Proposal #	FY	Technical Program Element	Task Manager	Lab	Proposal Title	NCSP Manager Accept?
FY21-01	2021	Analytical Methods	Joetta Goda	LANL	Development and Implementation of API to Deliver Continuous-Energy Nuclear Data to MCNP using Data Libraries	No
FY21-02	2021	Analytical Methods	Joetta Goda	LANL	Subcritical Validation Suite with Correlation Analysis	No
FY21-03	2021	Analytical Methods	Joetta Goda	LANL	MCNP Unstructured Mesh Benchmarks for Criticality Safety and Multi-physics Analysis	No
FY21-04	2021	Analytical Methods	Joetta Goda	LANL	Integration, Validation and Release of ENDF/B-VIII.0-based Benchmark Inputs, Covariances and Sensitivity Profiles for Whisper	No
FY21-05	2021	Analytical Methods	Doug Bowen	ORNL	Technical Data for the Pitzer Formulation of Solution Compositions to Include Uranium/Plutonium Solutions with Selected Admixed Absorbers (New Subtask)	No
FY21-06	2021	Analytical Methods	Doug Bowen	ORNL	Developing the Basis for Subcritical Limit Reduction Factors for Concrete Reflection	No
FY21-07	2021	Integral Experiments	Joetta Goda	LANL	Critical Experiment with Americium	No
FY21-08	2021	Integral Experiments	Joetta Goda	LANL	Thermal Critical Experiment with Chlorine and Plutonium	No
FY21-09	2021	Integral Experiments	Joetta Goda	LANL	Copper Critical Experiment	No
FY21-10	2021	Integral Experiments	Joetta Goda	LANL	Fast Tantalum Critical Experiment	No
FY21-11	2021	Integral Experiments	Joetta Goda	LANL	Design of Subcritical Benchmark Experiments to Maximize Differences in Fissi on Multiplicity Data	No
FY21-12	2021	Integral Experiments	Joetta Goda	LANL	True Intermediate Energy System with Pu-239 and Pu-240	No
FY21-13	2021	Integral Experiments	Joetta Goda	LANL	In Situ Measurements in PF-4 to Support LANL Production of 30 Pits per Year	No
FY21-14	2021	Integral Experiments	Joetta Goda	LANL	Iron/Steel/Chromium Critical Experiment Series	No
FY21-15	2021	Integral Experiments	Joetta Goda	LANL	Integral Experiments for Validation of Molybdenum Neutron Cross Sections	No
FY21-16	2021	Integral Experiments	Joetta Goda	LANL	Critical Experiment with Niobium	No
FY21-17	2021	Integral Experiments	Joetta Goda	LANL	Zirconium Integral Experiment Test Assembly	No
FY21-18	2021	Integral Experiments	Dave Heinrichs	LLNL	Thermal/Epithermal Experiments (TEX)-Plutonium Additional Mixed Spectrum Configurations	No
FY21-19	2021	Integral Experiments	Dave Heinrichs	LLNL	Nuclear Accident Dosimetry Blind Intercomparison Exercise	No
FY21-20	2021	Integral Experiments	Dave Heinrichs	LLNL	New Horizontal Split Table Critical Assembly Machine	No
FY21-21	2021	Integral Experiments	Dave Heinrichs	LLNL	Re-establish a Pulse Die-Away Capability for Thermal Scattering Law Benchmarks	No
FY21-22	2021	Integral Experiments	Dave Heinrichs	LLNL	Joint LLNL, LANL, SNL, and IRSN High Multiplication Subcritical (Multiplicity) Benchmark Experiments	No
FY21-23	2021	Integral Experiments	Joetta Goda	LANL	Composite CAAS1 Benchmark	No

FY21-24	2021	Information Preservation & Dissemination	Joetta Goda	LANL	MCNP Benchmark Model of FUND-LLNL-ALPHAN-HE3-MULT-001	No
FY21-25	2021	Information Preservation & Dissemination	Doug Bowen	ORNL	Revision of the LA-12808 Nuclear Criticality Safety Guide	Yes
FY21-26	2021	Information Preservation & Dissemination	Doug Bowen	ORNL	Preparation of ICSBEP Benchmarks from Historic Experiments by J. T. Mihalczo, and Preservation of Data	No
FY21-27	2021	Nuclear Data	Joetta Goda	LANL	Measurement of 35Cl(n,p) cross section from thermal to fast energies	No
FY21-28	2021	Nuclear Data	Joetta Goda	LANL	Modernization of the EDA Light-Element Evaluation Code	No
FY21-29	2021	Nuclear Data	Joetta Goda	LANL	95Mo neutron capture and transmission measurements in the resolved and unresolved resonance regions, resonance spin/parity measurements, and resonance evaluation	Yes
FY21-30	2021	Nuclear Data	Joetta Goda	LANL	Improved 239Pu neutron total cross section data and evaluation at low energies	No
FY21-31	2021	Nuclear Data	Joetta Goda	LANL	Review, Revision, and Expansion of the LANL Benchmark Library for MCNP and Whisper	No
FY21-32	2021	Training & Education	Doug Bowen	ORNL	Design of an Subcritical/Critical Assembly at ORNL for Use with the CSO/FMH Courses	Yes
FY21-33	2021	Training & Education	Kevin Reynolds	Y-12	Enhanced NCS Training for Y-12 Fissile Material Handlers with Subcritical Hands-On Experiments	No
FY21-34	2021	Nuclear Data	Gary Harms	SNL	Development and Implementation of Machine Learning Methods for Thermal Scattering Law Evaluations (NCSU)	Yes
FY21-35	2021	Integral Experiments	Gary Harms	SNL	Developing a Series of Integral Benchmark Experiments using the UNM AGN Reactor (UNM)	No
FY21-36	2021	Training & Education	Gary Harms	SNL	Designing an Interactive Series of Subcritical Experiments to Demonstrate MAGIC MERV (UNM)	No
FY21-37	2021	Analytical Methods	Doug Bowen	ORNL	Understanding the Impact of Angular Distributions on Predicting Criticality (UTK)	No
FY21-38	2021	Integral Experiments	Doug Bowen	ORNL	Development of Improved Critical Experiment Design Capabilities	No
FY21-39	2021	Nuclear Data	Doug Bowen	ORNL	Neutron Induced Gamma Emission Data Improvements + (Alpha,n) data improvement plan	No
FY22-01	2022	Analytical Methods	Dave Heinrichs	LLNL	Random-sampling-based uncertainty quantification and data assimilation for similarity assessment, area of applicability determination, USL determination	No
FY22-02	2022	Analytical Methods	Dave Heinrichs	LLNL	Proposed Benchmark Intercomparison Study	Yes

FY22-03	2022	Analytical Methods	Doug Bowen	ORNL	Use of Random Sampling to Quantify Uncertainties in Integral Benchmark Experiments	No
FY22-04	2022	Analytical Methods	Joetta Goda	LANL	Advanced Thermal Scattering Capabilities in NJOY	No
FY22-05	2022	Nuclear Data	Doug Bowen	ORNL	Understanding the Impact of Angular Distributions on Predicting Criticality	No
FY22-06	2022	Training & Education	Doug Bowen	ORNL	Development of Succession Pipeline for NCS and Critical Experiment Design Capabilities	No
FY22-07	2022	Analytical Methods	Doug Bowen	ORNL	Improved Nuclear Cross-section and Nuclear Thermal-Hydraulic Correlation Data for Transient Nuclear Criticality Excursion Modelling and Simulation of Fissile Liquids and Wetted Fissile Powders	No
FY22-08	2022	Integral Experiments	Joetta Goda	LANL	Design of Subcritical Benchmark Experiments to Maximize Differences in Fission Multiplicity Data	No
FY22-09	2022	Integral Experiments	Joetta Goda	LANL	Fast Tantalum Critical Experiment	No
FY22-10	2022	Integral Experiments	Joetta Goda	LANL	Graphite Critical Experiments	No
FY22-11	2022	Integral Experiments	Joetta Goda	LANL	Conceptual Design of a Solution Reactor for NCERC	No
FY22-12	2022	Integral Experiments	Joetta Goda	LANL	True Intermediate Energy System with Pu-239 and Pu-240	No
FY22-13	2022	Integral Experiments	Dave Heinrichs	LLNL	Thermal/Epithermal Experiments (TEX) with U238 in Reflection and Interaction	No
FY22-14	2022	Integral Experiments	Dave Heinrichs	LLNL	Thermal/Epithermal Experiments (TEX) with Aluminum Diluent	No
FY22-15	2022	Integral Experiments	Dave Heinrichs	LLNL	Pulse Neutron Experiments for Resonance Parameter Evaluation of Absorbing Materials	No
FY22-16	2022	Integral Experiments	Dave Heinrichs	LLNL	Thermal/Epithermal Experiments (TEX)-Plutonium Additional Mixed Spectrum Configurations	No
FY22-17	2022	Integral Experiments	Doug Bowen	ORNL	Neutron absorber plate experiments using the 7uPCX fuel	No
FY22-18	2022	Integral Experiments	Doug Bowen	ORNL	Stoichiometric Characterization of 6.90 wt% SNL Fuel	No
FY22-19	2022	Integral Experiments	Gary Harms	SNL	Critical and Physics Experiments Using HALEU Fuels in Light Water Configuration	No
FY22-20	2022	Integral Experiments	Doug Bowen	ORNL	Documenting the Unique Physics Properties of the UNM AGN-201M Reactor	No
FY22-21	2022	Analytical Methods	Joetta Goda	LANL	Quality Assurance, Expansion, and Distribution of the Los Alamos Benchmark Suite for Criticality Validations	No
FY22-22	2022	Information Preservation & Dissemination	Joetta Goda	LANL	Evaluation of High 240Pu ZPPR Plate Experiment in Jupiter Configuration	No
FY22-23	2022	Information Preservation & Dissemination	Joetta Goda	LANL	NCERC Long Term Data Archiving Strategy	No

FY22-24	2022	Information Preservation & Dissemination	Doug Bowen	ORNL	Oak Ridge Health Physics Research Reactor Additional Shielding Benchmark Evaluation	No
FY22-25	2022	Information Preservation & Dissemination	Doug Bowen	ORNL	Nuclear Criticality Safety - Learning From Experience (LFE) Database	Yes
FY22-26	2022	Information Preservation & Dissemination	Doug Bowen	ORNL	Nuclear Criticality Safety Repository	Yes
FY22-27	2022	Nuclear Data	Joetta Goda	LANL	Improved 239Pu neutron total cross section data and evaluation at low energies	Yes
FY22-28	2022	Nuclear Data	Joetta Goda	LANL	Advanced Capabilities to Ensure and Extend High-Fidelity Evaluation Modeling	No
FY22-29	2022	Nuclear Data	Doug Bowen	ORNL	Improving Critical Experiments through the Coupling of the R-matrix Theory and Neutron Multiplicities p with the Inclusion of Spin Effect and (n,yf) Reactions	No
FY22-30	2022	Nuclear Data	Doug Bowen	ORNL	Bayesian Monte Carlo evaluation framework for differential cross section data and integral benchmark experiments	No
FY22-31	2022	Nuclear Data	Doug Bowen	ORNL	Use of Thermal Epithermal Experiment (TEX) Data to inform potential cross section adjustments	No
FY22-32	2022	Nuclear Data	Doug Bowen	ORNL	Modeling of Thermal Neutron Scattering for Evaluation Applications	No
FY22-33	2022	Nuclear Data	Dave Heinrichs	SNL	Total Thermal Cross Section Measurements Using Monochromatic Neutron Beams at the PULSTAR Reactor	No
FY22-34	2022	Nuclear Data	Yaron Danon	RPI	Source Pulsed Integral Measurements for Improvement of Nuclear Data	No
FY22-35	2022	Nuclear Data	Doug Bowen	ORNL	Use of Substitution Experiments and TSAR to Test Nuclear Covariance Data for Non-Actinide Nuclides	No
FY22-36	2022	Nuclear Data	Doug Bowen	ORNL	Modernizing Nuclear Data Evaluation. Introducing Artificial Intelligence: Fast, Reliable and Reproducible	No
FY22-37	2022	Nuclear Data	Doug Bowen	ORNL	Improvement of nuclear data evaluation in the low energy region by using experimental data other than cross sections.	No
FY22-38	2022	Training & Education	Joetta Goda	LANL	ZPPR Criticality Safety Demo	No
FY22-39	2022	Training & Education	Doug Bowen	ORNL	Nuclear Criticality Safety Training and Pipeline Development	Yes
FY22-40	2022	Training & Education	Doug Bowen	ORNL	An Analytical Capability for Assessing Performance of Bias Mapping Methodologies	No