk at four levels of decommissioning: 1. Permanent cessation of operations and

- Permanent cessation of operations and permanent removal of all fuel from the reactor ves
   Fuel in the spent <u>fuel pool (SFP) has decayed such</u>
- that a SFP fire cannot occur in less than 10 hours 3. Transfer of all fuel to dry cask storage
- 4. All fuel removed from site



Traditional accidents such as: LOCA, Steam generator tube rupture, etc. resulting in a meltdown are no longer applicable.



The risk profile is on fuel handling and cask drop.

>10 hours for SFP

Plant Lifecycle

**Relative Radiological Risk** 

Fuel in Reactor Vessel

Fuel in Spent Fuel Pool

Dry Cask Storage

Reactor Decommissioning Trust Funds (DTFs) and Recent DTF Spending Violations

> Richard H. Turtil Senior Financial Analyst Financial Assessment Branch, NRC

Katherine Warner, CHP Senior Health Physicist, NRC Region I

June 13, 2024

### NRC Decommissioning and DTF Regulations Overview

- The intent of NRC regulations is to ensure that the decommissioning of licensed facilities will be accomplished in a safe and timely manner.
- NRC definition of "Decommission": "to remove a facility .... from service and reduce residual radioactivity to a level that permits... [R]elease of the property for unrestricted use and termination of the license."
- DTF funds are used for radiological decommissioning, unless otherwise authorized by exemption.

### Licensee Decommissioning Funding Lifecycle

- NRC ensures the initial certification of Financial Assurance by the licensee prior to fuel load.
- Licensee maintains NRC required funding throughout the life of the reactor.
- Licensee uses one or more funding methods specified in NRC regulations.
- From initial fuel load to completed decommissioning, ongoing monitoring of decommissioning funding is performed by the NRC.

NRC Review of DTF Submittals Financial Assessment Branch

- NRC's review ensures licensee decommissioning funding assurance is in place.
- Biennial reporting requirements for operating reactors; annual reporting for decommissioning reactors.
- 94 operating and 23 decommissioning reactors.
- Review of CY2023 Indian Point Energy Center submittal (ML24089A117) is underway.

### NRC Review of DTF Submittals Inspection

 Inspection Procedure 71801, "Decommissioning Performance and Status Reviews at Permanently Shutdown Reactors"

### Purpose:

- Engage with licensee on overall financial status of decommissioning.
- Identify and document in an inspection report the status, progress, and changes that potentially impact decommissioning financial assurance

### NRC Review of DTF Submittals Inspection

- Severity Level IV Notice of Violation documented in the NRC inspection report issued on February 22, 2024 (ML24017A236)
- HDI replied to the Notice of Violation in a letter dated March 20, 2024 (ML24080A172)
- Financial Assurance inspection currently being conducted and will be documented in the publicly available 2Q2024 NRC inspection report.

# Summary

- Inspections (Decommissioning and ISFSI) are intrusive, sometimes more than one inspector;
- Inspection Reports publicly available
- Violations are processed through our Traditional Enforcement Policy
- Decommissioning Inspections continue throughout the decommissioning process
- Spent Fuel is stored safely on ISFSI pad
- Spent Fuel is inspected as long as it remains on site
- Our Website <u>www.nrc.gov</u> contains a lot of information

Questions?