

NRC Regulatory Information Conference 2020

Holtec Decommissioning—Giving the Next Generation a Cleaner Tomorrow

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Holtec—Taking it to the Next Level

Holtec Nuclear History— Consistently Raising the Bar

- ✓ Spent fuel storage racks
- Heat exchangers
- ✓ Dry fuel storage
- **✓** Decommissioning
- ✓ Central Interim Storage
- ✓ Small Modular Reactor

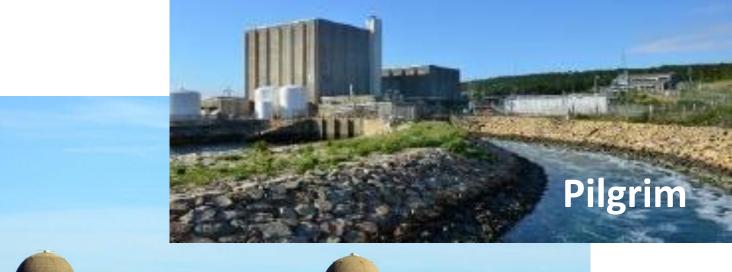
A vertically integrated turnkey supplier of goods and services to the power generation industry since in 1986



Holtec Decommissioning: **Building a Fleet**

- Implement & advance industry decommissioning
- Focused on improving safety, quality & compliance
- Fleet-based approach
- Qualified and experienced personnel
- Procedures & processes
- By accelerating movement of spent fuel into dry cask storage and deploying state-of-the-art technologies, Holtec is well-equipped to decommission nuclear plants decades sooner than if utility owned









Decommissioning Strategy



Implement & Advance Industry Decommissioning

Fleet Approach

Based on nuclear industry fleet model

Drive lessons learned across sites

Maximize standardization

Drive technology innovation

Qualified and **Experienced Personnel**

Existing Holtec nuclear-experienced personnel

> Additional nuclear plant experienced personnel

> Partner with SNC-Lavalin

Integrate site organization at license transfer

Industry vendors

Procedures & Processes

NRC compliant site programs, processes and procedures

Maintain compliance with site license & NRC regulations

Maintain, protect & control spent nuclear fuel

Ensure environmental & personnel protection

Decommissioning Organization



- Spent fuel management and nuclear services
- Spent fuel cask/storage vendor

Provide resources and oversight to support the Safe, compliant operation of the acquired sites



• Licensed operator for all decommissioning sites in the Holtec fleet, including Oyster Creek and Pilgrim



Wholly-owned Holtec subsidiary

- Extensive decommissioning project experience
- Decommissioning General Contractor (DGC) for the Holtec fleet



Jointly-owned by Holtec/SNC-Lavalin

Holtec Fleet Accomplishments



- Provided high quality submittals leading to efficient and timely approvals
- Successfully transitioned two Decommissioning Facilities in 2019
 - ✓ Oyster Creek—July 2019
 - ✓ Pilgrim—August 2019
- Solid trust fund management and site performance
- Signed agreements with organized labor
- Submitted Indian Point License Transfer Application, PSDAR and NDT Fund Exemption Request in 4th Quarter 2019

Project Snapshots



Oyster Creek (NJ)	
Shutdown	Sept 2018
License Transferred to Holtec	July 2019

Pilgrim (MA)	
Shutdown	May 2019
License Transferred to Holtec	Aug 2019

Indian Point (NY)	
Shutdown (Units 2 & 3)	April 2020 / April 2021
License Transferred to Holtec	Target Q2 2021

Palisades (MI)	
Shutdown	April 2022
License Transferred to Holtec	Target Q2 2022

Oyster Creek Status



- Spent Fuel Campaign
 - ✓ ISFSI expansion construction underway
- Reactor Segmentation
 - ✓ Segment drywell head and clean up equipment pool/refueling floor
 - ✓ Testing of segmentation tooling
 - ✓ Holtec is designing and manufacturing waste disposal boxes
 - HI STAR B/C waste boxes—facilitates efficient segmentation and packaging
- Key characterization planning, sampling and analysis
 - ✓ Integration of State Remediation Process with MARSSIM/MARSAME
- Initial building demolition underway

OC Drywall Head Being Segmented





OC Shield Blocks Being Segmented





OC Building Demolition





Pilgrim Status



- Spent Fuel Campaign
 - ✓ New ISFSI pad construction completed
 - ✓ New Haul Path construction underway
- Elimination of Radiological, Combustible and Industrial Hazards
- Decontamination & Dismantlement activities including Segmentation and Demolition
 - ✓ Leveraging experience and resources

Pilgrim ISFSI Pad Construction





Pilgrim Haul Path Construction





Drywell Head Segmentation









Indian Point Key Activities



- License Transfer Application submitted to NRC in November 2019
- Petition to Approve Proposed Transaction filed with NY Public Service Commission in November 2019
- Transaction Close Targeted for 2nd Quarter 2021 after IP3 is permanently shutdown and defueled
- Project and Transition Planning Underway
- Sharing lessons learned from Holtec decommissioning fleet transitions to optimize Indian Point efforts

Palisades Key Activities



- Transaction targeted to close late 2nd Quarter 2022
- Includes Big Rock Point ISFSI
- Sharing lessons learned from Holtec decommissioning fleet transitions to optimize Palisades efforts
- Engaged in planning activities in key areas

Key Fleet Activities



- Development of Holtec Fleet Decommissioning Programs and Procedures Model
 - ✓ Based on Pilgrim and Oyster Creek experience
 - ✓ Establishing alignment between sites
 - ✓ Will be used in transition of future sites.
- Standard Organization for each Decommissioning Phase
- Completing Fleet NDT and SFM Annual Status Updates
- Security Optimization

Summary



- Vigilance in Safety, Quality and Regulatory Compliance throughout Decommissioning
- Raising the bar in the decommissioning industry
 - ✓ Building on Holtec's extensive and diverse experience
 - ✓ Driving improvements through technology and innovation
 - ✓ Focusing on community and stakeholder communications
 - ✓ Strengthening decommissioning teaming through collaboration across all fleet sites and parent company organizations

Giving the Next Generation a Cleaner Tomorrow

Thank You!



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