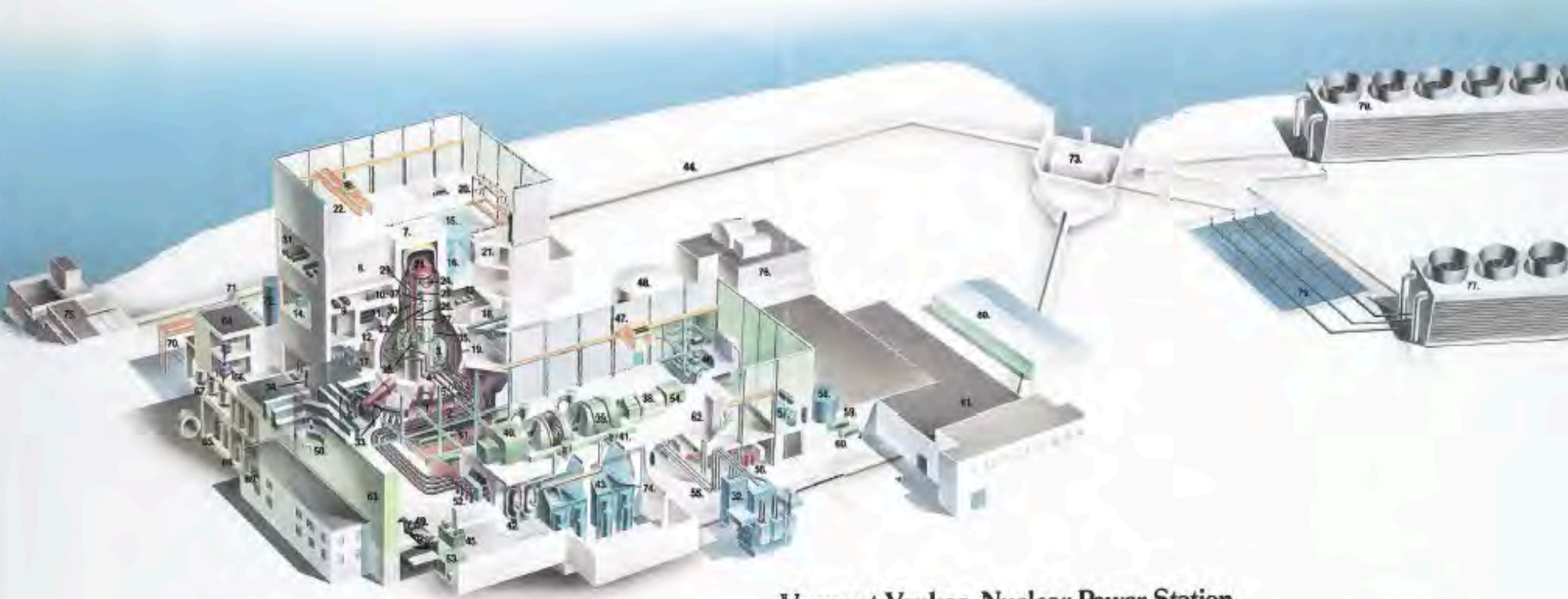


NorthStar VTY Decommissioning



Vermont Yankee Nuclear Power Station

NDCAP Update 09/18/2023

- | | | | |
|---|----------------------------------|----------------------------------|--------------------------------------|
| 1. Torus | 21. New fuel storage vault | 41. Intercept valve | 61. Receiving and stores |
| 2. Main steam lines | 22. Overhead crane | 42. Moisture separator | 62. Elevator |
| 3. Recirculation pump | 23. Biological shield wall | 43. Main condensers | 63. Turbine building |
| 4. Inboard main steam isolation valve | 24. Steam dryer | 44. Cooling water recirculation | 64. Rad waste building |
| 5. Outboard main steam isolation valve | 25. Steam separator | 45. Turbine oil tank | 65. Condensate phase separator tanks |
| 6. Downcomers | 26. Fuel assemblies | 46. Emergency diesel generators | 66. Centrifuge |
| 7. Shield plug | 27. Reactor vessel | 47. Overhead crane | 67. Cask filling area |
| 8. Dryer/separator storage pool | 28. Vessel head | 48. Condensate storage tank | 68. Spent resin tank |
| 9. Reactor building cooling water heat exchangers | 29. Main steam outlet | 49. Feedwater pump | 69. Waste sludge tank |
| 10. Reactor building cooling water pump | 30. Recirculation water outlet | 50. Control room | 70. Traveling hoist |
| 11. Reactor water cleanup heat exchanger | 31. Uninterruptible power supply | 51. High pressure heaters | 71. Sample tanks |
| 12. Reactor water cleanup pump | 32. Main transformer | 52. Main stop valve | 72. Surge tank |
| 13. Vital AC motor generator set | 33. Ring header | 53. Turbine lub oil storage tank | 73. Discharge structure |
| 14. Recirculation motor generator set | 34. RHR service water pump | 54. Excitation cubicle | 74. Low pressure heaters |
| 15. Fuel pool (spent fuel storage) | 35. Recirculation inlets | 55. Main generator leads | 75. Intake structure |
| 16. Spent fuel rack | 36. Manifold | 56. Make-up demineralizers | 76. Advanced off-gas building |
| 17. Hydraulic control units | 37. Feedwater inlet | 57. House heating boiler | 77. West cooling tower |
| 18. Standby gas treatment | 38. Generator | 58. Clearwell | 78. East cooling tower |
| 19. Primary containment wall | 39. Low pressure turbine | 59. Acid storage tank | 79. Spray pond |
| 20. Refueling bridge | 40. High pressure turbine | 60. Caustic storage tank | 80. Warehouse |

NorthStar Nuclear Decommissioning Company, LLC

Simple Priorities



SAFETY with all we do: Target Zero ( **Accidents**)

Radiological, Environmental, Industrial, Nuclear

Do it right. Do it safe.



Project Schedule – Overview (Re-Cap)

	2020	2021	2022	2023	2024	2025	2026	2027 thru 2051	2052	
								Partial Site Release		License Termination (ISFSI) Target 12.31.52)
Spent Fuel Management	█	█	█	█	█	█	█	█	Final Site Restoration & License Termination	
Site Restoration & Final Site Survey	█	█	█	█	█	█	█	█		
Large Component Removal	█	█	█							
Reactor Vessel & Internals	█	█	█							
Condenser		█	█							
Large Pumps & Motors (Circ H2O, Recirc, etc)		█								
Main, Start-Up & Aux Transformers			█							
Decontamination & Demolition										
Asbestos& Lead Paint Removal	█	█	█	█	█	█				
Security Structures and Equipment	█	█	█	█	█	█				
Turbine Warehouse	█	█	█							
Aog	█									
Rotors and Storage Structures		█								
Stack		█	█							
Intake		█	█	█	█					
Reactor Building			█	█	█	█	█			
Admin Building				█						
Control Building				█						
Rad Waste					█	█	█			
Discharge					█	█				
Service Building					█					

Performance Update

- SAFETY: **Acceptable**

Zero NorthStar OSHA Recordable Lost Time Accidents to date, with over 1,600,000 person hours worked on site since January 11th 2019.

- REGULATORY: **GOOD**

Zero NRC Cited Violations for all of 2019, 2020, 2021, 2022, and 2023 to date.

- PRODUCTION: **Acceptable**

Overall project schedule remains well on track. Bulk Decom work and Site Characterization continues advancing ahead of initial projections.

Turbine Building Superstructure Demo



Turbine Building Superstructure Demo



Turbine Building Demo



Turbine Building concrete structure Demo



Turbine Building concrete structure Demo



Turbine Building Structural steel



Demo and removal of CST concrete pad



Demo and removal of spare main transformer pad



Removal of concrete Stack Duct section



Removal of AOG Vent Piping from Plant to Stack



Performing AOG Vent Piping Trench Surveys



Backfilling the Cooling Tower Basin



Discharge Structure Demo Preparation



Switchgear Enclosure & Circ Water Booster Pump housing structures removed.

Discharge Structure Forebay water removal



Rx Building Interior Demo in HPCI Corner Room



Rx Building Interior Demo in RHR & CS sys Corner Room(s)



Rx Building Interior Demo in Steam Tunnel



Rx Building Interior Demo in TORUS Basement



TORUS Demo & Removal Complete

Loading demo material into gondola rail cars



Waste Loading & Transportation



Shipping and Material Volumes

Currently shipping about 4-5 rail cars per week
(Total shipments to date: 685)

- Total YTD Shipments (as of 8/31/23): 148
- Total Volume 1,953,212 ft³ (72,341 yd³)
- Total Weight 78,377,030 lbs. (39,188 tons)
- Total Activity 35,650 curies

Non-Rad Site Characterization/Remediation

What else is happening?

- No new areas of impact identified.
- Action Plan for a small excavation for PAHs in AOC 3 (former Construction Office Building area) determined no longer required per the (sitewide) Risk Evaluation.
- Split sampling continues for Post Demolition Surveys with ATC in coordination with ANR. All sample data continues to correlate well and show no impacts to soils below the buildings or structures.
- Post Decommissioning Groundwater Monitoring Program per MOU is still being developed with ANR input.
- Approval and Issuance of both the General Permit from USACE and Individual Stream Alt Permit from ANR for decommissioning the intake and discharge structures.
- Renewal and annual inspections of Stormwater Permits complete with minor maintenance as warranted.
- Local “Borrow Pits” selected and sampled to verify soils meet ANR Criteria for use as backfill material. Ongoing sampling will continue in accordance with approved Material Work plans.
- Continued collaboration with VT ANR, DEC via Bi-Weekly calls to maintain alignment.

Questions?

Target Zero (🚫 Accidents) Do It Right. Do It Safe.

