Exhibit 1: Acronyms and Definitions List

Acronyms

10 CFR 830	Title 10, Code of Federal Regulations, Part 830, *Nuclear Safety Management*
ARIES	Advanced Recovery and Integrated Extraction System
CD	Critical Decision
CMR	Chemistry and Metallurgy Research Facility
CMRR	Chemistry and Metallurgy Research Replacement Nuclear Facility
CRS	Congressional Research Service
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
DSA	Documented Safety Analysis
ESS	Evaluation of the Safety of the Situation
FSS	Fire Suppression System
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
MAR	Material-at-Risk
MRR	Material Recycle and Recovery
NDAA	National Defense Authorization Act
NNSA	National Nuclear Security Administration
PC	Performance Category
PF-4	Plutonium Facility, Building 4
PISA	Potential Inadequacy of the Safety Analysis
POC	Pipe Overpack Container
RANT	Radioassay and Nondestructive Testing Facility
SC	Safety Class
SS	Safety Significant
SNM	Special Nuclear Material
SSCs	Structures, Systems, and Components
TA	Technical Area
TRU	Transuranic
TWF	Transuranic Waste Facility
USQ	Unreviewed Safety Question
WETF	Weapons Engineering Tritium Facility
WIPP	Waste Isolation Pilot Plant

Definitions

Administrative Control: Safety controls or measures that rely on worker actions as opposed to engineered systems, structures, and components.

Compensatory Measure: A temporary safeguard designed to approach equivalent protection when a safety system or control has failed or a new requirement or deficiency has been identified.

Damage Ratio: The fraction of material that is actually affected by the accident-generating conditions.

Deficiency: A failing or shortcoming of a safety system or control.

Defined Use: Nuclear materials that are actively being used by a program or being held for future programmatic use. Defined Use may also include materials that require processing or materials suitable for storage that are compatible with the site's mission.

Design Basis: The set of requirements that bound the design of structures, systems, and components within the facility.

DNFSB/TECH-39: A DNFSB generated Technical Report sent to the NNSA Administrator. This report identified potential actions that would reduce hazards at PF-4, including opportunities to minimize the quantity of nuclear material-at-risk in PF-4.

Evaluation Guideline: 25 rem total effective dose. In the safety analysis, the Department of Energy performs evaluations against this criterion for doses of ionizing radiation. The Evaluation Guideline is established for the purpose of identifying the need for safety-class structures, systems, and components.

Hazard Category: The hazard category for a facility is based on an unmitigated release of available hazardous material. Unmitigated is meant to consider material quantity, form, location, dispersibility, and interaction with available energy sources, but not to consider safety features that will prevent or mitigate the release.

Hazard Category 2: The hazard analysis for a facility shows the potential for significant on-site consequences based on the quantity of material-at-risk and potential for criticality accidents.

Inventory: A complete list of the nuclear material within a nuclear facility.

MAR: The quantity of nuclear material susceptible to a release during an accident scenario.

No Defined Use: Nuclear materials that are not actively being used by any program and not being held for future programmatic use. No Defined Use may include materials that are being stabilized for discard, materials that may require processing, or materials suitable for storage pending future disposition.

Performance Category: The Department of Energy's system for the graded approach to design and analyze systems, structures, and components to withstand natural phenomena hazards (e.g., earthquakes, high winds, floods). Higher performance category structures, systems, and components are designed and evaluated to consider less frequent, but more severe natural phenomena hazards events and use more conservatism for engineering calculations and quality assurance.

Performance Category-2: PC-2 structures, systems, and components are meant to ensure the operability of safety-significant systems to protect the worker and contribute to protecting the public. Design of PC-2 SSCs use commercial methods that provide performance similar to hospitals and other emergency facilities.

Performance Category-3: PC-3 structures, systems, and components are meant to ensure the operability of safety-class systems to protect public safety. Credited safety class controls are designed and evaluated to PC-3 criteria using nuclear industry codes and standards at the highest levels of quality assurance.

PF-4: Located within LANL TA-55, PF-4 began operations in 1978. PF-4 is the only fully operational, full capability plutonium facility in the nation. It supports pit manufacturing, surveillance, and plutonium recovery; as well as basic and applied research in plutonium and actinide chemistry; nuclear materials separation, processing, and recovery; plutonium metallurgy, preparation, casting, fabrication, and recovery; machining and metallurgy; and destructive and nondestructive analysis.

Plutonium-239 Equivalent Curies (PE-Ci) Methodology: The methodology of using PE-Ci values to simplify accident analyses by allowing the analyst to model releases based on the curie value of one standard isotope (Pu-239) instead of modeling releases for every potential isotope of interest.

Respirable Release Fraction: The fraction of radioactive material that can be suspended in air and made available for inhalation into the human respiratory system.

Safety Basis: Describes the nuclear facility hazards and the risks for the workers, the public, and the environment. The safety basis defines the safety related equipment, procedures, and practices relied on to adequately control those hazards.

Safety Class: Structures, systems, and components including portions of process systems, whose preventative and mitigative function is necessary to limit radioactive material exposure to the public, as determined from safety analyses.

Safety Significant: Structures, systems, and components that are not designated as safety class SSCs, but whose preventative or mitigative function is a major contributor to worker safety as determined from safety analyses.

Source Term: The amount of radioactive or other hazardous material that is released as a result of a postulated accident scenario.

Specific Administrative Control: An administrative control that is identified and credited to prevent or mitigate a hazard or accident scenario.

Special Nuclear Material: Plutonium, uranium-233, or uranium enriched in the isotopes uranium-233 or uranium-235.

Technical Safety Requirements: A document that defines the envelope to safely operate a nuclear facility, including the parameters for safety systems, structures, and components; and administrative controls.

Total Effective Dose: A measure of radiological risk that is based on the sum of the dose from external sources of ionizing radiation and the 50-year committed dose from radioactive material taken into the body.

Transuranic Waste: Radioactive waste containing elements higher in atomic number than uranium greater than a concentration specified by federal law.