SUPPLEMENTAL AGREEMENT CONCERNING CONDITIONAL WAIVER OF SECTIONS D.2.e and K.1 OF 1995 SETTLEMENT AGREEMENT

This Supplemental Agreement is entered this 6th day of November 2019 between the United States Department of Energy (DOE), by and through the Assistant Secretary for Environmental Management and the Assistant Secretary for Nuclear Energy, and the State of Idaho by and through the Governor of the State of Idaho and the Idaho Attorney General (Idaho).

PURPOSE:

Consistent with the principles set forth in the Settlement Agreement and Order dated October 13, 1995 in the matter of Public Service Co. of Colorado v. Batt, No. CV 91-0035-S-EJL (D. Id.) and United States v. Batt, No. CV-91-0054-S-EJL (D. Id.) ("1995 Agreement"), this Supplemental Agreement to the 1995 Agreement provides a one-time conditional waiver of Sections D.2.e. and K.1 of the 1995 Agreement relating to receipt for research purposes of 25 spent nuclear fuel (SNF) rods from the Byron Nuclear Generating Station and for the conditional renewal of the January 6, 2011 Memorandum of Agreement Concerning Receipt, Storage, and Handling of Research Quantities of Commercial Spent Nuclear Fuel at the Idaho National Laboratory). DOE and Idaho (collectively "the Parties") agree as follows:

RECITALS:

WHEREAS, the 1995 Agreement provides in Section F that the Idaho National Laboratory (INL) is designated as the DOE Spent Fuel Lead Laboratory for the "research development and testing of treatment, shipment and disposal technologies for all DOE spent fuel" and provides for the receipt of DOE SNF for research purposes; and

WHEREAS, in 2002 the DOE designated the INL as the Nation's lead laboratory for nuclear energy research; and

WHEREAS, in furtherance of its research mission, the INL has developed and possesses unique technologies and capabilities which will further the research development and testing of new fuel types and technologies; and

WHEREAS, Section D.2.e of the 1995 Agreement restricts the INL from accepting any shipments of "spent fuel from commercial nuclear power plants" (Commercial Power Spent Nuclear Fuel [SNF]); and

WHEREAS, on July 1, 2008, the Parties executed the Agreement to Implement the U.S. District Court Order dated May 25, 2006 ("2008 Agreement"), regarding the interpretation of Paragraph B.1 of the 1995 Settlement Agreement; and

WHEREAS, on January 6, 2011, the Parties executed a Memorandum of Agreement ("2011 Memorandum of Agreement") allowing INL to accept limited quantities of

Commercial Power SNF so long as DOE was in compliance with other terms and conditions of the 1995 Agreement; and

WHEREAS, on January 1, 2013, the DOE failed to meet its obligation under Section E.5 of the 1995 Agreement to have treated all of the Sodium Bearing Liquid High Level Waste (HLW); and

WHEREAS, in February 2014, two unrelated events occurred at the Waste Isolation Pilot Plant (WIPP) resulting in a halt of WIPP operations; and

WHEREAS, subsequent to re-opening in January 2017, WIPP has been operating at limited throughput capacity pending completion of improvements to its ventilation system; and

WHEREAS, as a result of the events and subsequent slowing of shipment volumes to WIPP DOE has failed to meet the requirements of Sections B.1 and B.1.c of the 1995 Agreement, and Section VIII of the 2008 Agreement to Implement U.S. District Court Order Dated May 25, 2006 ("2008 Agreement"); and

WHEREAS, DOE remains in non-compliance with the 1995 Agreement, and Section VIII of the 2008 Agreement; and

WHEREAS, because DOE is in non-compliance of the 1995 Agreement and Section VIII of the 2008 Agreement the 2011 Memorandum of Agreement is not operative; and

WHEREAS, because DOE is in non-compliance with the 1995 Agreement, and Section VIII of the 2008 Agreement , shipments of DOE SNF to INL are suspended pursuant to Section K.1.a.; and

WHEREAS, prior to the 2014 closure of WIPP, DOE had shipped 30,089 cubic meters of transuranic waste from Idaho to WIPP; and

WHEREAS, since the re-opening of WIPP, DOE has shipped 1,492 cubic meters of transuranic waste from Idaho to WIPP; and

WHEREAS, since 2005, DOE has exhumed 5.01 acres and packaged 9,020 cubic meters of buried transuranic waste from the Subsurface Disposal Area pursuant to the 2008 Agreement; and

WHEREAS, since 2005, DOE has shipped 13,882 cubic meters of mixed Alpha-low level waste historically managed by DOE as transuranic waste to disposal facilities outside of Idaho.

WHEREAS, since December 31, 2014, DOE has shipped over 330,000 pounds of *heavy*

metal[1] nuclear material from the state of Idaho; and

WHEREAS, since December 31, 2014, DOE has shipped from Idaho a volume of TRIGA SNF equaling 29.3 pounds of *heavy metal;* and

WHEREAS, on December 31, 2014, DOE requested permission to receive 25 SNF rods from the Byron Nuclear Generating Station at INL for use in the High Burnup Fuel Testing and Fuel Cycle Research Development and Demonstration Project (research project); and

WHEREAS, to date Idaho has not allowed such shipment to proceed due to DOE's non-compliance; and

WHEREAS, DOE anticipates future needs to receive SNF in furtherance of INL's SNF and nuclear energy research missions, as recognized by the parties in their 2011 Memorandum of Agreement; and

WHEREAS, the Parties agree INL research has significant value to the national security interests of the United States and will provide valuable information regarding nuclear waste reduction and non-proliferation; and

WHEREAS, the State of Idaho has determined that acceptance of shipments at the INL for research purposes, subject to the terms and conditions of this Supplemental Agreement, will provide valuable benefit to both Idaho and the nation in the form of increased knowledge concerning the safe and efficient generation of nuclear energy, nuclear waste reduction technology and the nonproliferation of nuclear weapons; and

WHEREAS, implementation of this Supplemental Agreement will result in a further net reduction in the amount of SNF stored at the INL; and

WHEREAS, Section J.1 of the 1995 Agreement provides that Idaho, in its sole discretion, may waive performance by DOE of any terms, conditions, and obligations contained in the 1995 Agreement; and

WHEREAS, Idaho will continue to insist upon the safe management of SNF, HLW, and transuranic waste and disposition of such materials outside of the State of Idaho.

NOW THEREFORE IT IS HEREBY AGREED:

Pursuant to the following terms and conditions of this Supplemental Agreement and solely for the purpose of research conducted at the INL, Idaho in its sole and exclusive discretion, hereby grants a one-time waiver of the Section D.2.e prohibition on the

[1] For purposes of this Supplemental Agreement the Parties agree that the term "heavy metal" refers to all uranium, plutonium, and thorium and trace amounts of additional elements having an atomic number greater than or equal to 90, contained within materials such as SNF. Other SNF materials, such as cladding, alloys and structural materials are not included.

shipment of commercial SNF to INL and a one-time waiver of the State's invocation of Section K.1 arising from the above described non-compliance for the receipt of 25 SNF rods from Byron Nuclear Generating Station. Idaho further agrees that if DOE meets the terms and conditions of this Supplemental Agreement contained in paragraph 7, DOE may resume and plan for future receipts of SNF pursuant to the 2011 Memorandum of Agreement between Idaho and DOE.

1. Prior to receipt at the INL of the Byron Nuclear Generating Station SNF rods for research purposes, DOE shall have achieved radioactive operations of the Integrated Waste Treatment Unit and have provided verified notice to Idaho of attaining such radioactive operation. For purposes of this paragraph "radioactive operations" shall mean the introduction of sodium-bearing HLW to the treatment unit and successful treatment of sodium-bearing HLW resulting in at least one (1) full canister of dry solid sodium-bearing HLW.

2. After the effective date of this Supplemental Agreement and by not later than December 31, 2021, DOE agrees to ship not less than 300 pounds of special nuclear material[2] out of the State of Idaho.

3. DOE agrees to treat all Sodium Bonded EBR II Driver Fuel Pins into product material for High Assay Low Enriched Uranium (HALEU) fuel production as follows:

    a. DOE shall commence treatment by no later than thirty (30) days after the effective date of this Supplemental Agreement; and

    b. DOE shall treat at least 165 pounds heavy metal of Sodium Bonded EBR II Driver Fuel Pins per year on a three year rolling average basis; and

    c. DOE shall complete treatment of all Sodium Bonded EBR II Driver Fuel Pins by December 31, 2028; and

    d. Except for HLW, DOE shall dispose of any waste materials, including but not limited to fuel pin cladding material generated during treatment outside of the State of Idaho by not later than January 1, 2035; and

    e. Any HLW generated during treating shall be treated so as to put it into a form suitable for transport to a permanent repository or interim storage facility outside the State of Idaho by a target date of December 31, 2035; and

    f. If DOE has not put all the treated product material to beneficial use DOE

[2] For purposes of this Supplemental Agreement the Parties agree that the term "Special Nuclear Material" is defined as plutonium, uranium-233, or uranium enriched in the isotopes uranium-233 or uranium-235, but does not include source material.

will remove all treated product material from the State of Idaho by January 1, 2035.

4. Transuranic Waste Shipments to WIPP:

   a. Commencing on the effect date of this Supplemental Agreement, DOE will allocate to and make from the State of Idaho at least fifty-five percent (55%) of all transuranic waste shipments received at WIPP for INL transuranic waste, including retrieved buried waste, each year until shipments from INL are complete. This percentage will be calculated on a three year running average, beginning with Calendar Year 2019 (total number of shipments over any period of three years, divided by three)

   b. In addition to the fifty-five percent (55%) allocation of shipments of INL transuranic waste to WIPP, DOE will give INL transuranic waste priority for shipments to WIPP. Priority means that if a shipment allotted to a generator site other than INL is not made, such shipment allotment will be made available to INL, subject to consideration of national security mission and nonproliferation matters, other DOE legal and site cleanup commitments, WIPP operational concerns, and safety and security operations. In making the determinations above related to national security mission and nonproliferation considerations, the State recognizes the authority of DOE and its sole discretion regarding the same. With respect to decisions on the other considerations listed in this section, the State and DOE reserve their respective rights under section K.1.a. of the 1995 Agreement. In furtherance of this provision DOE agrees as follows:

      i. DOE shall provide to Idaho on the first of each month the eight week rolling shipment schedule for WIPP.
      ii. DOE shall maintain at the INL a quantity of packaged WIPP certified waste, and logistical resources sufficient to utilize any shipment allocations that become available to INL.
      iii. On a quarterly basis, DOE shall provide Idaho with access to DOE shipment tracking records, which document DOE shipment allocations to WIPP, subject to any security requirements limiting the manner of access.

5. Except for buried transuranic waste that has not been exhumed and is governed under the 2008 Agreement, DOE shall have all but 1,200 cubic meters of pre-1995 transuranic waste located at INL treated and packaged for shipment out of the State of Idaho on or by November 1, 2019.

6. Limits and Material Management – Byron Shipment:

   a. INL may receive for the purpose of research and examinations conducted

at the INL 25 SNF rods from the Byron Nuclear Generating Station for purposes of the Byron Rods for High Burnup Fuel Testing and Fuel Cycle RD&D Project, the total estimated weight of which is 100 pounds *heavy metal*.

b. The 25 SNF rods from the Byron Nuclear Generating Station will count as a shipment of DOE SNF for purposes of the annual shipment limits contained in Section D.2.f of the 1995 Agreement.

c. The amount of SNF from the Byron Nuclear Generating Station, measured in fractions of metric tons *heavy metal* (MTHM), including the equivalent amount contained in any wastes generated during research, remaining on site at the end of each calendar year will count toward the total metric tonnage limits for DOE SNF contained in Section D.2.c of the 1995 Agreement.

d. The SNF from the Byron Nuclear Generating Station will be stored and managed as SNF until shipped off-site in compliance with the 2035 shipment deadline of the 1995 Agreement.

e. Any transuranic waste and low-level waste resulting from the research on the SNF from the Byron Nuclear Generating Station may be consolidated with other laboratory waste and managed appropriately.

f. Nothing in this Supplemental Agreement shall be construed to allow DOE to exceed the 55 MTHM limit for SNF allowed by the 1995 Agreement.

7. Additional Shipments of Research Quantities of SNF under the 2011 Memorandum of Agreement.

a. DOE may resume the receipt of and plan for additional research quantities of commercial SNF pursuant to the 2011 Memorandum of Agreement, the terms and conditions of which will govern such additional shipments, upon successful production of at least 100 canisters of treated sodium-bearing HLW located at INL and so long as:

i. DOE is not in breach of any terms and conditions of the 1995 Agreement, or the 2008 Agreement other than those described in this Supplemental Agreement; and

ii. The Integrated Waste Treatment Unit is continuing sustained operations[3] to treat the remaining Sodium Bearing HLW located at

[3] For purposes of this paragraph only the term "Sustained Operations" shall mean the continuous operation of the Integrated Waste Treatment Unit to treat the remaining Sodium Bearing HLW exclusive of normal operating shutdowns for maintenance and repairs of less than twenty-four (24) months in duration.

INL.

8. This Supplemental Agreement reflects a conditional waiver of Sections D.2.e and K.1 of the 1995 Agreement related to a single shipment of research quantities of Commercial Power SNF to Idaho. This Supplemental Agreement further reflects terms and conditions under which DOE may resume and plan for additional shipments of Commercial SNF pursuant to the Parties 2011 Memorandum of Agreement. This Supplemental Agreement shall not be construed to alter or amend any provisions of the 1995 Agreement, the 2008 Agreement or the 2011 MOA.

9. This Supplemental Agreement shall not relieve the Parties from their obligation to comply with any applicable federal, state, or local law.

10. Nothing in this Supplemental Agreement shall be admissible in any judicial proceeding other than one for the enforcement of this Supplemental Agreement.

DATED this 6th day of November, 2019.

SO AGREED:

SIGNED: _____
WILLIAM I. WHITE
SENIOR ADVISOR FOR ENVIRONMENTAL MANAGEMENT
TO THE UNDER SECRETARY FOR SCIENCE
U.S. DEPARTMENT OF ENERGY

SIGNED: _____
HONORABLE DR. RITA BARANWAL
ASSISTANT SECRETARY FOR NUCLEAR ENERGY
U.S. DEPARTMENT OF ENERGY

SIGNED: _____
HONORABLE BRAD LITTLE, GOVERNOR
STATE OF IDAHO

SIGNED: _____
HONORABLE LAWRENCE G. WASDEN, ATTORNEY GENERAL
STATE OF IDAHO