



NYSERDA

OPTIONS FOR WEST VALLEY LICENSE MODIFICATION

August 9, 2018

Western New York Nuclear Service Center Today

Retained Premises

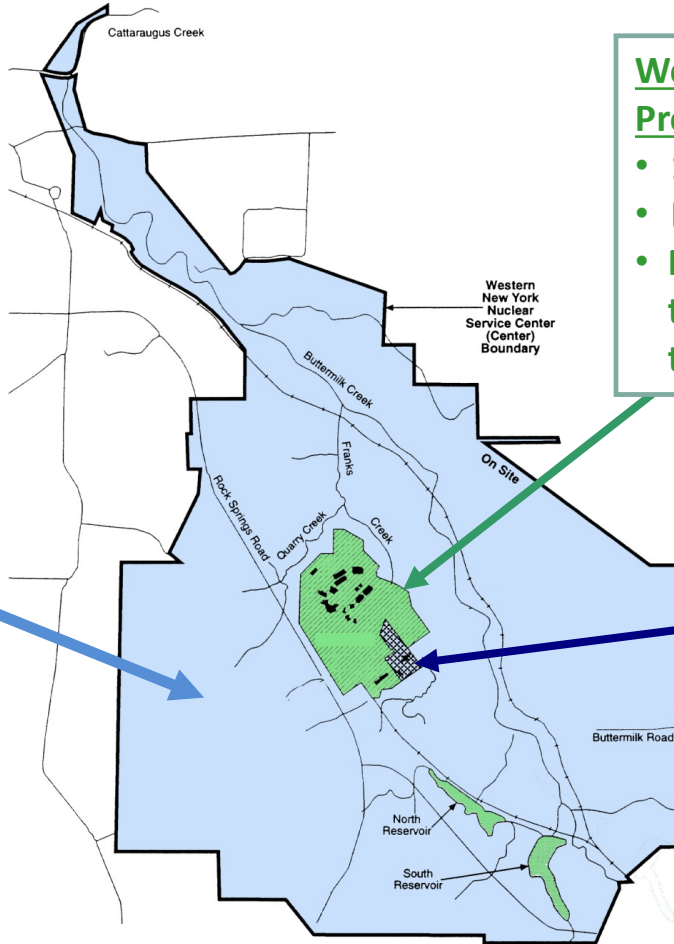
- 3,150 Acres
- NYSERDA-managed
- Regulated under Part 50 License

West Valley Demonstration Project Premises

- 167 Acres
- DOE-managed
- Part 50 License "on hold" for this area while DOE conducts the WVDP

State-Licensed Disposal Area

- 16 Acres
- NYSERDA-managed
- Regulated under NY State license and permits



Western New York Nuclear Service Center Today



Need for License Modification

- License does not contain provisions needed for NYSERDA to conduct needed maintenance and operations in the Retained Premises; health and safety provision was not transferred from site operator.
- Some needed maintenance activities are time-sensitive.
- Current license does not represent existing site conditions (reprocessing facilities have been dismantled).
- License has been in timely renewal for an extended period of time (decades).
- Existing license does not provide a current licensing basis.

Need for License Modification

Some needed maintenance activities are time-sensitive



Grass cutting and brush-hogging are needed to maintain fences and improve driver sight-lines.



Current conditions in potentially impacted areas



Current conditions in unimpacted areas

Fallen tree is modifying creek flow and threatening farmer's fields on adjacent land.

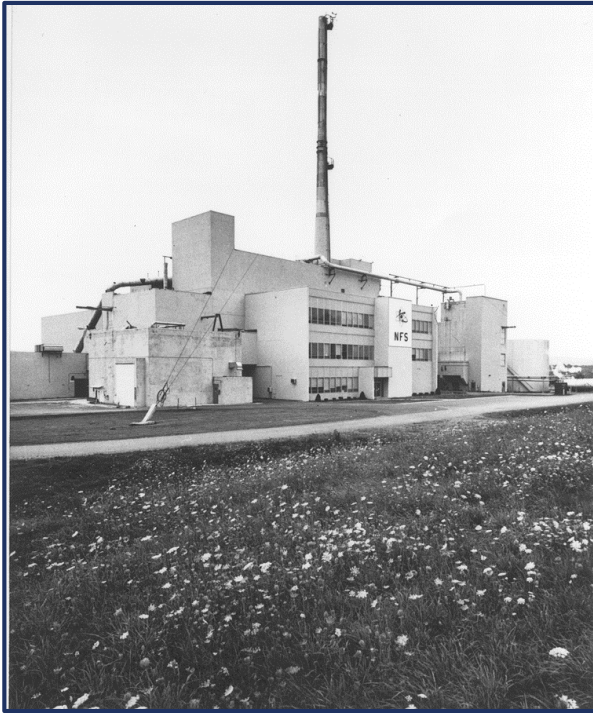


Utility and road work require rad assessments and support in potentially impacted areas. Presently conducted using separate agreements with the WVDP.

Options Identified for License Modification

- Limited Amendment Option – Focused on near-term maintenance needs.
- Option 1: Retain CSF-1 as a Part 50 license but convert it to a possession only license (POL).
- Option 2: Convert CSF-1 to a Part 70 (and Part 30 and Part 40) Materials license with “Hematite-type” provisions.

West Valley is No Longer a Part 50 Production Facility



**Part 50 Production Facility
1966-1982**



**West Valley Demonstration Project
1982-Present**



West Valley is a Complex Materials Site

Status of NRC-Regulated Complex Materials Sites Undergoing Decommissioning as of September 30, 2017

Site Name	Location	State	Criteria	DP Submitted	Original DP Submittal	DP Approved	Estimated Closure	Note
Alameda Naval Air Station	Alameda	CA	N/A	N/A	N/A	N/A	N/A	1
Cimarron (Kerr-McGee)	Cimarron	OK	Action-UNRES	Yes	4/95	Yes	2032	
Department of the Army - ARDEC	Picatinny	NJ	LTR-UNRES	Yes	11/13	TBD	TBD	
FMRI (Fansteel), Inc.	Muskogee	OK	LTR-UNRES	Yes	8/99	Yes	TBD	
Hunter's Point Naval Shipyard	San Francisco	CA	N/A	N/A	N/A	N/A	N/A	1
Jefferson Proving Ground	Madison	IN	LTR-RES	Yes	8/99	Withdrawn	N/A	
McClellan (former Air Force base)	Sacramento	CA	N/A	N/A	N/A	N/A	N/A	1
Shallow Land Disposal Area	Vandergrift	PA	LTR-UNRES	Yes	6/01	N/A	TBD	
Sigma-Aldrich	Maryland Heights	MO	LTR-UNRES	Yes	10/08	Under Revision	2019	
UNC Naval Products	New Haven	CT	LTR-UNRES	Yes	8/98	Yes	TBD	
West Valley Demonstration Project	West Valley	NY	LTR-UNRES	Yes	3/09 (Phase 1)	Yes	TBD	2
Westinghouse Electric (Hematite Facility)	Festus	MO	LTR-UNRES	Yes	4/04	Yes	2019	

For notes, please see the related data dictionary:

<http://www.nrc.gov/info-finder/decommissioning/complex/complex-datadictionary.xls>

For more information, please see Section 2.3 of SECY-17-0111, "Status of the Decommissioning Program--2017 Annual Report":

<https://www.nrc.gov/docs/ML1727/ML17276B120.pdf>

Source: NRC Webpage - *Locations of Complex Materials Sites Undergoing Decommissioning*

<https://www.nrc.gov/info-finder/decommissioning/complex/complex.xls>

NRC's Decommissioning Process is not the same for all types of facilities

10 CFR Part 50 - Focused on Power

Reactors:

- Notification within two years following cessation of activities
- Submittal and review of Post-Shutdown Decommissioning Activities Report (PSDAR)
- Followed by submittal and review of License Termination Plan (LTP)
- Implementation of LTP
- Completion of decommissioning

10 CFR 70 Complex Materials Sites:

- Notification within two years of shutdown
- Submittal and review of a Decommissioning Plan (DP)
- Implementation of DP
- Completion of decommissioning

The Materials Decommissioning Process is Being Implemented at West Valley

- NRC's current process for decommissioning at West Valley follows the Materials Site decommissioning process:
- DOE submitted a Phase 1 DP to NRC for review and comment in 2008, and NRC issued a Technical Evaluation Report in 2009 documenting its review of the Phase 1DP. WVDP Decommissioning is now underway.
- DOE will be submitting a Phase 2 DP and NYSERDA will submit a DP for the Center as a whole for NRC's review.
- This is in contrast to a Part 50 reactor decommissioning process that would have included the submittal of a Post-Shutdown Decommissioning Activities Report and License Termination Plan.

Addressing the Path Forward

Limited Amendment Option

- NYSERDA could prepare a limited license amendment package with the goal of effectuating immediate site maintenance needs (fence repair, vegetation clearing at perimeter fences, addressing concerns of neighbors – fallen trees, etc.).
- The limited amendment package would include:
 - A radiation protection plan
 - The clarification of responsibilities for health and safety provisions
 - A site maintenance plan describing the type of routine maintenance work contemplated
 - A no-significant-hazards-consideration assessment and DOE's non-objection
- Depends on resolution of health and safety provision issue.
- Would not address longer-term issues, and future amendments would be needed, but will address immediate maintenance needs.

Broader Amendment Options

- Look beyond current maintenance needs.
- Provide updated license to reflect today's site conditions and responsibilities.
- Allow for the removal of outdated and inapplicable provisions related to facilities and operations that no longer exist at the site.
- Result in a Current Licensing Basis for the Center.

Option 1: Retain Part 50 License and Convert to a POL

Existing Part 50 license could be retained and converted to a POL with Parts 30 (byproduct material), 40 (source material), and 70 (special nuclear material) authorizations included to reflect current conditions at the site.

Potential advantages:

- Part 50 POL approach may be viewed as less complicated or less labor intensive by the NRC staff.

Option 1: Retain Part 50 License and Convert to a POL (Cont.)

Potential Disadvantages:

- “Square peg in a round hole” – Part 50 does not suit current site conditions or processes (see, e.g., 50.59 procedure recently utilized for solar facility).
- Does not reflect current status of the site. No longer a production facility - reprocessing facility and related fuel processing and support SSCs dismantled. No future production.
- Most Part 50 requirements are not relevant to the site (requirements without clear purpose for the West Valley site).
- The Part 50 POL would need to retain (and appropriately adapt) the same Parts 30, 40, and 70 conditions/provisions as will be required throughout decommissioning -- essentially the same as would be contained in a stand-alone Parts 30-40-70 license. Efficiencies that might be gained by implementing a Part 50 POL may be minimal.
- Decommissioning as a Part 50 facility requires a substantial change in current process.

Option 2: Convert to a Materials License (Parts 70, 30 and 40)

- Existing Part 50 license could be converted to a materials license:
 - No unneeded Part 50 elements such as technical specifications required.
 - Would cover byproduct material (Part 30), source material (Part 40) and special nuclear material (Part 70) as it may exist on the site.
- Matters of special note:
 - The WVDP premises would need to be clearly identified and “carved out” in the license while DOE is in possession of the project premises.
 - Detailed review will be needed for the applicability of certain Part 70 provisions in relation to the dispersed nature of the special nuclear material on the site, and the nature of the remaining materials upon the completion of the WVDP.

Option 2: Convert to a Materials License (Parts 70, 30, and 40) (Cont.)

- Advantages of a materials license:
 - Better reflects the actual status and needs of the site.
 - NRC, NYSERDA, and DOE are presently implementing the DP approach, with longtime public support.
- Disadvantages of a materials license:
 - Potentially viewed as a less efficient, more complicated approach to decommissioning a Part 50 facility than the approach used for standard facilities decommissioned under Part 50 POL approach, but as described above, the West Valley facility is not a standard Part 50 facility.

Both options offer:

- Inclusion of Parts 30, 40, 70 considerations.
- Public hearing rights.
- No change to DOE relationship.
- No change to the operational decommissioning approach.
- No impact on NRC policy statement application.
- A Current Licensing Basis for the Center.

Both Options Require:

- A finding that the production facility has been dismantled to the extent that it no longer satisfies the definition of production facility.
- Additional license amendment findings required under Part 50:
 - Delete major parts of existing license that are no longer pertinent or needed.
 - Identify and retain pertinent parts and provisions as appropriate, subject to any necessary modifications to conform to revised license.

Both Options Require (Cont.)

- Authorization to possess and maintain Parts 30, 40, and 70 materials.
- Additional items:
 - Revised site description with necessary “carve-outs” (WVDP premises, SDA)
 - Radiation protection plan
 - Monitoring plan
 - Site maintenance plans
 - Emergency plans, if needed
 - Safeguards and security plans, if needed
 - Long-term funding requirements
- Various plans would be attachments to the license, imposed by license conditions.

Summary:

- West Valley is a NRC Complex Materials Site.
- DOE submitted and NRC approved a Complex Materials DP.
- DOE is implementing decommissioning under the current NRC approved DP (not a Part 50 License Termination Plan).
- Both broader amendment options must demonstrate compliance with License Termination Rule (LTR).
- Decommissioning for Part 50 sites normally includes a PSDAR, followed by performance-based decommissioning and submittal of an LTP for site end-state conditions. This is not the process in place for the West Valley site.
- Converting the current reprocessing Part 50 license to a Part 70, 30, 40 materials license would be effective and efficient for continuing with site decommissioning.
- NRC precedent for such an approach has been established through the Hematite Part 70, 30, 40 license.
- NYSERDA needs a near-term option to allow required maintenance.