

INDEPENDENT SCIENTIFIC PANEL (ISP)
Scope of Work and Overview of ISP Role in Phase 1 Studies
West Valley Demonstration Project (WVDP) and Western New York Nuclear Service Center
(WNYNSC)

ACRONYMS:

DOE	United States Department of Energy
ISP	Independent Scientific Panel
NYSERDA	New York State Energy Research and Development Authority
PAS	Potential Areas of Study
SME	Subject Matter Expert(s)
WNYNSC	Western New York Nuclear Service Center
WVDP	West Valley Demonstration Project

Background:

The New York State Energy Research and Development Authority (NYSERDA) and the U.S. Department of Energy (DOE) recently selected Phased Decision making as the path forward for Decommissioning and/or Long-Term Stewardship of the West Valley Demonstration Project and the Western New York Nuclear Service Center. During Phase One of the Phased Decision making Alternative, which will take about 10 years, NYSERDA and DOE (the agencies) plan to conduct scientific studies to facilitate interagency consensus to complete decommissioning of the remaining facilities. The agencies have agreed on a facilitated process for identifying, designing, and implementing potential Phase 1 Studies that involves input from Subject Matter Experts (SME), a four-member Independent Scientific Panel (ISP), regulatory agencies, and the public.

NYSERDA and DOE have identified a number of Potential Areas of Study (PAS) that will be considered by SME for further evaluation through specific studies. These include, but are not limited to:

- Soil erosion
- Groundwater flow and contaminant transport
- Catastrophic release of contamination and impact on Lake Erie
- Slope stability and slope failure
- Seismic hazard
- Probabilistic vs. deterministic dose and risk analysis
- Alternate approaches to, costs of, and risks associated with complete waste and tank exhumation
- Viability, cost, and benefit of partial exhumation of waste and removal of contamination
- Exhumation uncertainties and benefit of pilot exhumation activities
- In-place closure containment technologies
- Engineered barrier performance
- Additional characterization needs
- Cost discounting and cost benefit analyses over long time periods

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Objectives:

The ISP will provide independent scientific guidance to the SME working groups and to DOE and NYSERDA during the identification and scoping of scientific studies identified by the SME working groups, and will review study plans and activities.

The ISP will provide guidance to the SME working groups and to DOE and NYSERDA to keep the Phase 1 Studies process moving. If differences of opinion within a SME working group prevent the group from making a consensus recommendation on Phase 1 Studies, the SME working group may consult with the ISP in an attempt to resolve differences.

The ISP may receive requests for consultation by DOE and NYSERDA during the Phase 1 study process.

For each Task outlined below, the ISP will be required to interact with SME working groups, DOE and NYSERDA, and to participate as necessary in agency and public meetings.

TASK 1: Evaluate the Potential Areas of Study and SME Recommendations for Proposed Phase 1 Studies Given the Following Considerations:

- The primary objective of Phase 1 Studies is to facilitate interagency consensus to complete Phase 2 decisions concerning decommissioning/long-term stewardship of remaining facilities
- Analyses and information relevant to the PAS and to Phase 2 decisions will be considered.
- Public input and comment will be considered.
- Cost and Schedule are key considerations
- Potential studies must be completed in ~ 6 years.
- As determined by DOE/NYSERDA, the ISP will evaluate the PAS and the SME recommendations of proposed Phase 1 Studies and make recommendations to the agencies on:
 - The potential of the PAS and the SME-proposed Phase 1 studies to facilitate interagency consensus to complete decommissioning/long-term stewardship of the facilities remaining after the completion of Phase 1 decommissioning.
 - The prioritization of the recommended studies.

Task 2: Phase 1 Studies Mediation Services

- The ISP will provide guidance in an attempt to resolve differences of opinion, should they arise within SME working groups, that might prevent an SME working group from reaching consensus on recommendations to be made to the agencies.
- The ISP will provide guidance in an attempt to resolve differences of opinion, should they arise, between DOE and NYSERDA that might prevent DOE/NYSERDA from reaching consensus on study recommendations made by the SME.

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- The ISP will be available to provide consultation to the SME working groups and to the agencies at any time during the Phase 1 Study process.

Task 3: Public Meetings

- The ISP will attend public meetings as requested by DOE and NYSERDA, either in person or by telephone.
- The ISP will respond to questions from public stakeholders concerning the Phase 1 Studies and will respond to technical questions submitted in writing.
- The ISP will consider public input during the Phase 1 Studies process.

TASK 4: As Determined by DOE/NYSERDA, Review Phase 1 Study Work Plans, Interim Phase 1 Study Findings, and Phase 1 Study Final Reports.

- When determined by DOE/NYSERDA, the ISP will, in parallel with the agencies, review the Phase 1 Study work plans.
- ECS will provide monthly Phase 1 Study progress reports to the ISP and to the agencies.
- When determined by DOE/NYSERDA, The ISP will, in parallel with the agencies and SME working groups, review Phase 1 Studies draft final reports.
- As determined by DOE/NYSERDA, evaluate and interpret study findings with respect to their facilitation of interagency consensus.
- It is not anticipated that the ISP will review all analyses, recommendations, reports, etc. ECS will have the responsibility of keeping the ISP members informed of Phase 1 Studies progress. The ISP will generally be engaged at a high level, and when conflicts arise.

TASK 5: DELIVERABLES

- Communications - provide copies of all formal communications between the ISP and the agencies, SME, and public stakeholders to DOE and NYSERDA:
 - Moira.N.Maloney@wv.doe.gov and LMG@nyserdera.org
- Communiqués should be from the ISP as a group and not from individual ISP members. Individual ISP member dissenting opinions, if any, should be appended to each communiqué.

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- ISP communiqué providing review of SME evaluation and recommendations for Phase 1 Studies that will facilitate interagency consensus.
- As determined by DOE/NYSERDA, ISP communiqué providing review of Draft Phase 1 Studies Work Plans.
- As determined by DOE/NYSERDA, ISP communiqué providing review of Draft Final Phase 1 Studies Reports.
- As determined by DOE/NYSERDA, ISP communiqué providing recommendations for conflict resolution between SME or the agencies.
- As determined by DOE/NYSERDA, ISP communiqué providing responses to comments from stakeholders.