



Westinghouse Electric Company LLC
Columbia Fuel Site
5801 Bluff Road
Hopkins, South Carolina 29061-9121
USA

Director, Office of Nuclear Material Safety and
Safeguards
U. S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, Maryland 20852-2738

Direct tel: 803-647-2119

e-mail: courturf@westinghouse.com

Your ref:

Our ref: LTR-RAC-20-1

SUBJECT: WESTINGHOUSE 10CFR70.72 FACILITY CHANGE
REPORT

January 6, 2020

Westinghouse Electric Company LLC (Westinghouse) hereby submits the report of Columbia Fuel Fabrication Facility (CFFF) changes that did not require Nuclear Regulatory Commission (NRC) preapproval in accordance with 10CFR70.72. This report addresses those changes completed within calendar year 2019. Westinghouse had no facility changes that required NRC pre-approval during this time period.

Westinghouse uses an integrated safety review approach for all modifications of, or additions to, existing structures, systems and components at the CFFF. This process is described in, and conducted in accordance with the requirements of CFFF Regulatory Procedure RA-104, "Regulatory Review of Configuration Change Authorization." This integrated review is conducted by the various regulatory disciplines, including Nuclear Criticality Safety, Radiation Safety, Environmental Protection, Safeguards, Fire Safety, Chemical/Industrial Safety and other applicable Health and Safety experts when necessary. A key aspect of this review is a determination that the change is not prohibited by 10CFR70, a SNM-1107 license condition, or a governing order. The reviewers also determine whether NRC preapproval and SNM-1107 license amendment changes are required prior to implementation.

Specific guidance is provided to ensure that NRC pre-approval is obtained for changes that:

- create new types of accident sequences that, unless mitigated or prevented, would exceed the performance requirements of 10CFR70.61 and that have not previously been described in the Integrated Safety Analysis (ISA) Summary;
- use new processes, technologies or control systems for which the licensee has no prior experience;
- remove, without at least an equivalent replacement of the safety function, an Item Relied On For Safety that is listed in the ISA Summary and is necessary for compliance with the performance requirements of 10CFR70.61; or
- alter any Item Relied On Safety, listed in the ISA Summary, that is the sole item preventing or mitigating an accident sequence that exceeds the performance requirements of 10CFR70.61.

Each of the changes identified in the attachment to this correspondence were evaluated in accordance with this RA-104 procedure, and a determination was made that NRC pre-approval of the respective change was not required. This determination was documented on each change authorization form by the appropriate regulatory engineering review functions. For all of these changes, the regulatory engineering review function checked the "No" box on the form for "NRC pre-approval required?"

If you have any questions regarding this information, please contact me at (803) 647-2119.

Sincerely,



Gerard F. Couture,
Licensing Manager (Acting)
Westinghouse Columbia Fuel Fabrication Facility
Docket 70-1151 License SNM -1107
Attachment 1: Westinghouse CFFF 2019 Facility Change Report (94 pages)

cc:

U. S. Nuclear Regulatory Commission, Region II
245 Peachtree Center Avenue NE, Suite 1200
Atlanta, Georgia 30303-1257
Attn: Mr. Thomas Vukovinsky

U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, Maryland 20852-2738
Attn: Ms. Marilyn Diaz
Mail Stop: TWFN-4A60

CCF	Title	Description	Justification	Location	ISA ID
13316	Remove Obsolete Lines At UN Bulk Storage	Remove obsolete lines at UN Bulk Storage.	These lines are remanent of past processes due to an obsolete tank offloading system.	UN Bulk Storage	ISA-02 Uranyl Nitrite Bulk Storage Tanks
15344	Isolate V-1014 A & B Tanks from V-1014 Scrap Cage Storage Tanks.	Isolate V-1014 A & B Tanks from V-1014 Scrap Cage Storage Tanks. This will reduce size of V-1014 from 5 tanks to 3 tanks.	Two of the existing tanks are being re-purposed for use by another process. The Tanks will be re-purposed under CCF 15526.	Scrap Cage in ADU Conversion	ISA-11 Scrap Uranium Processing
15345	Reduce Size of V-1017 Scrap Cage Storage Tanks from 5 tanks to 3 tanks	Reduce Size of V-1017 Scrap Cage Storage Tanks from 5 tanks to 3 tanks. Tanks will be disconnected and modified under CCF 15-526 for use with the new washing process.	Two of the existing tanks are being re-purposed for use by another process.	Scrap Cage in ADU Conversion	ISA-11 Scrap Uranium Processing
15377	Line 5 Roll Compactor Motor Replacement.	Replace the Reliance T16H4017M-TH DC motor with Reliance T18R1118 DC motor. Installation of a new motor mount base plate will be required per the attached For Construction drawing. Minor fit-up of the new motor per MCP-108139, Section 18, may also be required.	The T16H4017M-TH DC motor is obsolete. The T18R1118 DC motor is the Reliance recommended replacement. The base plate will need to be lowered to accommodate the 1/2" base to shaft centerline height differential between the obsolete and new motor. The base plate mounting holes will need to be re-located to match the new motor foot print.	ADU Pelleting \ Line 5 Roll Compactor	ISA-08 Pelleting
15526	Install new Scrap Uranium Recovery Equipment in Scrap Cage.	<p>Install new equipment to remove uranium from filters and mops so they can be incinerated.</p> <p>Replace obsolete components in SSC ADUSCRP-406. Incorporate changes in SSC identification numbers due to changes in the Criticality Safety Evaluations.</p> <p>To update drawings to current field conditions (electrical, piping and ventilation).</p> <p>To modify Common Services BPCS controller(s) to allow for additional I/O modules required for this system.</p> <p>Updated ITR and drawings for changes being made to trip points for Air back flow prevention Safety Significant Controls (SSC) ADUSCRA-122, ADUSCRA-123 and ADUSCRA-124. A change was made to the power feed to the Rack 2 Slot 6 card in the Safety System. To address a discrepancy in ADUSCRA-132, the closest vessel is V-1032A not V-1032C which will require update to CSE-11-H and Sketch 815417-7.</p> <p>Also updated ITR package to revision 4 addressing an electrical drawing update which impacted Safety Significant Control ADUSCRP-406 for High Temperature Pump Shut-off Interlock to prevent Ammonium Nitrate Explosion. The modification relocated the fault contacts to eliminate an issue which required power to be shut off if a hardware fault occurred to reset the new safety relay. The change does not impact the conclusions, testing requirements or action items required by the ITR.</p> <p>Phase 1 - SURE Project</p> <p>Phase 2 - Addition of Control Net Modules to Common Services BPCS</p>	Existing process is not functioning as desired.	In Scrap Cage under platform.	ISA-11 Scrap Uranium Processing
15580	Integrate Current Model for SOLX V1087 and V1487 Automatic Valve Solenoids	Allow model number Asco 8320G230 solenoid to be utilized for SV-1087A, SV-1087B, SV-1087C, SV-1087D, SV-1087E, SV-1087F, SV-1487A, And SV-1487B.	The current switch has been updated by the manufacturer. It will have the same power requirements and Cv values.	SOLX	ISA-07 Solvent Extraction
16013	Fitzmill Polypak Platform for CL3	Extend the polypak platform to match that on CL5 and CL4, to allow for a polypak to come all of the way out of the fitzmill hood.	Polypak cannot currently sit on platform and also have the flap to the hood close.	Fitzmill platform on CL3	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
16105	Install new Vent Pot in Adu Conversion V-1037	<p>Install a new vent pot to support new Scrap Uranium Recovery Equipment being installed under CCF 15526.</p> <p>Phase 1: Install drop for Vent Pot in S-1030 duct Phase 2: Install Vent pot and associated piping - Isolated by blinds and locked valves to prevent Uranium in vent pot. Phase 3: Remove isolation blinds and locked valves installed in phase 2.</p> <p>CCF was demoted on 8/1/19 to update ITR package was made to update the drawing 333A05LS07:01 that shows wiring configuration for Safety Significant Control (SSC) ADUSCRP-905 to make function as intended. Additional drawing changes were previously captured under a CCR. Those drawings have been updated for reference.</p>	This was required by a HAZOP action item to remove nitric acid fume from the existing vent pot which is ventilated to the ammonia scrubber.	Scrap Cage	ISA-11 Scrap Uranium Processing
16558	S-1056 Scrubber (Out of Service) Inlet Transition Removal, Replacement, and Discharge Section Cover/Patch	Out of service equipment, drawing 333F02EQ07, sheet 01; To remove S-1056 inlet transition section and replace with sheet metal or similar material of approximately 44in x 44in. The removed inlet section will be decommission and/or disposition accordingly to URRS standards and procedures. In addition, to patch / cover or repair the discharge section of the scrubber with sheet metal or fiber glass or pvc or similar material.	To decommission the inlet transition section of S-1056 out of service equipment and replace with a cover plate. To ensure scrubber and/or related parts are isolated from water intrusion.	Plant Roof, Chemical Area, S-1056	ISA-01 Plant Ventilation System
16593	Demolition of 7A Filter House (FL-1060), Ductwork and Associated Equipment (Roof)	<p>This CCF is associated with the demolition and removal of out of service 7A filter house system, ductwork and associated equipment through a variety of methodologies. The equipment is located on Conversion roof platform between columns C and D and columns 2 and 3. This CCF is to remove only the mechanical portion of the system.</p> <p>Other associated CCFs include: - Electrical Demo is performed under CCF 16670 - New grating installation under CCF 16710</p>	This CCF is associated with CAPAL 100420659, SE RC-DI: Post-Startup Activities for Out of Service Equipment.	7A (FL-1060) Filter House: Conversion roof platform between columns C and D and columns 2 and 3	ISA-01 Plant Ventilation System
16600	Demolition of Out of Service 4B Filter House (FL-968), Ductwork and Associated Equipment (Roof)	<p>This CCF is associated with the demolition and removal of out of service 4B filter house system, ductwork and associated equipment through a variety of methodologies. The equipment is located on Conversion roof platform between columns D and E and columns 1 to 3. This CCF is to remove only the mechanical portion of the system.</p> <p>Other associated CCFs include: - Electrical Demo is performed under CCF 16670 - Heat Detector Removal and ITR is performed under CCF 16744 - Install new grating under CCF 16710</p>	This CCF is associated with CAPAL 100420659, SE RC-DI: Post-Startup Activities for Out of Service Equipment.	4B Filter House	ISA-01 Plant Ventilation System
16601	Demolition of Pelleting Out of Service Filter Houses (SF-1 thru 5)	<p>Demolition of out of service Pelleting sintering filter houses located on the roof (SF-1 thru 5).</p> <p>These filter houses have been isolated from service and cleaned. The Cleanout is documented per linked Related Document PSEDoc-0003437, Out of Service Filter House 4B and Pelleting Sintering Furnace Filter Houses Inspection and Clean Out Report.</p>	<p>Demolition of out of service Pelleting sintering filter houses located on the roof (SF-1 thru 5).</p> <p>These filters need to be removed from the roof so that they can be removed permanently from CFFF.</p>	Pelleting sintering filter houses SF-1 thru 5	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
16604	Demolition of Out of Service ERBIA Scrubber, Ductwork and Associated Equipment (Roof)	Demolition of Out of Service ERBIA Scrubber, Ductwork and Associated Equipment (Roof)	Demolition of Out of Service ERBIA Scrubber, Ductwork and Associated Equipment (Roof)	ERBIA Scrubber (Roof)	ISA-01 Plant Ventilation System
16610	Replacement of Bottom Plugging Station	The current bottom plugging station for line 6 (Tool #63971) is being replaced with a new station detailed on SKF-87001, Group 4. This new equipment only requires electrical and pneumatic connections, and will not be hard piped in to allow it to remain mobile if necessary. This CCF is to document the change to this station, and to convert the drawings to area specific since this was originally just used as a development plugger.	This plugger was originally a development plugger. It has been modified to be Non-Fuel Line 6 Bottom Plugger. The current bottom plugging station is old and needed to be updated with better technology and equipment. The new one has a light curtain to increase the safety for the operators.	Non-Fuel	Components
16744	Remove Heat Detector (HD-19) from Fire Protection System - Out of Service Filter House 4B	This CCF is specifically to remove the Heat Detector (HD-19) from Fire Protection System from the out of service system filter house 4B. The work will be performed per ITR (attached) PSEDoc-0003600 Other References: Mechanical demo is performed under CCF - 16600 Electrical Demo is performed under CCF - 16670	Filter House 4B system is out of service. This CCF is part of the demolition work for plant recovery, CAPAL 100420659.	Plant Roof Filter House 4B	ISA-01 Plant Ventilation System
17024	Separation of SOLX and Incinerator Honeywell Controls	Separate and upgrade controls for SOLX and Incinerator Honeywell DCS. Separate server pair (via new Virtual System) will be installed to allow independent control of SOLX and Incinerator system rather than connected directly to Conversion DCS system. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	System software is obsolete and lack of separation affects both conversion and URRS (inside) when a system has to be re-started. Also provides path forward for phase 2 and phase 3 of migration of Conversion and Outside URRS systems.	Chemical Side - ADU Control Room and SOLX Control Room	ISA-07 Solvent Extraction
17092	Fitzmill Polypak Platform for CL1	Extend the polypak platform to match that on CL5 and CL4, to allow for a polypak to come all of the way out of the fitzmill hood.	Polypak cannot currently sit on platform and also have the flap to the hood close.	CL1 Fitzmill	ISA-03 ADU Conversion
17127	VIEW Inspection Equipment (J,K,L,B,M,I,N) replacement.	In the grid area, replace existing VIEW Inspection Machines (K,I,B,J,L,M,N) with new VIEW Inspection Machines (Q,R,S,T,U,V,X) that are of similar model and have the same footprint. The new units also use the same utilities (air and electrical). This will be a 7-Phase Major Mod CCF. No SSCs are impacted. No CSEs are impacted.This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.	New View machines have been purchased and are due to arrive by the end of March 2018. This is part of the overall inspection process improvement plan (Quality at the Source) in the grid area.	Grid View Inspection	Components
17147	Install Okuma CNC lathe in the tool room.	The tool room has purchased an Okuma CNC lathe. This CCF is to mechanically install the lathe in the tool room. This CCF includes shop air and DI water connections.	Increase capabilities of the tool room.	Mechanical side tool room	Grounds

CCF	Title	Description	Justification	Location	ISA ID
17148	Install tube bending and forming equipment in the tool room	<p>A UTE model US20ED tube bender and a UTE tube end former have been purchased for the tool room. This CCF is to install the equipment in the tool room. The intent is to mechanize the bending and endforming of the UF6 Pigtail, W-dwg. 357F04ME01, while providing a part that is the same as the manually formed part in form, fit, and function.</p> <p>Note that this CCF is for installation and testing of the equipment only. A separate CCF will be issued to allow the machine formed pigtails to be used for production.</p> <p>For installation and testing, the scope of this CCF does not modify any processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, neither an upfront NCS planning meeting nor a RAF-104-10 is required.</p> <p>Parts made during the testing phase will be physically modified to preclude their use in production. For example, a hole could be drilled through the tube. When test samples are scrapped, the copper will be recycled according to standard tool room practices.</p>	The tube bender and end former will be used to mechanize the manual operations for fabrication of the UF6 pigtails. This change will reduce the labor required and thus the time required to make the parts, reduce the chance for work related repetitive action injuries, and reduce part to part variation.	The equipment is to be located in the tool room. Tables will be moved to allow installation of the bending and forming equipment.	ISA-03 ADU Conversion
17173	Repair column and bases next to scrap cage washing machine.	<p>The column next to the scrap cage washing machine that supports the calciner platform has been damaged by acid attack from the nitric acid leaking from the washing machine.</p> <p>Phase 1 will be to repair one column. Phase 2 will be to repair the other column.</p>	Repair column and bases to prevent the calciner platform and hoist for line 1 from collapsing during use. A temporary support structure design is detailed in LTR-PEUS-17-25.	Column by Scrap Cage washing machine	ISA-03 ADU Conversion
17184	Install Mezzanine to support new air handler to replace AC-11.	<p>Install Mezzanine to support new air handler to replace AC-11.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. However, an up front planning meeting with NCS is required since SSC Floor-119 is impacted by drilling holes in the floor for anchor bolt installation. A 104-10 and ITR is required.</p> <p>Phase 1 - Install Mezzanine Phase 2 - Install/Activate Heat Detectors on Fire Protection System Phase 3 - Install Lighting under Mezzanine</p>	Bulk Room is a moderation control area. It currently has a 6" chilled water lines which supply the existing air handler AC-11. A coil failure of the existing AC-11 could cause a criticality if water were to enter the moderation controlled area. This mezzanine will allow installation of a new air handler to eliminate water above the bulk room.	Area between bulk room and pellet team leaders office mezzanine	ISA-05 ADU Bulk Powder Blending
17188	Demolish out of service AC-10.	<p>Remove AC-10 so new duct work for AC-11 can be installed.</p> <p>CCF was demoted to modify how roof penetration was being closed and update the ITR.</p>	Bulk Room is a moderation control area. It currently has two 6" chilled water lines which supply air handler AC-10. A coil failure of AC-10 could cause a criticality if water were to enter the moderation controlled area. The plan is to replace the air handler to avoid an issue.	Above Bulk Room	ISA-05 ADU Bulk Powder Blending
17192	Eliminate Rod to Tray Transfer Hood and the Fuel Rod Area Quarantine Cage.	Eliminate Rod to Tray Transfer Hood and the Fuel Rod Area Quarantine Cage so new mezzanine can be installed.	The Rod to Tray Transfer Hood and the Fuel Rod Area Quarantine Cage should be removed to allow installation of new mezzanine	Rod and Pelleting area.	ISA-10 ADU Rods

CCF	Title	Description	Justification	Location	ISA ID
17203	P-1173/ P-1174 Hydrofluoric Acid Pumps Replacement With More Corrosion Resistant Design	Replace current Goulds 3298 pumps with Iwaki MXM-44 series mag drive pumps, constructed of Carbon Fiber Reinforced ETFE with 1.5" x 1.5" flanged connections. Carbon Fiber Reinforced ETFE front casing, rear casing, impeller, magnet capsule; alumina ceramic spindle and liner ring; carbon bearing; PTFE mouth ring; FKM O-Ring; and a impeller trimmed to 3.75" at 35gpm.	The current pumps fail on an annual frequency. The proposed design should result in better reliability and less opportunity for HF exposure for operations and maintenance.	Outside URRS	ISA-06 Chemicals Receipt, Handling and Storage
17214	Shorten Bus Duct 8A-8D	<p>This CCF was changed from a Pre-approved Level 0 CCF to a Major Modification CCF to allow Multiphase Startup.</p> <p>Shorten Bus Duct 8A-8D so it does not extend under valves for chilled water piping or through ladder cage to platform.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p> <p>Phase 1: Reheat Coil 20KW Load Relocated & Operational Phase 2: Store Room Lift Load Relocated & Operational Phase 3: AC-15 Load Relocated & Operational Phase 4: AC-11 Load Relocated & Operational Phase 5: Bus Duct Shortened and Operational Phase 6: Demolition of unused portion of bus duct completed</p>	Bus Duct currently extends though a ladder cage as a head bump source and across a platform as a trip hazard. The bus duct also is located under chilled water piping that is being modified. If water drips on the 480V bus duct it could be a very dangerous situation. Remove the currently unused portion of the bus duct to avoid issues.	In store room by wall between clean and contaminated area. The bus duct also extends though wall into map area.	Grounds
17285	Install Mono-Rail Hoist System on roof to support S-1030 Basket Removal	<p>Phase 1: Install Roof Penetrations for new Mono-Rail System.</p> <p>Phase 2: Install Mono-Rail Hoist System.</p>	New mono-rail hoist to eliminate need for a mobile crane to remove S-1030 scrubber baskets from roof.	On roof from beside S-1030 Platform following a path to the east of UF6 bay doors.	ISA-01 Plant Ventilation System
17287	Modify Stairs and walk way in Mono-Rail Path	Modify Stairs and walk way in Mono-Rail Hoist System path on roof to support S-1030 Basket Removal.	New mono-rail hoist is being installed to eliminate need for mobile crane to remove S-1030 scrubber baskets from roof.	Path from beside S-1030 platform and stairs in direct line South.	ISA-01 Plant Ventilation System
17288	Replace existing beam on S-1030 platform which supports grating and railing.	Replace existing W16x26 beam with a W24x62 on S-1030 platform which supports grating and railing.	The current beam is undersized to support the new work platform and hoist required to remove the S-1030 baskets.	side beam on S-1030 platform.	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
17294	Install work platform and hoist system on roof to support S-1030 Basket Removal	<p>Phase 1: Install new work platform</p> <p>Phase 2: Install bridge crane and hoist system</p> <p>Phase 3: Install Canopy</p> <p>Phase 4: Final Light Configuration</p>	<p>New platform with safety tie offs will allow elimination of existing scaffolding used during inspection and removal of baskets. New overhead hoist is being installed as partial solution to eliminate the need for a mobile crane to remove S-1030 scrubber baskets.</p> <p>Incorporate design of an elevated frame/table to set the S-1030 lid onto during basket change outs and main header nozzle inspections. The frame will be installed on the east side of the new access platform. The loading as a result of this frame/table does not adversely impact the roof loading and is enveloped by the new access platform and bridge crane weight. The frame is qualified by calculation CN-PEUS-19-04 Rev 0.</p> <p>Incorporate a canopy over the S1030 and access platform to mitigate impact of unforeseen rainfall. The canopy is designed to attach to the top rail of the platform. The loading as a result of this canopy does not adversely impact the roof loading and is enveloped by the new access platform and bridge crane weight. The wind load impact to the access platform is acceptable and within calculated margins. Incorporate attachment details to the access platform for lighting fixtures that are to be installed by CCF 17295. The platform modifications are qualified by calculation CN-PEUS-17-08 Rev 1.</p>	On conversion platform at S-1030	ISA-01 Plant Ventilation System
17295	Install electrical for S-1030 work platform and hoists.	<p>Install electrical to support new mono-rail and S-1030 platform hoist. Add lighting and receptacles for new work platform at S-1030.</p> <p>Phase 1: Monorail Hoist Operational</p> <p>Phase 2: Bridge Crane Operational</p> <p>Phase 3: All Lighting except Platform Lighting Operational, Receptacles Operational</p> <p>Phase 4: Platform Lighting Operational</p>	<p>New Platforms and hoists are being installed so we do not require a 250 ton mobile crane to remove S-1030 scrubber baskets from roof.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	At S-1030 on conversion platform on roof.	ISA-01 Plant Ventilation System
17296	Replace S-1030 Scrubber Body	Replace main body of S-1030 with new scrubber body.	Existing body is 15 years old and is nearing end of life. The existing body is made of fiberglass and has had multiple repairs since October of 2016.	S-1030 on Roof	ISA-01 Plant Ventilation System
17411	Fire Monitor Replacement	<p>This CCF will replace two fire fighting monitors. Monitor size will stay the same, but the monitor is a different configuration.</p> <p>The fire fighting monitors are located outside of fire pump house #1 and the maintenance dock. The new fire fighting monitors were selected by the emergency brigade. The monitor and nozzle meet required CE, NFPA, and FM standards.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	The upstream piping to each monitor is corroded and is a risk to the fire system. The monitors are nearing the end of their usable life and are leaking from the swivel joint while flowing water. The monitor by pump house #1 has been tagged out of service due to this deficiency.	Pump House #1 Maintenance Dock	Grounds

CCF	Title	Description	Justification	Location	ISA ID
17434	Line 5 Pellet Grinder Replacement	<p>This CCF is to replace the Line 5 Pellet Grinder and control system. This upgrade will include a new Royal Master Grinder unit, new PLC cabinet, new power cabinet and new 24 VDC solenoid valves controlled by PLC. The 480 VAC power to the system currently fed from several buckets in MCC 7709 will be reduced to a single feeder bucket.</p> <p>This upgrade will also include an updated design for the exit conveyor to account for the change in work rest blade and reg wheel connection. FME barriers are addressed via SYP-312.</p>	<p>The existing Royal Master Grinder and control system is obsolete. The upgrade will improve accuracy, serviceability and reliability.</p> <p>Work rest blade now moves with the reg wheel, introducing an additional angle to the discharge direction of the exit conveyor. A new design for the exit conveyor will be able to account for this angle and allow the pellets to transition smoothly.</p>	Pellet Grinding Line 5	ISA-08 Pelleting
17487	Tool Room Area - Relocate Cress heat treat oven	<p>(Pre-Approved Level 2 Mod, Ref CCF 17489)</p> <p>Move the Cress heat treat oven. No electrical drawing changes needed, only the arrangement drawing changes.</p>	Make room for the new Okuma CNC Lathe	Mechanical side tool room.	Components
17490	ADU Line 4 Calciner Scrubber Off-Gas Ventilation Hood Flow Monitoring / ADU Line 4 Voltage Monitor	<p>Add a flow sensor to ADU Line 4 Calciner Off-Gas Scrubber Vent hood to allow detection of loss of ventilation. Add a Voltage Monitoring Panel to allow detection of a loss of normal power to the ADU Line 4 equipment.</p> <p>Phase 1: Update Software in Line 4 SPLC</p> <p>Phase 2: Install coupling on hood and sensor in calciner scrubber hood.</p> <p>Phase 3: Voltage Sensor and Flow Sensor operational for monitoring</p>	<p>Loss of flow will be used to eventually stop hydrogen flow to calciner. This is a verification that the sensor will properly detect changes in flow to S-1030 scrubber from this hood.</p> <p>Loss of normal power to ADU Line 4 will also be used to eventually stop hydrogen flow to the calciner.</p>	<p>In the vicinity of the ADU Line 4 Calciner, including at the Scrubber Off-Gas Hood, in the overhead above the calciner, and at the ADU Line 4 SIS cabinet. Also, the voltage monitoring panel will be installed in the vicinity of ADU Line 4 Panelboard RP-400.</p>	ISA-03 ADU Conversion
17506	PIPE BRIDGE VEHICLE PROTECTION	<p>This CCF is installing bollards, barriers, and clearance bars on and around the pipe bridge in the south yard as part of the scope of ISR#5</p> <p>No SSCs are impacted.</p> <p>No CSEs are impacted.</p>	<p>The bollards are installed with subgrade foundations in order to meet the requirements of IBC 2012 for vehicle impacts.</p> <p>The barriers are installed in only a few locations in order to provide a physical and visual boundary between the travel lane and the protected columns.</p> <p>The clearance bars are hung from the overpasses in order to provide the clearance height as well as a physical warning for over-height vehicles.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	PIPE BRIDGE IN THE SOUTH YARD	ISA-06 Chemicals Receipt, Handling and Storage
17545	Re-Purpose MAP Office as Permanent DCS/Experion Controls Room	<p>Revise arrangement drawing for office area in MAP control room to be utilized as a DCS controls room.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Space is needed to store/maintain the DCS controls and ancillary equipment.	Chemical Side - Old MAP Control Room	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
17546	MAP Control Room Arrangements and Floor/Ceiling Replacement	Revise arrangements, including removal of existing non-load bearing wall (and addition of new non-load bearing wall), repair/replace flooring tiles and ceiling tiles and repair/install new wall coverings to allow use of previous MAP control room as a temporary ADU control room and future engineering/team room	A temporary location may be needed for allowing chief operators to continue monitoring and directing work for conversion lines is needed. This will provide a method to allow re-design and modernization of the existing ADU Control Room to be accomplished. EH&S Reviewers Michelle Johnson Cynthia Logsdon Justin Williams David Wagoner Rodney Likes	Chemical Side - Old MAP Control Room	ISA-03 ADU Conversion
17548	Demolition of Old MAP Control Room Components	Removal of non-function equipment from OLD Map Control Room	Space is needed for use as temporary ADU Control Room and future Permanent location of backup ADU Control room and team meeting area This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. However, an up front planning meeting with NCS was requested to document the review.	Chemical Side - Old Map Control Room	ISA-03 ADU Conversion
17549	Revise/Replace Lighting scheme, lights and receptacles in old Map Control Room	Replace/Relocate lighting, switches and receptacles in old MAP Control Room, Office, and closet.	Lights need to be updated to new specifications and new locations, plus receptacles need to be identified and added/relocated. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	Chemical Side - Old Map Control Room	Grounds
18002	Change to the ECG machine P&ID to allow the use of more corrosion resistant Tubing fittings	Change the P&ID drawing to add a note permitting the use of more corrosion resistant fittings where the fittings are subject to exposure to the electrolyte and specify a version of stainless steel fittings for use on the air lines inside the machine enclosure. The scope of this CCF does not modify any processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, neither an upfront NCS planning meeting nor a RAF-104-10 is required.	Reduce machine downtime and maintenance labor required to periodically replace the failed pneumatic fittings.	Through out the plant.	Clean Side Rod Area
18011	Conversion Line 5 Decanter Frame Replacement	Replace the line 5 decanter frame with the new frame design.	This will make line 5 match all the other lines with the new improved design.	Conversion Line 5 Decanter	ISA-03 ADU Conversion
18035	Wireway Installation for MCC-2215	Installation of Wireway to support multiple feeders from MCC-2215 No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.	Buss Duct 07E-07G is being replaced with MCC-2215 and new power connection routes are needed	Chemical Side - Pelleting	Grounds
18040	Relocation of Power Feed for Furnace 5B from Buss Duct 07C-07D to MCC-2223	Refeed power from Buss Duct to MCC No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.	Accessibility of LOTO and reduced operator exposure to potential voltage excursion	Chemical Side - Pelleting	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
18045	Extend Perforated Sheet on Pellet Drying Ovens for Lines 1, 3, 4 and 5	<p>Replace the existing 16 GA, 304 ss perforated sheets (holes: 1/4" round, staggered. hole centers: 5/16") installed in the pellet drying ovens with a longer perforated sheet of the same material and perforation type. This will be a multi-phase CCF to allow for the implementation of the extended sheets on pellet lines 1, 3, 4 and 5.</p> <p>The existing perforated sheet installed is approximately 35.5" in width and 60" in length. The length of the perforated sheet matches the length of the online pellet dryer. Any gap between the perforated sheet and the online dryer sheet metal end covers at the current length can allow pellets to fall beneath the perforated sheet to the bottom of the drying oven which is not desired.</p> <p>The new perforated sheet will extend beyond the entry and exit ends of the online dryers to eliminate the potential gaps which allow pellets to fall beneath the perforated sheet. The new perforated sheet will extend approximately 4 to 6" beyond the entry and exit of the online dryer. The entry and exit ends will need to be field fit at installation.</p>	<p>Eliminate gaps which allow pellets to fall into bottom of online dryer beneath perforated sheet in the existing configuration.</p> <p>This modification is similar to the modification which was made on pellet line 2 per CCF-17410.</p>	ADU Pelleting Online Pellet Tray Drying Oven between Grinding and D&V station (Lines 1, 3, 4 and 5)	ISA-08 Pelleting
18064	Install Dehumidifier for IFBA in Temporary Location	<p>Install a Dehumidifier skid to condition the air in the IFBA manufacturing area. The initial installation is being done in a temporary location to allow it to be in operation quicker. Condensate from unit will be pumped into contaminated sump. A HEPA filter will be installed between return air and dehumidifier.</p> <p>Demoted to add two phases to the CCF.</p> <p>Phase 1 - Install dehumidifier hardware with temporary platform for main disconnect access.</p> <p>Phase 2 - Install permanent work platform for main disconnect access.</p> <p>Phase 3 - Install insulation on outside duct work</p> <p>Changes made between initial submittal and Demotion include the following:</p> <p>1) Secondary containment added around condensate pump</p> <p>2) Level switch to disable dehumidifier if condensate level detected in secondary containment</p> <p>3) Aerosol testing ports added before and after HEPA filter</p> <p>4) Phasing for Insulation of outside duct work and Platform</p> <p>5) Change to duct support material length to obtain proper elevation.</p> <p>6) Breaker location change due to existing circuit</p>	IFBA Coater pump down time is increases when the area humidity is increased. Add a dehumidification skid to reduce area humidity.	IFBA	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
18077	Install Air Compressors, Air Dryers, and Receiver Tank For Plant Air	<p>This CCF will cover the installation of (2) air cooled, oil free rotary screw full featured air compressors with an integral dryers, (1) new compressed air receiver tank, and (1) air compressor sequencer. The CCF will be a multi-phase CCF consisting of (4) phases.</p> <p>Phase 1: Air Receiver tank and Piping Installation Phase 2: Atlas Copco ZT 315 FF VSD Air Compressor Installation Phase 3: Atlas Copco ZT 250 FF VSD Air Compressor Installation Phase 4: Air Compressor Sequencer Installation</p> <p>Phase 1: Set the air receiver tank on the equipment pad. Fabricate and install a 6" air header from the air receiver tank to the proposed compressor location near the IFBA dryroom skid. Fabricate and install a 6" air header from the receiver tank to connect to the (2) 3" plant instrument air headers.</p> <p>Phase 2: Form and install an equipment pad for the ZT 315 FF VSD Air Compressor. The unit is suitable to be installed outdoors under cover. The air compressor will be located on the south side of the IFBA dryroom skid. Install a 480V power feed to the new compressor, and a 120V feed to support heat tracing of the drains. Fabricate compressed air piping to connect from compressor outlet to the newly installed air header. Connect condensate drains from air compressor to IFBA dryroom skid condensate drains. Install cover over air compressor.</p> <p>Phase 3: Form and install an equipment pad for the ZT 250 FF VSD Air Compressor. The unit is suitable to be installed outdoors under cover. The air compressor will be located on the south side of the IFBA dryroom</p>	<p>The new Atlas Copco air compressors will replace (2) older Kobelco air compressors located in Compressor Room #1. The 300 HP Kobelco compressor failed while in service, and was not economical to repair. The 250 HP Kobelco compressor is nearing the end of usable service. The air dryers that service the Kobelco air compressors have exceeded their useful life and are obsolete designs. Facilities has funded the replacement of the air compressors and air dryers.</p>	Compressor Room #2 and IFBA Dryroom Skid	Grounds

CCF	Title	Description	Justification	Location	ISA ID
18078	Boiler House #2 (North American Boiler House) Demolition	<p>This CCF will cover demolition of equipment, piping, and electrical in Boiler House #2 (North American Boiler House). The demolition will be done to prepare the boiler house for installation of the new boilers and boiler auxiliary equipment. The demo will be covered under a two phase CCF.</p> <p>Phase 1 will cover installation of a rental water softener to feed the Powermaster and Rental boilers. The rental water softener is necessary since the existing water softeners are located in Boiler House 2. The existing softeners must be demolished to allow for new boiler installation under a separate CCF.</p> <p>Phase 2 will consist of the subsequent demolition of Boiler House 2. During demolition and subsequent installation, the steam needs of the plant will be supplied by the rental boiler and the Powermaster boiler.</p> <p>Major equipment to be removed under this CCF will include North American Boiler #1 (BO-1157), North American Boiler #2 (BO-1188), Deaerators (DE-1157 and DE-1188), Boiler Feed Pumps (P-1157A & B, P-1188 A & B), Blowdown Separators (S-1157 and S-1188), and Water Softeners #1 and #2.</p> <p>Piping to be removed under this CCF will include: 8" steam to valve on header, natural gas and fuel oil to isolation valves in the Powermaster boiler house, condensate return piping for 1143 tank, and city water piping to isolation valves in the still area.</p> <p>Electrical will be demolished from the major equipment listed above to</p>	<p>The North American boilers are over 30 years old and have exceeded their usable life. Numerous refractory repairs have been made over the last 12 months that have exceeded \$100K in cost. Both boilers require additional upgrades and repairs including replacing a second feed water patch on the pressure vessel and burner replacement. Since the feed water patch calls into question the pressure vessel integrity, it is no longer economical to make the repairs.</p>	Boiler House #2 (North American Boiler House)	Grounds
18083	Active Cooling Laser X Main Control Panel	<p>With this CCF, we will install a compact cabinet cooler (air-to-air flush mount) to the Laser X main control cabinet. This 120Vac cabinet cooler (0.6A) is like the one installed on Oxide Coater 2 and will take the place of an existing 120Vac fan (0.3A). The existing 120Vac circuit will service this new cabinet cooler.</p> <p>This change will not affect any SSCs. No processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form are modified by this configuration change.</p> <p>NCS upfront planning meeting and RAF-104-10 is not required.</p>	<p>Per Eng WO 808356</p> <p>Laser X main control cabinet needs active cooling according to the outside vendor. Currently there is a single fan and exhaust. The single fan is not providing adequate cooling and are now experiencing increasing failures related to temperature. Axis faults.</p>	Laser X	Components
18086	Relocation of ADU Rod Line 3 Seal Welder, Girth Welder and Maintenance Weld Receptacle	Relocate power feed from Buss Duct 07E-7G to MCC-2215	<p>Elimination of obsolete Buss Duct and to address grounding and safety concerns with accessing buss duct cans</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	Contaminated Side - ADU Rod Lines	ISA-10 ADU Rods
18087	Relocation of power feed for Sintering Furnace 3B	Relocate power feed from Buss Duct 07E-7G to MCC-2215	<p>Elimination of obsolete Buss Duct and to address grounding and safety concerns with accessing buss duct cans</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	Contaminated Area - Pelleting	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
18093	Remove Nitric acid lines and equipment from IFBA and ERBIA.	This change will: Remove old section of piping of the nitric acid line to Erbia and IFBA. Phase 1 - Cut and cap line feeding Nitric Acid to Erbia and IFBA Phase 2 - Demo Nitric acid lines to IFBA and ERBIA	Large quantities of Nitric Acid are not needed to these to areas. In the event they need Nitric Acid, it can be brought in small quantities to limit/prevent exposure.	Above Scrap Processing area in IFBA at AE-7092 Mezzanine - T-7153 Nitric Acid Airbreak Tank - Upper Platform ERBIA - 2nd floor.	ISA-14 IFBA Processing
18114	View Inspection Equipment (Voyager 18, Bazic 12, 1220) Replacement	In the CE Grid Area, replace existing View Inspection Machines (Voyager 18, Bazic 12, 1220) with updated New/repurposed View Inspection Machines (W, O, N). The replacement units have the same utility requirements (air, electrical) This will be a 3-Phase Major Mod CCF. Qualification(s) (QA-004) will be completed by Product Assurance outside the scope of this CCF. No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Refer to attached TAF-500-10 for RAB review.	New View machines have been purchased and are due to arrive by the end of March 2018. This is part of the overall inspection process improvement plan (Quality at the Source) in the grid area.	CE Grid Area	Components
18117	Install Strap Marking Station in Grid Build Stations at Laser #4	Install, test, and startup a new strap marking station at the Laser #4 Grid Build Station. The existing workbench in the area will be replaced with an L-Shaped workbench and the new grid marking station will be mounted on top of the bench. Installation of the new workbench will require moving some PC stands, a light pole, and may require minor modification/redirection of some conduit. 418F08EL01 is linked to show the Bill of Materials, Backpanel Layout and Electrical Elementary to support the strap marking equipment. 418F08EQ01 is linked to detail the dimensions of the strap marking equipment.	This pre-approved modification is considered to be a minor modification for these reasons: - No SSCs are affected by the changes - No SNM is involved - No affect on safety basis - The modification does not require a revision to Plant License SNM1107 - NRC pre-approval is not required	Within Bay A-B and 16-17 near Laser #4	Components
18118	Install Strap Marking Station in Grid Build Stations at Laser #5	Install, test, and startup a new strap marking station at the Laser #5 Grid Build Station. The existing workbench in the area will be replaced with an L-Shaped workbench and the new grid marking station will be mounted on top of the bench. Also a 34"x72" table will be replaced with a 24"x72" table to make room for new L-shaped table. Installation of the new workbench will require moving some PC stands, a light pole, and may require minor modification/redirection of some conduit. 418F08EL01 is linked to show the Bill of Materials, Backpanel Layout and Electrical Elementary to support the strap marking equipment. 418F08EQ01 is linked to detail the dimensions of the strap marking equipment.	This pre-approved modification is considered to be a minor modification for these reasons: - No SSCs are affected by the changes - No SNM is involved - No affect on safety basis - The modification does not require a revision to Plant License SNM1107 - NRC pre-approval is not required	Within Bay A-B and 17-18 near Laser #5	Components

CCF	Title	Description	Justification	Location	ISA ID
18119	Install Strap Marking Station in Grid Build Stations at Laser #6	<p>Install, test, and startup a new strap marking station at the Laser #6 Grid Build Station. The existing workbench in the area will be replaced with an L-Shaped workbench and the new grid marking station will be mounted on top of the bench.</p> <p>Installation of the new workbench will require moving some PC stands, a light pole, and may require minor modification/redirection of some conduit.</p> <p>Fire Extinguishers and eyewash will be relocated along the same wall under guidance from Industrial Safety Engineering.</p> <p>418F08EL01 is linked to show the Bill of Materials, Backpanel Layout and Electrical Elementary to support the strap marking equipment.</p> <p>418F08EQ01 is linked to detail the dimensions of the strap marking equipment.</p>	<p>This pre-approved modification is considered to be a minor modification for these reasons: - No SSCs are affected by the changes - No SNM is involved - No affect on safety basis - The modification does not require a revision to Plant License SNM1107 - NRC pre-approval is not required.</p>	Within Bay A-B and 17-18 near Laser #5	Components
18120	Sub 1 AC Unit Replacement	<p>Replace current 25 Ton package air condition unit with new upgraded 25 Ton AC Unit. Both AC Units are similar, but Trane don't make the current AC Unit with R-22 refrigerant any more. No electrical supply power will change.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	<p>Current AC unit have a history of failing many times. Sub 1 depends on AC unit to cool. If Sub 1 overheats, it will shutdown the plant.</p>	Sub 1 Ac Unit	Grounds
18126	Repair Lime Silo steel bracing	<p>This CCF modifies the lime silo structural framing. Part of the x-bracing has been removed or notched, which compromises the structure's seismic capacity. This part of ISR 9</p> <p>Work will require temporary unbolting of conduit, vibrator switch box, and timer below it prevent heat from welding affecting these items.</p> <p>A small portion of the roof will be temporarily removed/modified to be able to access to the structure for the modification. The project will be using a single ply EPDM membrane sheet that will be adhered with a form flashing that will form to the ribs of the deck and create a water tight seal during the modification. The roof will be repaired after steel bracing modification complete.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	<p>A new drawing is created to as-built the lime silo, as well as show the modification.</p> <p>The modification is performed in Westinghouse calc: CN-PEUS-18-01</p>	T-1117 lime silo, plant south	ISA-06 Chemicals Receipt, Handling and Storage

CCF	Title	Description	Justification	Location	ISA ID
18128	T1&T2 Roof Sections Replacement	Install a new roof in the T1 & T2 areas, the roof will leave the old roof PVC membrane in place and overlay a layer with foam board, plywood, sealing the joints. A 50 mil rubber membrane will be overlaid on the plywood. The V2T roof vent system will be installed bonding the membrane to plywood. Slip resistant walking pads will be installed in the areas that have heavy foot traffic	The Existing T1 & T2 roof has exceeded its useful life by several years and there have been several leaks in the last couple of years. The roof is overtop the chemical side of operations and is classified IROC (Safety Critical) due to concerns of water leaking over chemical production.	T1&T2 Roof Sections	ISA-03 ADU Conversion
18137	Boiler Replacement Project - Installation of two boilers	Install two new boilers. Boilers are Cleaver Brooks Model CBEX-E 200-600-150ST This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required. Phase 1 - Boiler #1 Phase 2 - Boiler #2	Existing North American boilers have exceeded their useful life.	Boiler House #2	Grounds
18138	Outside Fire Protection System Upgrades - Post Indicator Valves	This project will upgrade several portions of the outside fire protection system. The project will consist of three phases. Phase 1 will add PIV #10A next to PIV #10; and Phase 2 will add PIV #37A next to PIV #37; Phase 3 will add PIV #26A to PIV #26. No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.	For the fire loop, several of the PIVs do not fully close and still allow flow at an unacceptable rate when the valve is fully closed. Since taking the PIVs out and replacing them is inefficient, we will simply put in another PIV near it in line and call it "#A". In order to isolate sections of the loop efficiently, we have chosen 3 locations / phases for these PIV installations.	Phase 1: In front of pump house #1, PIV #10 Phase 2: Near pump house #2, PIV #37 Phase 3: Near walkway in front of trailer 5, PIV #26	Grounds
18140	FACTS Loop Circulation Pump Controls Modification	Modification of FACTS Loop Circulation Pump Control System to add Emergency Stop Pushbuttons. This modification is for the electrical system for the FACTS loop pump, and is outside of the system boundary as described in the CSE. As such no systems or components are affected that contain, measure, handle, transport, process, or secure Uranium in any form. An up-front NCS planning meeting and RAF-104-10 are not required.	Identification by Industrial Safety Review of need for E-Stop pushbuttons in the circulation pump control circuit.	Product Testing LAB FACTS Loop	ISA-18 Laboratories
18144	Final Assembly Freepath Inspection Station Controls Upgrade	Final Assembly Freepath Inspection Station Controls Upgrade. The scope of this project is to replace the following obsolete equipment, the Allen Bradley PLC5, AB Servo Drive and Motor, the DOS based PC Maintenance loader, and the Wonderware PC hardware and software to bring them up to the current Columbia Plant control System standards. The new server based Wonderware PC platform will allow data to be also saved on the server for automatic backup of program and data capture. Also included is the rerouting of the 120VAC receptacle and lighting power feeds which currently run in the same wire tray as the control wires. This AR includes funding to support engineering costs (mechanical, electrical etc.), costs based on the Glenmount quote for: fabrication, bench testing start-up assistance and software costs.	Reference PRF-1002049. This system uses an old IBM286/386 PC that Maintenance uses to troubleshoot the system and it is often tedious to make the 2 systems communicate. There are 3 main reasons this should be replaced: 1. Obsolescence 2. Single point vulnerability 3. Very few personnel at CFFF are familiar with trouble shooting this system and spare parts are hard to attain	Final Assembly	ISA-17 Final Assembly

CCF	Title	Description	Justification	Location	ISA ID
18152	Ribbon Blender ECO Assist, Blender and Gantry Mod. Follow On	Phase 1 - Ribbon Blender ECO Assist, Blender and Gantry Mod. - PLN1 Phase 2 - Ribbon Blender ECO Assist, Blender and Gantry Mod. - PLN2 Phase 3 - Ribbon Blender ECO Assist, Blender and Gantry Mod. - PLN3 Phase 4 - Ribbon Blender ECO Assist, Blender and Gantry Mod. - PLN4 Update Phase 5 - Ribbon Blender ECO Assist, Blender and Gantry Mod. - PLN5	ECOs are difficult to complete and puts the operators at risk for stress and strain type injuries and worse. The gantry system (as demonstrated on PLN4) eliminates the majority of those risks.	Pelleting Lines 1-5, Ribbon Blender Hoods.	ISA-08 Pelleting
18154	Mechanical Area Sprinkler Riser "B"	Provide wet pipe sprinkler additions in the following area: ?QC Receiving/Inspection Offices These systems are to be fed from the fire sprinkler supply, as fed from Riser ?B?, and any fire alarm interfaces to be made to the central Fire Alarm Control Panel per plant standards. Per EH&S: No asbestos testing was required for this area. No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	Mechanical Area Sprinklers per NFPA 13	Mechanical Area: QC Receiving/Inspection Offices	Grounds
18156	PE/Met Lab fire detection	Provide smoke/heat detection throughout the PE/Met lab area. Pre-Approved Mod level 2 based off of CCF 17350. No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	There is currently no smoke or heat detection throughout the PE/Met Lab area as required per NFPA 72. Fire Protection Program Excellence Project	PE/Met Lab	ISA-18 Laboratories
18157	IT/Chem Lab fire detection	Install fire detection per NFPA 72 throughout IT surrounding offices, hallway outside IT, the observation hallway, and Chem lab. Pre-Approved Mod level 2 based off of CCF 17350. No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	There is a lack of fire detection in the surrounding IT offices and Chem lab. Fire Protection Excellence Project and regulatory requirement.	Surrounding IT offices and Chem lab	Grounds
18167	Oxide Coater 1 Power Supply and Coil Banks Upgrades A, B & C	The scope of this project is to upgrade the Oxide Coater 1 Power Supplies and Coil Banks on A, B, & C units. Note: CCF was cancelled on 11/25/19 because Modification type was incorrect. Should have been Pre-Approved Level 2. CCF is being sent for proper approvals based on type. C2 DAP electrical drawing changes will be attached.	Current Powers Supplies and Coil Banks A & B are obsolete. Reference PRF1001101. Upgraded Charlie unit has had improvements and updates identified that are needed and will also be upgraded. All three Power Supplies and coil Banks will then be the same. This is a Pre-Approved Mod - Level II	Tube Prep	Components

CCF	Title	Description	Justification	Location	ISA ID
18168	Modify Utilities Connections and Install New GX5250 Dry Screw Pump on Coater #5 Roughing Pump A for in Process Testing	<p>Install GX5250 Dry screw pump and operate for testing</p> <p>This will require:</p> <p>1) Install Edwards GX5 250 Dry Scroll pump on mezanine above coater #5. piping into the roughing pump and the discharge from the pump will require change per the piping plan drawing.</p> <p>2) Modify chiller water supply and return piping on mezzanine above coater #5 to for connecting cooling lines to pump.</p> <p>3) Modify argon supply piping on mezzanine above coater #5 for connecting argon purge lines to pump.</p> <p>4) Electrical changes will replace existing MCC Bucket MCC 7175-2F with a new control configuration to support the electrical requirements of the new pump GX5250. Additional Changes will involve adding (2) new Pump Digital Status Alarms to the existing Coater #5 PLC I/O spare inputs. Changes will also include updating the Coater #5 Process Diagram and Alarm Display to incorporate the (2) New Pump Status Alarms. In addition a new Operator Interface for Acknowledging Pump Alarms and monitoring will be installed at the Coater #5 Control Panel.</p> <p>Reference PME work order# 802624</p>	Current roughing pumps are obsolete and the amount of spare pumps is dwindling. Old pumps have been rebuilt so many times that production is experiencing performance issues on many of the remaining pumps.	ON Mezzanine behind Coater #5	ISA-14 IFBA Processing
18183	Remove Washing Machine in Scrap Cage	<p>Remove existing washing machine.</p> <p>CCF was demoted to change the following:</p> <p>1) Add drawings 333F05HV01, 333F05HV02 and 333F05ST01 to the CCF.</p> <p>2) Incorporate changes made during CCF 18-108 which required modification to drawing 333F02PI03, 333F05HV01, and 333F05HV02.</p> <p>The changes do not impact the ITR.</p>	The existing washing machine is out of service and is no longer being used. Free up floor space for other activities.	Scrap cage by control Room	ISA-11 Scrap Uranium Processing
18187	Replace existing liquid nitrogen cooled INVIVO counting equipment with electronically cooled INVIVO counting equipment.	<p>Remove existing liquid nitrogen system, oxygen sensors and counting equipment. Replace with electronically cooled INVIVO counting equipment.</p> <p>The processes does not contain, measure, handle, transport, process, or secure Uranium in any form.</p> <p>The floor in the INVIVO room will not be disturbed during implementation of this CCF.</p>	Liquid nitrogen poses an asphyxiation hazard. Removing liquid nitrogen improves safety in the room.	In INVIVO Room.	Miscellaneous
18188	Repower INVIVO Counting Chamber door motor and equipment from Emergency Power to Uninterruptable Power.	<p>Repower INVIVO Counting Chamber door motor and equipment from Emergency Power to Uninterruptable Power.</p> <p>The processes does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	Counting equipment will be cooled electronically and can not withstand a loss of power for an extended period of time without a extended restart period. The counting chamber door should work even if emergency power is lost to enable personnel exit from the chamber.	INVIVO Room	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
18189	1st FL IFBA Area Speaker Additions - Part 1	Pre-approved Level 2 Mod Add speakers to the 1st Floor IFBA area for the following locations: - IFBA Lobby - IFBA Lobby Stairwell - IFBA South Stairwell - IFBA Dock 9	Fire Improvement Excellence Project	IFBA	Grounds
18190	1st FL IFBA Area Speaker Additions - Part 2	Pre-approved Level 2 Mod Add speakers to the 1st Floor IFBA area for the following locations: - IFBA Instrument Tech Shop - Tray Repair Room - Boron Waste & Equipment Airlock - IFBA/Erbia Maintenance Office	Fire Improvement Excellence Project	IFBA	Grounds
18200	Addition of Flammable Cabinet for IFBA Spent Coater Vacuum Pump Oil	<p>Currently the oil is stored in 5 gallon buckets placed on the floor; and is close in proximity to a zirconium operation (IFBA scrap rod lathe). The oil in use is Leybonol LVO 100. Based on the flash point of the oil, the material is a class IIIB liquid and must be stored in a flammable liquid storage cabinet per NFPA 30</p> <p>Per TA-500, rev. 37 an Independent Technical Review (ITR) is required per procedure FA-114 if a system or component being modified would result in NCS significance, changes to the controls, and/or alter the Operating Conditions described in the applicable CSE. An ITR will not be performed for this CCF.</p>	<p>A flammable liquid storage cabinet is necessary for the storage of the used oil (Leybonol LVO 100) which is used in the IFBA area vacuum pumps. Currently the oil is stored in a quantity of 8, 5 gallon buckets placed on the floor. The used oil is a Class IIIB liquid and must be stored in a flammable liquid storage cabinet per NFPA 30, which we commit to following in our license SNM-1107S. Additionally, the used oil is stored ~6ft from zirconium waste storage. The close proximity of the zirconium (ignition source) to the buckets which contain the volume of used oil has the potential for a small zirconium flash/pop to initiate a large fire.</p> <p>Definition and classification of flammable and combustible liquids are addressed in Subsection 3.3.33 and Chapter 4 of NFPA 30. A flammable liquid is defined as a liquid whose flash point does not exceed 100°F, when tested by closed cup test methods, while a combustible liquid is one whose flash point is 100°F or higher, also when tested by closed cup methods. These broad groups are further classified as follows:</p> <p>Class IA-Flash Point less than 73°F; Boiling Point less than 100°F Class IB-Flash Point less than 73°F; Boiling Point equal to or greater than 100°F Class IC ? Flash Point equal to or greater than 73°F, but less than 100°F Class II ? Flash Point equal to or greater than 100°F, but less than 140°F Class IIIA ? Flash Point equal to or greater than 140°F, but less than 200°F Class IIIB ? Flash Point equal to or greater than 200°F</p> <p>The safety data sheet for Leybonol LVO 100 provides a flash point of 482°F using the Cleveland open cup method. While closed cup methods</p>	Location is column 106 F	ISA-12 IFBA Fuel Rod Manufacturing
18204	VIPER Internals drawing for Gosgen 15x15 German fuel VIPER Test	Create a drawing (218F01EQ45) for the VIPER Internals for the 15x15 German fuel design test for the Gosgen reactor plant using flow housing drawing 218F01EQ39 Rev 2. New lower and upper core plate assemblies will be fabricated per the drawing.	A new 15x15 German fuel design will be testing as a single assembly in the VIPER Loop and requires a new drawing so that test setup can be documented and appropriate simulated core plates can be fabricated.	PE Development Lab - VIPER Loop	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
18205	Installation and Cutover of SOLX C200 to C300 Processors and Consoles	<p>Install C300 controllers and cabinet for SOLX in Control Room. Replace communication modules to remote racks to permit communication with C300 controllers. Connection of C300 controllers to upgraded and isolated Honeywell Experion system. Replacement of existing consoles (including stations) with new Console System.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Existing C200 and ControlNet communication is nearing the end of support. This provides a path forward for continued support.	Chemical Side - Inside URRS	ISA-07 Solvent Extraction
18206	Installation and Cutover of Incinerator C200 to C300 Processors and Stations	<p>Install C300 controllers and cabinet for Incinerator. Replace communication modules to remote racks to permit communication with C300 controllers. Connection of C300 controllers to upgraded and isolated Honeywell Experion system. Replacement of existing stations with new stations (for use with upgraded Honeywell DCS).</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Existing C200 and ControlNet communication is nearing the end of support. This provides a path forward for continued support.	Chemical Side - Inside URRS	ISA-13 Low Level Radioactive Waste Processing
18207	Install Particle Size Analyzer in the Erbia Lab	<p>Install a Particle Size Analyzer in Erbia Lab for the Pellet Low Density Investigation. The analyzer will require instrument air and 120 VAC power. The powder samples are tested using a dry feeder system which is under vacuum. The vacuum system uses our plant standard Nilfisk vacuum and filter system. The analyzer will be connected to ventilation system 9405.</p> <p>The Analyzer also has the capability of testing liquid suspended solids. This requires a self contained feed and drain system utilizing containers. The liquid testing system will not be implemented undejavascript;;r this CCF.</p>	The plant needs this system to perform the Pellet Low Density Investigation.	Erbia Lab	ISA-18 Laboratories
18208	Rod Area Welding Receptacle and Spare (Cable Tray) Power Relocation	<p>Relocate Power Feed for Rod Area Welding Receptacle and Spare (Cable Tray) Power from Buss Duct 7C-7D to MCC-2223</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Power Feeds are being relocated to eliminate use of Buss Duct	Chemical Side - Pelleting	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
18210	Modify conversion platform stairs & ladders to provide a minimum of 3 inches of clearance above existing roof.	<p>STAIRS</p> <p>1)Stairs north side, west end ? Cut bottom off the stair stringer to a height at least 3" above the highest point of the existing roof. This will require the removal of the lowest step from the stairs. The second step (which will become the lowest step) is currently approximately 11-1/2" from the existing roof, one the new roof is in place, the height will be approximately 10-1/4"</p> <p>2)Stairs north side, center of platform ? Cut bottom off the stair stringer to a height at least 3" above the highest point of the existing roof. The bolts holding the lowest step are currently approximately 4-1/4" above the existing roof. The cut should be made leaving at least 1" of steel below the bolt centerline.</p> <p>3)Stairs north side, catwalk (turned 90 degrees) - Stairs are being removed under CCF-17333.</p> <p>4)Stairs east side, north end ? The bottom of the stairs are above the 3" of clearance required, however the 3x3 angle iron used for bracing needs to be cut at a diagonal to provide 3" of clearance above the existing roof.</p> <p>5)Stairs east side, filter platform (turned 90 degrees facing north) ? Cut bottom off the stair stringer to a height at least 3" above the highest point of the existing roof. The bolts holding the lowest step are currently approximately 4-3/4" above the existing roof. The cut should be made leaving at least 1" of steel below the bolt centerline.</p> <p>6)Stairs east side, near AC-5 ? See drawing 703F03ST02-18xxx,C1. Cut bottom off the stair stringer to a height at least 3" above the highest point of the existing roof. The bolts holding the lowest step are currently approximately 4-3/4" above the existing roof. The cut should be made leaving at least 1" of steel below the bolt centerline.</p> <p>7)Stairs east side, just east of 1030 scrubber ? Cut bottom off the stair</p>	<p>The T1 & T2 roof areas have exceeded the useful life of the roof and are to be replaced under CCF-18128. The roofers need a minimum of 3 inches of clearance between the existing roof and items like stairs, which are cantilevered off the conversion platform and float above the roof, to put the new roof in place. There are currently nine sets of stairs on the conversion platform; one of those sets of stairs is in the process of being removed under CCF-17333. Of the remaining 8 sets of stairs only one has the necessary 3" of clearance, the remainder must be altered to provide the required clearance. In addition to the stairs there are two ladders that need to have the lower rails cut off to provide clearance.</p>	Conversion Platform	ISA-03 ADU Conversion
18213	Install electrical service including concrete pad outside, piping to Contaminated Waste for condensate and duct work to support Permanent Dehumidification skid for IFBA.	<p>Install electrical service, piping to Contaminated Waste for Condensate and Duct work to support Permanent Dehumidification skid for IFBA by Dock 9. Water generated by skid is being piped to contaminated sewer. Duct work is being installed to direct the conditioned air to each of the coaters.</p> <p>All of this CCF is being done to support the permanent installation.</p> <p>This process, system or component do not contain, measure, handle, transport, process, or secure Uranium in any form.</p> <p>Phase 1: Installation of Concrete Pad, Out Door Power Panel and Electrical Service to Panel</p> <p>Phase 2: Installation of Condensate line to Contaminated Waste Sump, heat tracing and insulation of line.</p> <p>Phase 3: Installation of Duct Work and Door panel at Dock 9 for future use.</p>	<p>All this work is pre-work to allow the permanent installation of the Dehumidification skid for IFBA. Work is being separated so it can be completed prior to the skid being delivered to reduce installation time.</p> <p>Humidity is causing coater extended coater cycle times. Reducing humidity in IFBA will increase the amount of coater runs the area can produce.</p>	By Dock 9 in IFBA	ISA-14 IFBA Processing
18218	Remove Pellet Crusher and ICP-MS from the Erbia Lab	Remove Pellet Crusher and ICP-MS from Erbia Lab including ventilation and electrical services.	These items are no longer used or required by production or the Erbia Lab.	Erbia Lab	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
18222	Temporary Location for Line 5 Grinder	<p>Temporarily install new Grinder for Pellet Line (PL) 5 in the Dock 1 laydown area for general testing and evaluation purposes. Control panel and electrical panel will also be staged next to the grinder.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Utilizing the Dock 1 laydown area provides a controlled environment suitable for additional testing of the controls of the grinder, minimizing future discoveries once grinder is installed in PL 5.	Dock 1 Laydown Area	ISA-08 Pelleting
18225	New Boiler House #2 Speaker Addition	<p>Pre-approved Level 2 Mod</p> <p>Install speaker/horn in New Boiler House #2</p>	North American Boilers 1 and 2 are being replaced with new Clever-Brooks Boilers. The entire boiler house will be dismantled and rebuilt.	Boiler House #2	Grounds
18226	New Boiler House #2 Manual Pull Station and Heat Detector Addition	<p>Pre-approved Level 2 Mod</p> <p>In the New Boiler House #2, Install Manual Pull Station and Heat Detector(s) and implement all necessary programming to support the installation.</p>	North American Boilers 1 and 2 are being replaced with new Clever-Brooks Boilers. The entire boiler house will be dismantled and rebuilt.	Boiler House #2	Grounds
18227	Bulk (Powder) Container Replacement	Introduce and updated bulk container to replace the fleet of existing containers.	We are no longer able to procure containers from the previous manufacturer and the new manufacturer uses tooling and techniques that result in a slightly different container.	CFFF, Bulk Blending	ISA-05 ADU Bulk Powder Blending
18236	Modify Pellet Line 4's Sloped Tray Conveyor Pans	<p>The sloped tray conveyor pans which were previously installed on pellet line 4 per CCF 17315 were the initial design. Based on feedback from this original installation the design implemented on pellet lines 1, 2, 3 and 5 (CCFs 17342, 17343, 17344 and 17345 respectively) incorporated a sloped transition pan beneath the tray indexer and the straight conveyor section between the tray stacker and pellet online dryer entrance included a funnel which allowed operations to move pellets that fall onto the slope pans into a polypak that is connected via a hose on the discharge side of the funnel. The existing detailing funnel which is mounted to the conveyor bracket near the tray indexer on line 4 and is currently routed to a polypak will be removed and replaced with a newly designed detailing funnel which will be routed into the sloped straight conveyor section between the tray indexer and the pellet online dryer entrance. The existing design detail funnel was removed on lines 1, 2, 3 and 5. A separate CCF will be written to install the new design detail funnel on lines 1, 2, 3 and 5 to allow lines 1-5 to have the same configuration.</p> <p>Scope of modifications for this CCF are for Pellet Line 4 Only: Item 1-Add sloped transition section beneath the tray indexer and the first pellet tray conveyor section Item 2-Modify the existing straight conveyor section between the tray stacker and pellet online dryer entrance by adding a funnel which discharges to the scrap polypak Item 3-Replace existing detailing funnel which drops to polypak with new design detailing funnel that is routed into the modified sloped pan (Item 2)</p> <p>Per TA-500 rev. 37 an Independent Technical Review (ITR) is required per</p>	<p>These modifications will update the tray conveyor pan design implemented on pellet line 4 to the latest configuration which is implemented on lines 1, 2, 3 and 5.</p> <p>The installation of the newly designed detailing funnel will allow operations to be able to detail trays in the manner that they traditionally have while eliminating the need to pick up pellets that fall into the sloped pan since the sloped pan will be modified to include a funnel like lines 1, 2, 3 and 5 have.</p>	Pellet Line #4 at Pellet Tray Conveyor between Grinder and D&V Station	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
18237	Install new design pellet tray detailing funnel on lines 1, 2, 3 and 5	<p>Lines 1, 2, 3 and 5 have all been modified to include the latest design for the pellet tray conveyor's sloped pans which incorporate a funnel into the sloped pan which is beneath the first tray conveyor section between the tray indexer and the pellet online dryer. When the new sloped pans were installed the detailing funnel was removed as part of the scope of the respective modifications (CCFs 17342, 17343, 17344 and 17345). Operations has requested a detailing funnel to be installed so they can detail trays as they traditionally have. A new design detailing funnel will be installed that discharges into the sloped tray conveyor pan.</p> <p>Scope of modifications for this CCF (multiphase, 4-phases):</p> <ul style="list-style-type: none">-Install newly designed detailing funnel on PLN1 (phase 1)-Install newly designed detailing funnel on PLN2 (phase 2)-Install newly designed detailing funnel on PLN3 (phase 3)-Install newly designed detailing funnel on PLN5 (phase 4) <p>Per TA-500, rev. 37 an Independent Technical Review (ITR) is required per procedure FA-114 if a system or component being modified would result in NCS significance, changes to the controls, and/or alter the Operating Conditions described in the applicable CSE. An ITR will not be performed for this CCF.</p>	<p>When operations is detailing now on lines 1, 2, 3 and 5 the scrap pellets are placed into the pan. Since there is no longer a funnel in place it is possible for pellets to bounce out of the sloped pan as the detailing occurs. Installing a new design detailing funnel will eliminate the pellets from bouncing out of the sloped pan while still maintaining the benefit of the sloped pan design.</p>	Pellet Lines 1, 2, 3 and 5 at Pellet Tray Conveyor between Grinder and D&V Station	ISA-08 Pelleting
18239	Fix Floor under existing UN Header	<p>Fix Floor under existing UN Header - includes adding tent for construction.</p> <p>Phase 1 Install Tent for work</p> <p>Phase 2 repair floor</p> <p>Phase 3 Remove Tent</p>	Floor needs repair	Scrap cage under existing UN Header	ISA-02 Uranyl Nitrite Bulk Storage Tanks
18240	Remove floor plate in scrap cage washing machine area as part of floor repair work.	<p>This CCF documents the removal of a steel floor plate from scrap cage washing machine area.</p> <p>This modification is part of a larger scope of work for the scrap cage floor repair. After floor plate removal, a tent will be constructed in accordance with SYP-312 to provide containment of airborne SNM created by floor repair work. Once the tent is constructed, the Contractor (IFCO) will mechanically prep the existing flooring where degraded, using grinders and chippers; install a primer to penetrate and seal the substrate; pre-fill all small holes, cracks, and irregularities with a polymer putty; install an 3330FS epoxy grout; finish with top coat of ICO Super Guard. Floor flatness will be verified through performance of OM91007 after repair. The tent will be deconstructed when containment is no longer required.</p>	<p>Provide a repaired floor that reliably controls contamination and resists degradation by chemicals used in the area.</p>	Scrap cage under existing washing machine	ISA-11 Scrap Uranium Processing

CCF	Title	Description	Justification	Location	ISA ID
18245	Install HVAC Air Handling Unit on Roof and provide once thru air to Auxiliary Control Room (formerly MAP Control Room). New Duct work will be installed, including diffusers and dampers inside the room.	Install HVAC Air Handling unit for balance of Auxiliary Control Room (See CCF 17547 for split unit for DCS Room inside the Aux CR). This will include installation of curbing for the HVAC unit plus two roof penetrations (one for the duct work and one for the HVAC Power and Controls wiring). This will also include installation of new duct work in the main room, plus diffusers and dampers as this will be a once-thru air system (no air return to outside air). Phase 1: Install roof curbing, cut hole in roof for curbing, and temporary cap until HVAC unit is installed. Install ventilation duct work in Auxiliary Control Room. Phase 2: Install HVAC on roof, using crane for setting the unit from the ground and onto the curbing. Connect power, Auxiliary Control Room duct work and temperature controller.	Auxiliary Control Room requires HVAC equipment to replace abandoned AC-40 unit which fed MAP pelleting and the control room in the past.	Chemical Side - Auxiliary Control Room (Formerly MAP Control Room)	ISA-01 Plant Ventilation System
18247	Tube Cart Door Replacement	Replace the heavy sectional stainless steel doors with flexible covers made out of the (currently blue) tarp material.	The stainless doors are heavy and difficult to utilize smoothly. The put the operator at greater risk of injury.	CFFF, Mechanical Side, Tube Carts	Components
18248	Relocation of Information Panel and Blue Light in Auxiliary Control Room (Old Map CR). Relocation of Blue Light system condition toggle switches in Auxiliary Control Room. Addition of Exit Signs at the 2 room exits.	This modification will be to relocate the Information Panel and Blue Light approximately 2 feet from its current position (same approximate elevation but will be outside the new DCS Controls Room). Control Panel for Blue light system (with toggle switches) will have the front plate removed and replaced with a blank cover. A new box will be added into the room (wires extended and re-terminated) using the existing toggle switch panel. Additionally, install new Exit Light Signs at each exit to the Auxiliary control room.	Blue light system and indicators will be visible in the main part of the Auxiliary Control Room upon relocation. Accidental trigger of a Blue Light will be prevented by relocation of this faceplate and toggle switches in the main Auxiliary Control Room.	Chemical Side - Auxiliary Control Room	ISA-03 ADU Conversion
18250	Boiler House #2 Concrete and Building Renovations	This CCF will cover excavation and pouring of concrete foundations for the new boilers inside of boiler house #2, foundation for DA tank, foundation and steel work for economizers, replacing metal wall panels, and roof panels. This CCF only covers the items detailed above. Installation of equipment, process piping, and electrical work will be covered under CCF 18137. No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.	The existing boilers in boiler house #2 have exceeded their useful life. They were removed under CCF 18078. New boilers will be installed under CCF 18137. This CCF covers necessary concrete and structural work for installation of the new boilers.	Boiler House #2	Grounds
18272	Replace the LeBlond Makino Mill with OKK VB53 Vertical Maching Center	Demo the LeBlond Makino Mill and replace with new OKK VB53 Vertical Maching Center No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.	The LeBlond Makino mill has reached the end of it's useful life and must be replaced.	Machine Shop	Miscellaneous
18274	New Datalogic Scan Gun Powerscan PM9500	Introduction of new Datalogic Scan Gun Powerscan PM9500 to allow the use as an alternate for the pen scanner, which is used for tubes and rods.	The pen scanner is outdated and new technology can now be used to scan tube IDs successfully with this model that utilizes imaging technology.	Tube Prep, ADU Rod Loading, IFBA Rod Loading, Rod Storage, Rod Inspection and Magazine Loading	Clean Side Rod Area

CCF	Title	Description	Justification	Location	ISA ID
18279	Reconfigure Waterglass F-1165 Filtrate Tank T-1166 and Associated Piping	Streamline the shape and location of T-1166 to enable better access to the front of F-1165A/B. T-1166 will be replaced with a new rectangular tank. Tank will be relocated to maximize space between the front of F-1165A/B. Current functionality of F-1165A/B and T-1166 will not change. Instrumentation functionality on T-1165 will not change.	Operators need more space in front of F-1165A/B to safely disassemble and reassemble filter during filter felt replacement and other maintenance activities.	Outside URRS Waterglass Building	ISA-15 URRS Wastewater Treatment System
18284	Kapton tape installation on Coater Cathode Insulators	Process Engineering has proposed and provided the technical basis for the use of Kapton tape (polyimide film developed by DuPont) as an insulator on IFBA Coater cathodes. Rapid Modifications is facilitating this modification by implementing this CCF. IFBA Operations will procure and install Kapton tape (polyimide film developed by DuPont) directly on Coater cathodes. This installation will occur in the IFBA Vacuum Shop when cathodes are being re-built. The Kapton tape will be applied directly to the Cathode about ¼" below the cathode surface on all sides except the surface to act as an insulator between the cathode and the Aluminum Oxide Insulator. The tip of the tape will be just below the Cathode vent hole to allow adequate flow for vacuum pump downs. Kapton is regularly used as an insulator in ultra-high vacuum environments due to its low outgassing rate. We believe the thermal properties of this tape will lend itself useful in the Coater as remains stable across a wide range of temperatures, from -269 to +400 °C (-452 to 752 °F).	?As a result of the sputtering process within the Coater cycle, the fallout/residue drops in the cracks of the Aluminum Oxide Insulator. When enough build up occurs, this provides an unintended current path and causes an electrical short. ?Excessive downtime ?Equipment damage ?Potentially Missed shipments ?High failure rate	Coater Cathodes	ISA-14 IFBA Processing
18285	Replace the Plywood and Wood Stud Wall that Separates the MAP Furnaces from the Aisle Between ADU and SOLX with 8 Foot High Wire Mesh Fence	Replace the plywood and wood stud wall that separates the MAP furnaces from the aisle between ADU and SOLX with 8 foot high wire mesh fence. Relocate and update the lighting fixtures currently mounted to the plywood wall onto the new fence. The fence will also have a gate with a locking mechanism to restrict access to unauthorized personnel.	The plywood and wood stud wall is potentially a source of fuel if a fire broke out in the area. It also encourages unauthorized storage of debris and combustible materials due to the lack of visibility through the wall. A wire mesh fence will eliminate combustible materials in this area and provide visibility to all items stored near the MAP Furnace. A gate with a locking mechanism will be installed on the fence to restrict access to unauthorized personnel.	MAP Line Furnaces	Grounds
18287	Active Gamma Scanner Project - Pre-work - Soft Rod Handling Section F Panel Relocation	This CCF provides the design for relocating the existing control and pneumatic panels for Soft Rod Handling Section F. Scope includes: Relocation of Section F control and pneumatic panels, including the support stand, from the east side of the walking beam conveyor to the west side. Removal and replacement of air tubing from pneumatic panel to walking beam lifter and advance/retract cylinders. Removal and replacement of existing 24V and control wiring. Disconnection and modification of 480V power feeder cables and associated conduits. Re-routing the associated air supply piping, isolation valve, and air regulator to the new pneumatic panel location. Removal, modification, and re-installation of guard rail on the west side of walking beam conveyor	The current location of the Section F control and pneumatic panels will interfere with the proposed placement of new Gamma Scanner 3.	Rod Inspection Area - Soft Rod Handling Section F Walking Beam Conveyor	ISA-10 ADU Rods

CCF	Title	Description	Justification	Location	ISA ID
18288	Fire Alarm Speaker Additions for Grid Area	<p>Pre-approved Level 2 Mod</p> <p>Add speakers to the Grid area for the following locations:</p> <ul style="list-style-type: none">- Grid Welding/Inspection Area (S268 and S269)- Old ECG Room (S270)- QC Inspection Offices (S271, S272, and S273) <p>This work will also include installation of new transponder/miniplex components to support the speaker additions above. In addition, programming changes to the Simplex Fire Alarm System will be performed by a factory trained Simplex Grinnell Technician.</p>	This project is part of the Fire Improvement Excellence Program	QC Inspection Offices and Old ECG Room and Grid Area	Grounds
18296	Calciner Line 4 System Testing	<p>Multi Phase Effort to</p> <p>1 Collection of test data - Laydown area for testing - Lab layout for testing</p> <ul style="list-style-type: none">- Test plans for sampling and lab tests <p>2 Removal of all or some of the modifications made under CCF18229. The system will be restored to an operational condition as dictated by operations. This may range from complete removal of all modifications to removing just valves and installing blinds. Discussions after testing will determine what course is taken.</p> <p>Testing Equipment includes:</p> <ul style="list-style-type: none">- (2) Two Meter box/pump combo =17.5 x 11.25 x 52 inches- (2) Two Refrigerator = 20.25 x 21 x 32.5 inches- (2) Two Fourier transform infrared (FTIR) = 17.5 x 25.25 x 12.5 inches- (2) Two Environics = 17 x 15 x 7 inches- (1) One Micro GC = 21.75 x 6 x 11 inches <p>- Gas cylinders:</p> <ul style="list-style-type: none">- Nitrogen: 9?x55? Volume: 49.8L- Helium: 9?x55? Volume: 49.8L- SF6/Ammonia, Argon, (2) O2/CO2: 9?x51? Volume: 43.9L <p>Test Method:</p> <ul style="list-style-type: none">- EPA Method 3C of 40 CFR 60 - Integrated gas sample (IGS) bag (GC)- EPA Method 4 of 40 CFR 60 - Impinger condenser train- EPA Method 17 of 40 CFR 60 - Isokinetic collection onto in-stack ceramic thimble and quartz filter- CARB Method 501 - Isokinetic collection onto quartz fiber substrates using an in-situ cascade impactor- EPA Method 320 - Constant rate extractive sampling (ETIP)	Testing necessary for the CO	Conversion Calciner Line 4	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
18298	Hydrolysis Column Hygienic Seal	This CCF proposes to add a PTFE hygienic seal to the Hydrolysis Column level instrument LE-S-x02-10 3" Diaphragm. Where x = 1 through 4. This seal will also be added to LE-x02F where x = 1 through 4.	<p>There have been multiple Redbooks generated that document that the level instrument LE-S-x02-10 on the Hydrolysis Columns have gone out of calibration and or have gotten clogged causing the instrument to read in error. An investigation revealed that one of the causes of instrument reading errors is damage to the diaphragms due to the process fluid and or due to damage when cleaning the diaphragm of build up from the process fluid. The hygienic seal will help to protect the diaphragm from degradation and will allow for easier cleaning by the technician when necessary.</p> <p>The non-safety related instruments LE-x02F are installed in the same configuration as the safety related instrument and therefore are subject to the same degradation mechanisms. Therefore, the seal is being added to the non-safety instruments as well to help ensure they read accurately and are protected from degradation.</p>	Conversion Hydrolysis Column - lines 1 through 4	ISA-03 ADU Conversion
18300	Test for Removal of Cathode Ground Shields Cooling/Heating Water	<p>Current IFBA cathode ground shields have cooling/heating water on three sides and bottom. The plan is to remove this cooling/heating water. The purpose for this cooling/heating water is: When the power supplies are on, cooling water (70 F) is run through these channels to remove heat and avoid thermal growth of the ground shield. When power supplies are not on, heating water (120 F) is run through these channels to avoid having condensate form on these surfaces.</p> <p>Cooling/heating water is run through many other parts/components of the coater for the same purpose. The surface area of the cathode ground shields is minimal compared to the surface areas of the other components.</p> <p>Prior to removing these water channels a test will be performed. The test will be to not flow water through cathodes 2 & 5 ground shields for one week. Then place cathodes 2 & 5 back on-line and not flow water through cathodes 1, 3, 4 and 6 ground shields for one week. Then remove water from cathodes 2 & 5 ground shields again so that no cathode ground shield has water flow for a week. To perform this test the cathode ground shields not having water flow will need to be jumped on the flow in/out to maintain current water flow alarms. While testing if a degrade in coater performance is noted, testing will stop. Water flow will be re-established to all cathode ground shields and this CCF will be cancelled.</p> <p>If testing is acceptable, another CCF will be created to permanently remove cooling/heating water by installing a new designed ground shield without water channels</p>	<p>Testing will determine if cooling/heating water on cathode ground shields is necessary. If it is not necessary and removed, this will eliminate one a the major contributors to water in a coater. It will also eliminate maintenance time for cathode change-outs. No longer needing to purge water from ground shields, dis-connect & re-connect water lines and leak check water lines.</p>	IFBA/FA1	ISA-12 IFBA Fuel Rod Manufacturing
18305	Eliminate roof penetration such as the abandoned MAP Room AC unit and AC-39 heat trace.	The T1 & T2 roof is being reroofed, the roofers requested horizontal penetration such as such as the abandoned MAP Room AC unit and AC-39 heat trace be eliminated. The roofers will seal the roof with the rest of the roof project using the same curb flashing detail (CCF-18128). This CCF will document that the penetrations will be eliminated just prior to the roofers working that area.	To properly reroof the T2 area, horizontal penetrations must be eliminated.	T1 Roof area over pelleting	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
18306	HF Spiking Station #2 Tent and Concrete Removal	<p>HF Spiking Station #2 tent erection for the purposes of concrete removal. A tent will be erected to cover the area where concrete will be removed for contamination control/airborne and includes a step off pad. The plastic sheeting will be oriented in such a manner that prevents the pooling or accumulation of liquids in the event of an overhead spill. There will be temporary curbing within the tent to minimize ingress of liquid into the work area</p> <p>Concrete removal will be done under the tent and removed for disposal in URRS.</p> <p>An RAB exemption is attached.</p> <p>Demoted on 11/1/2018 to revise size of concrete removal to 13'-0" x 17'-0" to allow for the trench box size. The tent and temporary berm will be revised as well.</p>	This CCF will be focused on erection of a tent, addition of temporary curbing to minimize potential of liquid ingress to work area; and removal of concrete at the leak site. There will be additional CCF (s) written to further describe repair and restoration of HF Spiking #2.	HF Spiking station #2	ISA-03 ADU Conversion
18313	Replace TPBAR HVAC	<p>Install 480 & 120 VAC electrical service for the new HVAC unit to replace the existing TPBAR HVAC unit. The new air handling unit will be located on the roof of TPBAR south of the existing pad for AC-35. The new condensing unit will be installed outside east of the existing condensing unit. A new power panel and receptacle panel will be installed to feed the new HVAC equipment. AC-35 has been abandoned the electrical service for AC-35 will be removed. The old TPBAR electrical service will be removed.</p> <p>Two phases.</p> <p>* Demo AC-35 and Old HVAC</p> <p>* Installation of electrical services for new HVAC</p> <p>No new or existing CSE, or crit. safety SSC's are required/affected for this project. See attached RAB document and email attachment.</p>	The old TPBAR unit is obsolete, failure of this unit would significantly impact product.	TPBAR roof and outside	Grounds
18315	Fire Alarm Speaker Addition for Medical Exam Room	<p>Pre-approved Level 2 Mod</p> <p>Add one (1) Fire Alarm Speaker to the Medical Exam Room at the Nurse's Station.</p>	This project is part of the Fire Improvement Excellence Program	Medical	Grounds
18316	Fire Alarm Speaker Additions to Mechanical Side Office Expansion Area	<p>Pre-approved Level 2 Mod</p> <p>Add Fire Alarm Speakers to the Grid area for the following locations:</p> <ul style="list-style-type: none"> - Mech Side - Equipment Room #2 above CR301/302 (S292) - Mech Side - Office Expansion West Stairwell (S301) - Mech Side - Office Expansion East Stairwell (S302) 	This project is part of the Fire Improvement Excellence Program	Mechanical Side Office Expansion Area	Grounds
18318	Fire Alarm Speaker Additions to the PE Lab Calibration Room / Manager Office	<p>Pre-approved Level 2 Mod</p> <p>Add speaker to the PE lab area for the following locations:</p> <ul style="list-style-type: none"> - PE Lab - Calibration Room / Manager Office (S303) 	This project is part of the Fire Improvement Excellence Program	Met/PE Lab Area	Grounds

CCF	Title	Description	Justification	Location	ISA ID
18319	Line 1 R53 Press and Platform Upgrade	<p>Update R53 Press electrical and mechanical components and controls as follows: (Reference CCF 16086 and 16549 for similar changes)</p> <p>Electrical/Controls:</p> <ul style="list-style-type: none">- Upgrade PLC to Rx3i and convert program to Proficy ME- Add programming for 4 Hold Down Pressure control loops- Add programming for 1 Transition pressure control loop- HMI graphics modifications including trending- Configure new VFD- Design changes to existing electrical drawings and P&IDs to reflect valve rack changes, instrumentation changes, PLC Rx3i upgrade, control hardware upgrades, and electrical panel backplane modifications. <p>Mechanical:</p> <ul style="list-style-type: none">- Worm Gear replacement- Turret replacement- New Pneumatic hold-down and hold-up cam actuators to eliminate current air-over-oil system- See attached document listing the full scope of changes <p>Structural:</p> <ul style="list-style-type: none">-Support steel for the platform will be added to provide more stability to the platform floor and frame.-New design will allow the electrical conduit for the press to be recessed away from the pellet press removal and reinstallation path.	Obsolescence, Continuous Improvement, Maintenance Reliability, Replacement of worn components.	Line 1 Pellet Press	ISA-08 Pelleting
18320	Okuma Lathe Electrical Install and Cress Furnace relocation.	<p>Pre-approved Level 0 CCF:</p> <p>The tool room has purchased an Okuma CNC lathe. This CCF is to Electriclly install the lathe in the tool room and to relocate the Cress furnace to allow access to the new lathe.</p>	Increase capabilities of the tool room.	Mechanical side tool room	

CCF	Title	Description	Justification	Location	ISA ID
18322	EnCore Accident Tolerant Fuel - Lead Test Rods Program	<p>The EnCore Accident Tolerant (ATF) - Lead Test Rods (LTR) Program will build fuel assemblies with the following new fuel rod design concepts:</p> <p>1. Uranium Dioxide pellets will be loaded into a standard zirconium fuel rod coated with a 20 to 30 micrometer chromium coating.</p> <p>2. ADOPT pellets will substitute a Uranium Dioxide fuel pellet. ADPOT pellets have 700 ppm Cr2O3 (479 ppm Cr) and 200 ppm Al2O3 powder added into Uranium Dioxide. ADOPT pellets will be loaded into a standard zirconium fuel rod coated with a 20 to 30 micrometer chromium coating.</p> <p>3. Uranium Silicide fuel pellets will substitute a Uranium Dioxide fuel pellet. Uranium Silicide fuel pellets will be loaded into an encapsulated 12 inch long segment. Fuel rods will be fabricated to consist of zirconium bars on the top and bottom of the rod and the segment with U3Si2 pellets in the middle.</p> <p>The overall program will assemble fuel assemblies with the above test rods incorporated into peripheral locations on the assemblies.</p>	<p>The EnCore program proposes to obtain significant benefits from fuel cost savings and from the reduction or elimination of currently required safety requirements/systems. Westinghouse and its partners are developing EnCore ATF that has the potential to significantly increase the tolerance for nuclear reactor severe accident scenarios. These new designs have the potential to improve nuclear plant safety and reliability as well as provide financial savings to the utilities that operate the plants.</p>	<p>Chemical Development Lab, Pellet Area, ADU Rod Loading, ADU Rod Inspection, Non Fuel, Final Assembly</p>	<p>ISA-18 Laboratories</p>
18325	Upgrade of Honeywell Experion DCS System for Outside URRS	<p>Upgrade Server/PC hardware, operating system and applications for Honeywell DCS system (for Outside URRS) from ver 3.11 to 5.02 and install on isolated system</p> <p>This may be completed in 3 phases:</p> <p>Phase 1 is to install the network switch, cabinet, fiber optic cabling and power in the WaterGlass Instrument shop.</p> <p>Phase 2 is to replace selected monitors (most notable the monitors on the Still1 and Still 2 Experion Systems</p> <p>Phase 3 is the actual cutover which includes new Honeywell Client stations, Upgraded firmware for the existing C200 controllers, new virtualize servers for Outside URRS and validation of proper operation</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	<p>Hardware is mature and operating system is obsolete. Honeywell DCS version requires upgrading to maintain support.</p>	<p>Outside URRS (Still's, WaterGlass and Tank Farm)</p>	<p>ISA-06 Chemicals Receipt, Handling and Storage</p>
18326	Blue M Damper Relocation & Inspection Access	<p>Relocation of the two damper for the scrap cage Blue M's</p> <p>Providing a permanent means of accessing duct inspection port</p>	<p>Part of CO project</p>	<p>at the Scrap Cage Blue M's</p>	<p>ISA-01 Plant Ventilation System</p>
18330	Additional Skeleton Bulge Carriage and new HMI screens	<p>The CCF is for the modification to add another bulge carriage to the area. Also there will be a new PLC program downloaded for this additional bulge carriage. A test plan, verification, and validation per QAF-007 will be completed.</p>	<p>The additional bulge carriage is needed for the added NGF production</p>	<p>Skeleton assembly area</p>	<p>Components</p>

CCF	Title	Description	Justification	Location	ISA ID
18335	Repair details for Process Duct Work - Conversion Line 4	<p>There is a hole in process duct work in the chemical area (between the conversion line 4 mill and the Torit) that has been left open after instrumentation has been relocated. This hole needs to be repaired to support the SSCs in the area that require integrity of the pressure boundary to prevent the ingress of water into the duct.</p> <p>Note that this is being created to resolve CAP 2018-12902</p>	<p>The materials selected will be able to withstand the process fluids as well as the external environment in conversion - which is expected to be the most severe environment that these will be installed.</p> <p>The patch of the ductwork will increase the ID of the duct, but is acceptable because it is within the bounding limits of the current criticality assessment of the duct.</p>	Conversion Line 4	ISA-01 Plant Ventilation System
18339	Skeleton HMI screen move and HMI pole removal	<p>The HMI pole for #3 skeleton needs to be removed</p> <p>The HMI screen needs to be moved to skeleton fixture #1</p> <p>There needs to be a bracket added to the light pole of skeleton fixture # 1</p> <p>The HMI screens need to be reconfigured to the proper location</p>	New bulge carriage	Skeleton Fixture # 3	Clean Side Rod Area
18341	Replace Lime Silo Level Transmitter	<p>Replace ultrasonic level transmitter with a radar type of level transmitter.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	The existing Ultrasonic Level Transmitter is not functioning correctly. It needs to be replaced with a radar type.	Outside URRS - Lime Slaker	ISA-06 Chemicals Receipt, Handling and Storage
18345	Speaker Additions to the Manufacturing Building Roof	<p>The CCF will include the scope necessary to install three (3) Hyperspike Fire Alarm Speakers to the Manufacturing Building Roof. Although this scope includes installation of speakers, new transponders will also need to be installed to support the speakers. Adding the transponders will require Simplex Fire Alarm System programming changes and is governed by the scoping/originating CCF 17350 (linked in Related Documents).</p> <p>Adding speakers is governed by the scoping/originating CCF 17363 (linked in Related Documents).</p> <p>New transponder cabinets will be installed in Sub 9 Equipment Room. Existing conduit and junction boxes will be used to access the roof. No roof penetrations are included or expected in this scope of work.</p>	Fire Improvement Excellence Program	Manufacturing Building Roof	Grounds
18350	Oxide Coater # 1 Light and Receptacle	<p>Pre-approved Level 0 CCF:</p> <p>Install conduit and add light switch for existing light which is currently plugged into receptacle using a drop cord at Oxide Coater # 1. Extend existing receptacle circuit to Oxide Coater Platform as a convenience receptacle.</p> <p>No new or existing CSE, or crit. safety SSC's are required/affected for this project. See attached RAB document and email attachment.</p>	Using drop cords for supplying power to lights should only be considered for temporary lighting and should not exceed 90 days per the NEC.	Oxide Coater # 1	

CCF	Title	Description	Justification	Location	ISA ID
18351	Steam Flow, Fuel Oil Flow, Natural Gas Flow Tie In to existing BPCS - Boilers #1 & #2 Replacement	<p>Provide I/O Tie-In to existing BPCS from new Boiler Controls System.</p> <p>Existing Boilers #1 and #2 are being replace with new Boilers from Cleaver Brooks using Allen Bradley (AB) PLCs per Boilers. These PLCs are Hawk 4000. Respective Steam Flow, Fuel Oil Flow, Natural Gas Flow Transmitters using signal splitters will be connected to existing BPCS (Outside URRS). A common Boiler Trouble Alarm will also be considered and where applicable implemented as part of this scope of work and/or accounted in a later CCF.</p> <p>This scope of electrical work to be in parallel with implementation work associated with CCF 18137, Boiler Replacement.</p> <p>No SSCs are impacted. No CSEs are impacted.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	<p>Flow Transmitters, FIT-1157A (Steam Flow from Boiler #1), FIT-1188A (Steam Flow from Boiler #2), FIT-1157B (Natural Gas Flow Supply to Boiler #1), FIT-1188B (Natural Gas Flow Supply to Boiler #2) process signals to be maintained within the existing BPCS. FIT-171-1 (Boiler #1) and FIT-171-2 (Boiler #2), Fuel Oil Flow transmitters to be added to BPCS.</p> <p>In addition to these process signals boiler operational information for Natural Gas and Fuel Oil to be available to support SCDHEC Air Permit Requirements.</p> <p>The Steam Flow and Natural Gas Flow Transmitters were originally removed from existing BPCS and rewired/integrated into the new Boiler Controls System.</p>	Boiler House #2	Grounds
18354	ERBIA Women's change room ceiling tile change out.	<p>Pre-approved Level 0 CCF:</p> <p>Ceiling tiles in ERBIA women's change (clean area) are molding and need to be replaced with a type that wont mold.</p>	Existing tiles are molding.	ERBIA Women's change room	
18356	Muffle Furnace 3 Replacement in the Chem Lab Uranium Room	<p>With this CCF, review we will purchase 2 muffle furnaces. One will serve as a spare/replacement while the second muffle furnace will immediately replace damaged obsolete muffle furnace #3 in the Chem Lab.</p> <p>Old Furn:</p> <ul style="list-style-type: none">*Thermo Scientific Model FA1730-1*Overall Dimensions: 31" W x 40" D x 28" H*Internal Dimensions: 9.75" W x 13" D x 8" H (two 4" fixed shelves)*900 dec C operation range w/o overtemp control*No broken thermocouple monitor to prevent runaway*5800W 24A 240V plug-in <p>New Furn:</p> <ul style="list-style-type: none">*Overall Dimensions: 29" W x 28" D x 33" H*Internal Dimensions: 15" W x 13" D x 15" H (three adjustable shelves 5", 7.5", and 10.25")*900 dec C operation range with overtemp control*Broken thermocouple monitor to prevent runaway*5800W 25A 240V hard-wire	Muffle Furnace #3 in the Chem Lab Uranium Room is damaged with parts being obsolete.	Chem Lab Muffle Furnace #3	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
18358	Refurbish and reinstall spiking station #2	<p>CCFF has two spiking stations, #1 and #2. Each station is skid mounted and located in its own containment dike. Each dike has a polypropylene liner. They operate in parallel with one station on line and one in reserve. HF and UN are precisely mixed in a batch operation. The spiked UN is then pumped to V-506A or V-106A.</p> <p>CCF18358 was initiated to design, to build, and to install a new floor/containment dike and equipment skid. The goal is to increase the impermeability of the floor, to reduce the risk of solution reaching the floor, and to increase the potential of timely recognizing and correcting an adverse condition. After station #2 has been returned to operations and has proven its reliability, station #1 will also be replaced. The spiking station #2 system will be modified to reduce the risk of spiking solution escaping through the floor. This will be accomplished by increasing the impermeability of the floor and reducing the risk of solution reaching the floor. Modifications requested by the PHA and DFMEA have been incorporated into the design.</p> <p>The equipment changes will include:</p> <ul style="list-style-type: none">- replacing the spiking tank T-1281 to eliminate all side nozzles- increasing distance from the bottom of the frame to the floor- providing two removable polypropylene catch pans under the frame- replacing the convolution couplings with pulse dampeners- replacing CS lined piping with SS PVDF lined piping- replacing bottom outlet with standard pipe fittings- replacing the HF feed line- replacing the existing BPCS HI level switch with a Emerson fork level probe	Leak was found in concrete under spiking station #2	UF6 bay in conversion	ISA-03 ADU Conversion
18359	EF-2 Kitchen Exhaust Fan and Duct Replacement	<p>Replace existing EF-2 kitchen exhaust fan with new exhaust fan above the kitchen on the roof(cut open in roof) near the fryer exhaust fan. Install new non-combustible welded ductwork including fire proof insulation as required per NFPA 96. Current exhaust fan is located in Equipment Room 1. All work and design will be done per NFPA 96.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	Current exhaust fan is obsolete and has become a fire safety hazard because of leakage of grease in area near MCC and electrical panels. Replacing the obsolete fan and relocating it on roof of the kitchen will resolve safety concerns.	Kitchen Roof	Grounds
18362	Add secondary quarter turn valve on sample line for V-1014 and V-1018 tank bank	<p>Xomox valves are positive shut-off valve, but tough for operations to throttle for samples. Add secondary 1/4 turn ball valve for ease of sampling while still maintaining the superior shutoff of the xomox valves.</p> <p>No ITR required per latest revision of TA-500</p>	Xomox valves are positive shut-off valve, but tough for operations to throttle for samples. Add secondary 1/4 turn ball valve for ease of sampling while still maintaining the superior shutoff of the xomox valves.	1014 and 1018 scrap tank piping systems	ISA-11 Scrap Uranium Processing

CCF	Title	Description	Justification	Location	ISA ID
18366	Replace 1ATS6 with New ATS (1ATS7)	<p>This CCF will install a new ATS (1ATS7) having advanced bypass and isolation features to replace existing 1ATS6. The replacement will be an upgrade to the existing ATS features. Scope of work will entail installing a new ATS panel on the mezzanine near column 16B. The new ATS will be fed from a normal power source (PP2-15A) and an emergency power source (EPP-15A) via installation of new conduit and cable. Once 1ATS7 is operational, the load from 1ATS6 will be transferred to 1ATS7. Once the load has been transferred, 1ATS6 will be removed.</p> <p>1ATS6 serves the Mechanical Cooling Tower</p> <p>This CCF will execute in the following Phases: Phase 1 - Install the new 1ATS7 cabinet and partially install conduit Phase 2 - Removing 1ATS6 from service and completing the 1ATS7 tie-in Phase 3. Testing/Final Checkout</p>	<p>The current automatic transfer switch used for 1ATS6 is past its useful life and needs to be replaced to maintain plant reliability. New 1ATS7 will replace 1ATS6, but will have advanced features to allow on-line maintenance of the ATS. This will eliminate the need for a Mechanical Cooling Tower outage should the ATS need to be maintained.</p>	<p>Mezzanine above Compressor/Plating Room near column 16B</p>	<p>Grounds</p>
18368	S-1008 Vent Header drain line.	<p>S1008 vent line header will have a drain line attached to the bottom of the duct to drain any condensed moister to a cream can.</p>	<p>Moisture seems to occur around weather changing patterns and causes dripping from flanges on aisleways</p>	<p>conversion control room area</p>	<p>ISA-01 Plant Ventilation System</p>
18375	Line #4 Calciner - S-431, Recirculation Line pH Instrumentation	<p>Install new instrumentation and new spool piece into the S-431 Recirculation Line. Instrumentation to consist of (2) pH probes w/transmitter, (1) Flow Meter. New Instruments to be wired to existing Honeywell BPCS, Line #4, ADU I/O Rack. Changes also includes modifications to the existing HMI Graphical Display(s) to accommodated these instruments.</p> <p>New Spool piece to consist of the applicable configuration for installation of the new instruments, By-Pass Manual Valve, Isolation Valves, Drain Valves, and boundary interfaces to existing process connections. Spool piece is to replace an existing section of the S-431 Recirculation Line.</p> <p>(Note: Process Operability and equipment performance, for this instrumentation, to be evaluated for the prospects of installing a pH Control system that includes adding a control valve to the ammonia line, relocating the ammonia feed point, and installing a Flow Meter in the ammonia line. A separate CCF (TBD) will be generate for this potential pH control system.)</p>	<p>pH control of the S-431 Scrubber is one of several processes to mitigate uranium carryover to S-1030 Scrubber. pH monitoring is done via a Grab Sample collections every 8 hours, processing the sample in the lab, and manually recording the results in a log book in the control room. Installing this instrumentation will provide an effective means for continuous monitoring and live trending to mitigate upset conditions.</p> <p>In addition in accordance with Confirmatory Order EA-16-173, Section 5, Item 3.1, this instrumentation is required to disposition the applicable part of Item 3.1</p>	<p>Line #4 Calciner, S-431 Recirculation Line</p>	<p>ISA-03 ADU Conversion</p>

CCF	Title	Description	Justification	Location	ISA ID
18377	Substitution filter for Flanders 24"x24"x2" Pre-filter.	<p>Substitute Flanders filter (Part#21230) with DHA Extended Surface self-supported mini-pleat Filter MP65-24242 - 24x24x2</p> <p>The filter media shall be comprised of a MERV 11 Micro-Glass media, pleated in a nominal 2" depth.</p> <p>The filter shall have a MERV rating, (Minimum Efficiency Reporting Value) of 11, when evaluated in accordance with ASHRAE Standard 52.2-1999. The media element, comprised of 100% MicroGlass fibers, shall perform in a mechanical manner, increasing in efficiency throughout the life cycle of the product.</p> <p>The filter shall have an average dust spot efficiency of 60-65%, when evaluated in accordance with ASHRAE Standard 52.1-1992.</p> <p>The initial resistance to airflow, when tested at 500 fpm, shall not exceed 0.25" wg. The filter shall be rated for flammability (UL 900) by Underwriters Laboratories.</p>	<p>The 24x24x2 Flanders filter is the plants highest usage filter. Changing to a different manufacture that can supply consistently and would have a cost savings.</p>	Plant	ISA-01 Plant Ventilation System
18382	IFBA Coater 8 Controls upgrade	<p>Upgrade the controls, instrumentation, HMI, and power supplies for IFBA coater #8. This will be done in several stages. Phase 1 will demo and replace operator station, install new PLC and Varian & MKS controllers. Allen Bradley PLC will be installed, and awaiting the next phase. During phase 2 we will upgrade instrumentation and implement Devicenet control. The AB PLC will be configured and 1st floor engineering workstation will be employed. Phase 3 will, migration of the control and communications with the existing AE power supplies to the AB PLC. The new PointIO modules (discrete, ascii) will be commissioned. The serial communication to the AE power supplies will be moved from the HMI computer to the PointIO ascii modules. In addition, IO racks and 3rd floor engineering workstation will be installed. Cryo pumps and serial communications will be deployed in the 4th phase. Phase 5 we will install the new HMI computer. Phases 6-10 will be done on CCF 19294</p>	<p>The PLCs are obsolete and unattainable. The IFBA Coater instrumentation and communications have changed little in 25 plus years. The instrumentation is dependent on serial communications to 5 pressure, 1 mass flow controller, 2 cryo pumps and 8 power supplies. All communications are connected to 2 serial boards in the HMI (Human Machine Interface) computer (Wonderware). The HMI is configured to display data and also pass the instrument data to the PLC (Programmable Logic Controller) and vice versa. If the PCN (Process Control Network) is busy or down the coater cannot run due to lack of transfer of the control data between the PLC and HMI.</p>	IFBA coater #8 & throughout the IFBA floors that pertain to coater #8	ISA-14 IFBA Processing
18383	Bypass around HX-1107 and HX-1176	<p>During acid wash of system, there is no bypass around HX-1107 and HX-1176 to prevent acid wash from flowing through the exchangers. Acid wash can damage the exchangers.</p> <p>This is an RMP covered system.</p> <p>TA-500 review is adequate for this project as per PSEDoc-0005257 which is attached in related documents.</p>	<p>Acid wash can damage the exchangers</p>	Outside URRS	ISA-15 URRS Wastewater Treatment System

CCF	Title	Description	Justification	Location	ISA ID
18385	UCON Pre-Heater Flow Meter Installation	<p>With this CCF, we will be installing a flow meter on the UNCON Preheater DI water supply line. This new flow meter will serve as a heat permissive for the heater. The heater will only be allowed to be on as long as there is flow.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required</p>	<p>Currently, the new preheater for the UCON DI water supply line has to be reset each time it is used. The preheater was sized to maintain heat at 40gal/min meaning the preheater will shut off at a trip condition if there is no water flow. Water only flows through the DI water supply line if there is a need for makeup water in the hot tank. The preheaters need to be integrated into the system that calls for hot water to be filled.</p> <p>Eng WO# 824295</p>	Final Assembly UCON Wash Preheater	ISA-17 Final Assembly
18387	Install Vacuum Mounted Portable Vibrators at Remill Stations #1 and #2	<p>Modify the instrument air supply associated with the remill stations to allow for separate air supplies to the vacuum mount and to the vibrator itself for the portable vacuum mounted vibrator.</p> <p>For air supply to the vacuum mount:</p> <ul style="list-style-type: none">-Tie in to air supply which is routed throughout the bulk blending room at available 1/2" gate valves (air supply tie in for vacuum mount not shown in drawings)-Install a new lockable quarter turn ball valve at tie-in point for air supply to vacuum mount-Run new tubing to 2nd level where bulk container is set in place for air supply to portable vacuum mounted vibrator-Connect to portable vacuum mounted vibrator with flexible hose connection for ease of use for operations <p>For air supply to the vibrator</p> <ul style="list-style-type: none">-Tie in to air supply that goes to bulk container's discharge valve on the 2nd level, downstream of SV5 as shown on drawings 348F03PI02:01 and 348F03PI07:01-Install a new quarter turn valve at the tie-in point on the 2nd level-Install a precision pressure regulator (not exceeding 30 psig discharge pressure) after new quarter turn valve on 2nd level-Connect to the vibrator on the portable vacuum mounted vibrator with flexible hose connection for ease of use for operations <p>Portable vacuum mounted vibrator to be installed is a NCT-10 VAC 12 unit (manufactured by Martin Vibrating Systems) (S/R# 344025) which was previously installed on the ADU pelleting lines per CCFs 17471 and 17535</p>	<p>Provide a robust and reliable vibrator for operations to use for processing the ADU bulk tanks. New type vibrator will be repairable.</p> <p>Having a reliable vibrator is essential to eliminate the need of operations personnel to manually "thump" bulk feed tank with hand tools. Manual "thumping" is a laborious task which should be eliminated to prevent potential for injuries.</p>	Bulk Blending Remill Station #1 and #2	ISA-05 ADU Bulk Powder Blending
18388	Remove the Drum Drive Brakes from IFBA Coater 7 and Coater 8	IFBA Coater 7 and Coater 8 have brakes on the drum drives. The other 6 coaters do not have the brake. This CCF will remove the brakes and the associated brake controls.	The brakes are problematic and not needed. Operations has requested they be removed	IFBA Coaters 7 and 8	ISA-14 IFBA Processing
18390	Install tooling in Plenum Check Hood to accommodate rod download	CCF to install tooling in Plenum Check Hood to accommodate rod download. Reference Drawing 366F05TL06 and Tool Shop Work Order TSWO-0015295.	CCF required to allow for Operations to be able to perform a rod download following removal of Rod to Tray Transfer Hood per CCF 17192. Rod to Tray Transfer Hood is required to be removed to support installation of mezzanine per CCF17184. In lieu of relocation of Rod to Tray Transfer Hood, Operations suggested modification/tooling enhancement of Plenum Check Hood to free up floor space for cart storage under new mezzanine.	Rod and Pellet Area	ISA-10 ADU Rods

CCF	Title	Description	Justification	Location	ISA ID
18391	Remove abandoned ADU control room AC duct and replace with fresh air intake for current AH-7301	<p>Pre-approved Level 0 CCF:</p> <p>When AH-7301 was installed the fresh air is drawn through the same penetration as the old AC unit that sat on top of the roof. The old duct work was never removed and is too low to the roof to put down the new roofing material. Ductwork will be removed and replaced with a fresh air intake through the same roof penetration.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	The T1 & T2 roof area is being re-roofed and the abandoned old ADU control room AC duct is in the way. Replacing the duct with a fresh air inlet thorough the same penetration would allow a more direct rout for fresh air and allow the duct to be removed. This design is what was approved for CCF-00247 that installed the new ADU control room AC unit AH-7301. The fresh air intake on the roof was not completed contrary to drawings 510F09HV05,01 510F09HV05,02 and 510F09HV05,05	Roof Conversion Platform	
18393	Oxide Coater 1 Receptacle Modification	This CCF will modify RECEPT-205B1 and RECEPT-205B2 from a duplex receptacle to a simplex receptacle.	This change is to ensure nothing is plugged into this receptacle in addition to the Vacuum Pump at either the Argon or the Helium station.	Oxide Coater 2	Components
18394	Install tubing Block valve for Line 1 Calciner nitrogen to Fitzmill Rotameters	<p>Install tubing Block valve for Line 1 Calciner nitrogen to Fitzmill Rotameters. Line 1 Safety upgrades design did not incorporate a block valve to shut in the Rotameters on Line 1.</p> <p>No ITR required per latest revision of TA-500</p>	If the Fitzmill needs to be worked on with the calciner nitrogen purge active the block valve will be needed	Line 1 Calciner	ISA-03 ADU Conversion
18395	Relocation of RP-7F Transformer from BD 7E-7G to MCC-2215	Relocate power feed from Buss Duct 07E-7G to MCC-2215	<p>Elimination of obsolete Buss Duct and to address grounding and safety concerns with accessing buss duct cans</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Contaminated Area - Pelleting	ISA-08 Pelleting
18399	TPBAR HVAC Replacement	<p>This CCF will replace the existing split 20 ton DX unit that serves TPBAR. A new air handler and duct heater will be installed on top of TPBAR, and a new condensing unit will be installed outdoors on a concrete pad. Once the new unit is commissioned, the existing unit will be demolished. An abandoned chilled water unit will also be demolished to make room for the new power panel.</p> <p>This CCF covers the mechanical and refrigeration portions of this project. The electrical work will be covered under CCF 18313.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	<p>TPBAR cladding has a special coating causing it to have a fairly high value of roughly a couple thousand dollars each. At current production levels, we have roughly up to 1,800 cladding tubes in various stages of production. A completed TPBAR is valued at roughly \$11,000, meaning at any given time in TPBAR we could have anywhere from approximately \$4 million to \$20 million worth of product that we would risk having to scrap should we lose the ability to control humidity.</p> <p>The current DX Split System HVAC unit for TPBAR is approaching 20 years old. The expected life of such units is 15-20 years. Internal components of the unit have become obsolete and difficult to find. Over the past year and a half the unit has required numerous repairs. One such repair required parts found only on Ebay, an unreliable location to find parts. There is a leak in the unit as maintenance has had to add refrigerant more than once over the last year and a half. The required refrigerant is being phased out and federal regulations stipulate how much and how often that particular refrigerant can be added to a unit. As the leak worsens, we risk not being able to use that unit at all due to the federal regulations.</p>	TPBAR Facility and Adjacent Area	Clean Side Rod Area

CCF	Title	Description	Justification	Location	ISA ID
18401	Mechanical Area Sprinklers Riser "A"	<p>Note: CCF was approved through facilities 10-May 2019; Demoted on 24-Sep-2019 in order to change the installation start-up from (1) phase to (3) installation phases.</p> <p>Provide wet pipe sprinkler additions in the following areas: Installation Phase 1</p> <p>?Grid Market/Storage Area</p> <p>?Mech. Area A/B & 13/15</p> <p>?Mech. Area A/B & 9/10</p> <p>?Mech. Area A/C 5 &10, 5/13</p> <p>?Tool & Gage Room</p> <p>?MCC Mezzanine Offices</p> <p>?Zirc Strap</p> <p>?Cleaning Room</p> <p>?Machine Shop (Sandblast Room)</p> <p>Provide wet pipe sprinkler additions in the following areas: Installation Phase 2</p> <p>?Plant Services 2nd Floor (Exercise Room, VC Conference Room)</p> <p>Provide pre-action sprinkler system in the following: Installation Phase 3</p> <p>?WABA room (Modifying existing handrail above WABA room to accommodate pre-action system)</p> <p>These systems are to be fed from the fire sprinkler supply, as fed from Riser ?A?, and any fire alarm interfaces to be made to the central Fire Alarm Control Panel per plant standards.</p>	Addition of Mechanical Area Sprinklers per NFPA 13	<p>Mechanical Area Locations:</p> <p>Grid Market/Storage Area</p> <p>Mech. Area A/B & 13/15</p> <p>Mech. Area A/B & 9/10</p> <p>Mech. Area A/C 5 &10, 5/13</p> <p>Plant Services 2nd Floor (Exercise Room, VC Conference Room)</p> <p>Tool & Gage Room</p> <p>MCC Mezzanine Offices</p> <p>Zirc Strap</p> <p>Cleaning Room</p> <p>WABA Room</p> <p>Machine Shop (Sandblast Room)</p>	Grounds
18402	Mechanical Side Sprinklers Riser "C"	<p>Provide wet pipe sprinkler additions in the following areas:</p> <p>?Receiving Rack Storage Area</p> <p>?Bin Storage Area</p> <p>?Bin Storage Office Area</p> <p>These systems are to be fed from the fire sprinkler supply, as fed from Riser ?C?, and any fire alarm interfaces to be made to the central Fire Alarm Control Panel per plant standards.</p> <p>No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Mechanical Side Sprinklers per NFPA 13	Mechanical Side Sprinklers	Grounds
18403	Refurbish Receptacles and Lights for Chemical Development Lab Hood # 1.	<p>Pre-approved Level 0 CCF:</p> <p>The existing lights and receptacles have been disconnected from Hood #1. Install new conduit and wire to RP-6CC and connect to existing breaker for lights and receptacles. Replace the receptacles and rewire and connect the existing lights.</p> <p>No processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form are modified by this configuration change.</p>	The hood needs lights and power to become fully functional.	Chemical Development Lab	

CCF	Title	Description	Justification	Location	ISA ID
18404	V-1493A/B Banks Dilution Piping	Add dilution piping with control valves and flow meter to allow for operator control via Experion to add DI water to the aqueous waste tanks (V-1493A/B/C/D).	In order to reduce gamma interference from thorium in the SOLX aqueous waste, dilution water is frequently added to the V-1493A/B banks. This manual and labor intensive task would be better served with control valves to add DI water via a nozzle connection on top of each tank. Operators would have control to specify a certain amount of DI water to be added to each bank of tanks via Experion.	SOLX, Aqueous Waste Tanks	ISA-07 Solvent Extraction
18408	Install new power converters for RP-3-105F	<p>Install two new 20KVA power conditioners to replace the existing 15KVA power conditioners. These power conditioners provided power to critical process equipment in IFBA. The load side of the power conditioners will be connected to a manual transfer switch which feeds power to RP-3-105F. The manual transfer switch is installed to prevent long term downtime in the event of a power conditioner failure.</p> <p>This is a 3 phase CCF</p> <p>Phase 1-Install and connect Power Conditioner # 1</p> <p>Phase 2-Demo Remove old power conditioners and associated equipment</p> <p>Phase 3-Install and connect Power Conditioner # 2</p> <p>No processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form are modified by this configuration change.</p>	The existing power conditioners are obsolete. One of the power conditioners has failed, the remaining unit has had several trips during power sags and needs replacing.	IFBA Equipment Room	ISA-12 IFBA Fuel Rod Manufacturing
18409	Add bollard to protect the Consolidation Feeder VFD, from accidental bumping	Add safety bollard to protect the VFD box. It should be located 42" away from VFD housing as per NEC Electrical code.	A bollard would help to prevent accidental impact of the VFD by the bulk containers	Bulk Blending Room Consolidation Station VFD. Equipment Arrangement Bay C-7	ISA-05 ADU Bulk Powder Blending
18411	Add oxygen sensors to sample lines for the thermal analyzer in the Erbia Laboratory.	Add oxygen sensors to sample lines for the thermal analyzer in the Erbia Laboratory. This CCF will also allow us to replace existing plastic tubing with stainless steel tubing. Using stainless steel tubing is a best practice.	Oxygen measurement of our streams will allow us to accurately evaluate or test results.	Erbia Chemical Laboratory	ISA-18 Laboratories
18412	Replace Obsolete Contactor with Micro-Speed MD in Hoist H in Final Assembly Area	Replace the hoist contactors with Micro-Speed MD.	Replacement of obsolete parts. The Micro-Speed feature is similar to the Smart Move feature that has worked well on the trolleys, and we would like to incorporate it on the hoists as well.	Final Assembly	ISA-17 Final Assembly
18413	Install Dialight Control Panel in Final Assembly Area	<p>Pre-approved Level 0 CCF:</p> <p>Install Dialight Control Panel in Final Assembly Area. The panel will be mounted on the wall and be hard wired electrically. This panel will be installed inside of a box to limit who has access to it. A light study will be included with this CCF to ensure the adjustment of the lights does not impact the quality requirement.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	There are several lights in the final assembly area that are too bright and pose a safety risk to the operators when they have to look up at the cranes in the area. This Dialight control panel will allow someone to connect with a laptop and adjust the brightness of the lights that cause problems.	Final Assembly	

CCF	Title	Description	Justification	Location	ISA ID
18415	Poly-pack Carrier Cart Modification	Add a skirt around the lower port of the cart to prevent it from overlapping with other carts in the area.	The cart spacing is controlled by various documents to establish a minimum center to center spacing between carts. The structure of the current cart design maintains this spacing between similar carts but doesn't between the poly-pack carrier cart and the cream-can carts. The addition of this skirt to the poly-pack carrier cart will prevent this overlap and will therefore maintain the required spacing.	CCCF, Chemical Side, Conversion	ISA-03 ADU Conversion
18416	Cat track on bulger #1 will be shortened by approximately 21" to 26"	Shorten cat track for bulger #1 for install of bulger #3A	The change is needed for the additional bulge carriage 3A	Skeleton assembly	Clean Side Rod Area
18423	Replace Lights Under Thermal Stability Platform	Pre-approved Level 0 CCF: Replace fluorescent Lights Under Thermal Stability Platform with LED lights. No processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form are modified by this configuration change.	When handling rods operators could contact the light tubes with rods creating multiple safety hazards. LED lighting is more energy efficient and will provide better task lighting for operations. The LED lights will have protective covers to prevent contact with LEDs. Ref. RA-417 and TRN-009 for disposal of lamps.	Under Thermal Stability Platform	
18424	Grid Laser Welder Chamber Argon Hose for Knives Replacement	Replace polyethylene tubing (1/4" OD X .170" ID) with a polyurethane tubing (1/4" OD X .160 ID) inside Laser Welder Chamber that connects to the argon to knives. This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.	The hoses are often damaged by the manipulator used to take grids in/out of the weld chamber. The result is reduced argon flow which causes bad weld. The bad welds then have to be reworked. Polyurethane 95A is a better abuse-proof material that is excellent rub and kink-resistant. It is also highly flexible that will lay flush with the chamber curvature.	Laser 3	Components
18425	Line 5 Polypak Roller Redesign (east side)	Design and install a new direct drive polypak roller system for the east side. The west side was done under CCF 14279. Installation will include covering the existing Roll Hood floor opening for the old style polypak roller with a stainless steel plate. Note: The new drive gear unit is filled with .24L (.06 gal) of oil from the manufacturer and is sealed for the life of the gear unit. This quantity falls within the range as specified per PELPREP-118.	The polypak rollers are currently chain driven with a drive system which hangs beneath an opening in Roll Hood floor. The new polypak rollers will be direct driven with the drive motor mounted inside the hood. The direct drive will eliminate the multiple chains/sprockets/shafts/belt that are prone to failure and require frequent maintenance. Also, all drive components can be accessed from the top side. This greatly simplifies the drive system and thus, improves the maintainability of the system. Covering the floor opening will eliminate a source of powder leaks. Having a system that does not have to be lifted up thru the floor opening will also reduce the chance of injury.	Pellet Line 5 Roll Hood	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
18426	Modify HF unload station piping	<p>Currently we receive deliveries of HF by truck. Using a flex hose the vendor attaches his truck to the flanged connection on our unload piping. This connection is connected to the suction of our unload pump P-1192 using lined piping. This section of piping includes two 8 foot vertical runs that form an upside down "U". The unload pump transfers HF to our storage tank T-1174.</p> <p>The only purpose of the upside down "U" is to facilitate egress to an emergency gate connecting the UN storage tanks and the HF unload station. Since the UN tanks are part of the radiation area, routine transfer through this gat is not allowed. Another emergency access gate is located about 20 feet away.</p> <p>Even though the suction of the unload pump is about 5 feet lower in elevation than the flanged connection and the flex hose, HF can not flow by gravity to the suction because of the "U". Since the flex hose will not completely drain, HF is collected in a bucket at the flanged connection. An operator then carries this open bucket into the HF pit and deposits its contents into the overflow tank T-1191 exposing him to the potential chemical exposure.</p> <p>This project will replace the flanged connection and suction piping. The connection will be moved closer to the truck and the "U" will be eliminated from the piping. This will facilitate the contents of the flex hose draining to the pump and eliminate the need to transport HF in an open bucket. The emergency gate will either be modified to eliminate it as an egress. The flex hose will also be supported to facilitate draining.</p>	Reduce HF exposure potential to operators	HF unload area	ISA-06 Chemicals Receipt, Handling and Storage
18428	IFBA RLN7 Pellet Dryer Oven #1 - Alignment Tabs	<p>IFBA RLN7 Pellet Dryer Oven #1 trolley beam has misalignment between monorail channel sections A and B. External and bore scope inspections reveal at least one broken hanger stud and one missing hanger stud. Maintenance will repair the damaged studs and place the beams back into alignment during an upcoming installation window.</p> <p>This CCF will add two 304 stainless steel alignment tabs (3"X4"X1/4") to monorail channel section A to prevent future misalignment between the two trolley segments.</p>	Due to thermal expansion, the threaded hanger studs supporting the monorail channel sections deflect over time. If the monorail channel sections are not aligned during oven loading / unloading, the threaded hanger studs are subjected to lateral stresses, which deform the threaded hanger studs and/or break the stud welds.	IFBA	ISA-14 IFBA Processing
18429	Machine Shop Sandblaster Torit Filter Cartridge Replacement	<p>Pre-approved Level 0 CCF:</p> <p>Replace current Donaldson filter (Store Rm# 21053) for the Machine Shop Sandblaster Torit with same size DHA filter. Filters are similar but made by different manufacturers.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	WESCO would like to change to new supplier that provides similar filter cartridges with cost savings.	Sandblasting	

CCF	Title	Description	Justification	Location	ISA ID
18431	Valve Lockout - Sintering Furnaces	<p>Sintering furnaces are susceptible to spikes in the N2 supply line pressure that can reach as high as 150 psi. The saturator tanks are not rated to handle such spikes.</p> <p>An updated design for a tank is in development. In the interim, valves on lines leading out of the tanks need to be locked open.</p>	<p>The valves on lines leading out of the saturator tanks need to be locked open so there will be no possibility of building excess pressure inside the tanks, even with a spike in pressure in the N2 supply lines.</p>	Pellet Sintering Furnaces	ISA-08 Pelleting
18434	Restore Manholes on Sanitary/Contaminated Wastewater and North/South/East/ Sanitary Lagoons to Grade	<p>Bring the underground piping system manholes to grade to accommodate routine inspection and maintenance. Dirt and gravel, cement, or asphalt have been applied to the top of these manholes over time. This project will excavate the 6 to 12 inches of material on top of them, install risers to bring them to grade, and re-establish a smooth surface to walk or drive on around the manholes.</p> <p>No CSEs are impacted. This process, system, or component does not contain measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	<p>Restoration of manholes to grade will allow access for inspection and repair of underground piping.</p>	Outside URRS	Grounds
18437	Addition of Helium Supply line to Line 6 Bottom End Welder	<p>Add a regulator and supply line to the current mechanical side helium line to provide the ability to weld in helium at the line 6 bottom end welder.</p>	<p>Due to the new NG RCCA Hybrid Control Rod design, welding in helium is the preferred method due to the better welds produced during testing when compared to argon.</p>	Non Fuel Line 6	Components
18439	Modification of Substitution Procedure MCP-202174 to include Lamps and light bulbs	<p>Modification of Substitution Procedure MCP-202174 to include Lamps and light bulbs</p> <p>This change does not constitute a modification to processes, systems, or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p> <p>Section 6.30 added to MCP-202174 6.30Bulbs, Lamps, Lighting Elements (LEDs); CCF-18439 1.Replacement lamps should comply with the specifications of FSS-004, Columbia Plant Electrical, Control, and Instrument Wiring Standard Specifications and FSS-006, Electrical, Instrumentation, and Control Equipment Suppliers. 2.The evaluation of the replacement Lamp will consider at least the following? ?Lumens ?Mounting style and type ?Physical size ?Power rating (wattage) ?Voltage ?Color (temperature) 3.If the replacement Lamp\bulb will be illuminating and inspection area or may affect the plant process (example-lighting can greatly affect the performance of bar code readers) then the substitution must be evaluated by a PSE or maintenance engineer. Documentation of the engineering evaluation will be done by creating a .PDF file which will be attached to an ?Equipment Substitution? PSE doc</p>	<p>Allow us to substitute Bulbs and Lamps in non-critical applications.</p>	Storeroom	

CCF	Title	Description	Justification	Location	ISA ID
18440	IFBA Coater #2 Drum Drive Shaft Coupling Replacement	Replace existing Browning Emerson coupling with Atra-Flex T3 coupling and coupling hub. The T3 coupling uses an off-the-shelf elastomer insert that can be replaced in place and isolates wear to the replaceable part. The coupling hub will be machined to improve maintenance access to the coupling.	Replacing the Browning Emerson coupling with the Atra-Flex T3 coupling eliminates a lubrication point on the Coater, improves misalignment tolerance, and reduces required maintenance. A 24-hour study of the Coater drive circuit indicates a consistent torque demand of 8500-9000 lbf-in at the gearmotor output. The Atra-Flex T3 coupling is rated for 11700 lbf-in in this configuration and can support spike loads of 16380 lbf-in. In the event of a drum bind, the elastomer can also protect rigid assemblies as a source of engineered failure.	IFBA	ISA-14 IFBA Processing
18441	UF6 Bay Rollup Door Enhancements	Modify the personnel door on the new rollup door in the UF6 Bay to Erbia by adding a pull handle on the UF6 side. No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.	The pull handle is requested because the airflow out of the UF6 bay makes it difficult to close the personnel door manually by just using the crash bar.	Hallway from UF6 bay to Erbia, adjacent to the hot oil room.	ISA-03 ADU Conversion
18442	Add foot valve to P-x06C dip tube	Pumps P-x06C are used to transfer liquid (HF/nitric acid/UN) from cream cans to the V-x06 columns. Each conversion line includes a P-x06C pump. The pumps dip tube is placed in the can and the diaphragm pump is manually started. When the can is empty, the pump is manually stopped. The dip tube is removed, wiped, and placed in a bucket. After transfer acid leaks back down the dip tube onto the floor damaging the concrete. This project will install foot valves on the dip tubes to prevent liquid from running back from the de-energized pump and leaking onto the concrete. Since no SSC's are affected, no ITR is required.	Prevent leaking acid from damaging floor. Reduce need to mop floor.	Each Conversion line near the V-x06 column	ISA-03 ADU Conversion
18444	Grid Laser Welders Leybold HV Type Valves Replacement	Replace current Leybold manufactured high vacuum(HV) valves with new VAT manufactured HV type valves for Grid Laser Welders 3-6. "Pre-approved Level 2" This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.	The current Leybold HV type valves are obsolete and repair parts are not readily available for purchase by the Storeroom. VAT HV type valves are equivalent to the current Leybold HV type valves.	Laser Welder 3-6	Components
18445	Feed Tube Redesign Ammonia Still 2	WO 795371 - replace the feed tube with a larger tube with larger and properly oriented holes. This CCF does not impact any SSCs or CSEs. The process, system, or component modified by this CCF does not contain, measure, handle, transport, process, or secure Uranium in any form. Due to the above, up-front planning meeting with NCS is not required; RAF-104-10 is not required.	Still 2 not performing up to spec	Top of still 2	ISA-06 Chemicals Receipt, Handling and Storage

CCF	Title	Description	Justification	Location	ISA ID
18446	Cross Over Piping Ammonia Still 2	<p>Improve still 2 performance by installing cross over piping between the reflux line and the absorber.</p> <p>This CCF does not impact any SSCs or CSEs. The process, system, or component modified by this CCF does not contain, measure, handle, transport, process, or secure Uranium in any form.</p> <p>Due to the above, up-front planning meeting with NCS is not required; RAF-104-10 is not required.</p>	Still 2 is not performing at full capacity	Ammonia Still 2	ISA-02 Uranyl Nitrite Bulk Storage Tanks
18447	Replace Obsolete Contactors with Smart-Move MSM-R in Trolleys (I through V) in Final Assembly Area	Replace the current obsolete Trolley Contactors with Smart-Move MSM-R. See CCF 18122 for replacement done on Trolley A.	The trolleys in Final Assembly have Westinghouse Contactors that control the forward and reverse movement. These contactors can no longer be obtained because they are obsolete. This CCF will replace them with a Smart-Move MSM-R. The Smart-Move will ramp the speed up and down when going to move the trolley, versus the current contactors that go straight to 60 Hz.	Final Assembly	ISA-17 Final Assembly
18449	New heat pumps for the front entry	<p>The ductless heat pumps located in the front entry have reached the end of their service life.</p> <p>This CCF will replace the existing units with new heat pumps, Daiken FTX36NVJU-RX36NMVJU. A contractor has been chosen and has investigated our problem. Since the contractor has determined that the service size does not need to change, no drawing revisions are required.</p>	The existing units have failed and the security officers have complained that they are excessively cold.	Front entry	Grounds
18451	Reduce leaks at dryer filter lids	<p>Under CCF18112 new lids were fabricated using heavier materials than previous and a notch was cut into the bottom flange to facilitate welding of the outlet nozzle. Per the existing drawings red rubber gaskets were used at the dryer flanges.</p> <p>We are still experiencing leaks at the dryer lids, especially at the notch in the flange.</p> <p>This project will evaluate using different gasket materials (red rubber, expanded PTFE, Garlock Blue-Gard Style 3000, and Garlock Blue Gard Style 3300. In addition we will evaluate methods to increase gasket compression at the notch (C-clamps and stiffener bar).</p> <p>After evaluations have been completed, drawings will be updated to indicate any revisions.</p> <p>Since no SSC's are affected, an ITR is not required.</p>	Persistent leaks at dryer filter housings	Conversion on the calciner platform	ISA-03 ADU Conversion
19001	Replace Process Sump pumps P-1125A & P-1125B	<p>Process pumps P-1125A & P-1125B bases are in bad condition and need to be replaced. The pumps are obsolete and will be replaced with a new models.</p> <p>This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form.</p>	Pump bases are failing and causing alignment problems that causes the coupling's to fail and need replacement frequently.	URRS outside, sump located under cooling towers.	Grounds
19003	Chem Lab QC Cage Shelf	Relocate hard hat rack from QC Cage area beside the door of Conversion Line 4 aisle way to the adjacent wall above non-combustible trash. Install a shelf that will hold a brigade bag on wall where the hat rack was removed from.	Shelf will be used to store the fire brigade medical bag.	QC Cage	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
19004	Dirty Dissolver Hanger Bearing Change	Dirty Dissolver CCC-750 Hanger Bearing Change	Change bearing to help with maintenance	URRS	ISA-04 Safe Geometry Dissolver
19005	FIT Building fire detection	<p>Provide smoke/heat detection throughout the FIT Building. Pre-Approved Mod level 2 based off of CCF 17350.</p> <p>No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	There is currently no smoke or heat detection throughout the FIT Building as required per NFPA 72. Fire Protection Program Excellence Project	FIT Building	Grounds
19006	S-1030 Ventilation Duct Sample Port Installation	<p>Cut one 4" holes 90 degree apart from current sample port on S-1030 inlet vertical duct on roof and install a 4" flange saddle sample port over it.</p> <p>Cut two 4" holes 90 degree apart on S-1030 exhaust stack on roof and install a 4" flange saddle sample port over it.</p>	Sample ports will be use to capture samples from the air that S-1030 pulls from the process areas.	S1030 Scrubber Duct on roof	ISA-01 Plant Ventilation System
19007	S-2A&2B Ventilation Duct Sample Port Installation	Install four 3? saddle sample ports on 2A2B scrubber; two on the inlet duct (90 degrees apart) inside Scrap Cage area and two on the FN-961 exhaust stack on the roof. Only two holes on the inlet duct will need to be cut; the exhaust stack has two existing ports but ports are deteriorated and need to be replaced.	Sample ports will be use to capture samples from the air that S-2A&2B pulls from the process areas.	2A&2B Scrubber Duct inside Scrap Cage area and exhaust stack on roof	ISA-01 Plant Ventilation System
19008	S-1008 Ventilation Duct Sample Port Installation	Install two 3? sample ports on the inlet duct (90 degrees apart) inside Scrap Cage area and two 3"ports on the exhaust stack on the roof. Only two holes on the inlet duct will needed to be cut; the exhaust stack has two existing ports but ports are deteriorated and need to be replaced.	Sample ports will be use to capture samples from the air that S-1008 pulls from the process areas.	S-1008Scrubber Duct inside Scrap Cage area and exhaust stack on roof	ISA-01 Plant Ventilation System
19009	S-958 Ventilation Duct Sample Port Installation	<p>Cut two 3" holes 90 degree apart on S-958 inlet duct located on roof and install a 3" flange saddle sample port over it.</p> <p>Cut two 3" holes 90 degree apart on S-958 exhaust stack on roof and install a 3" flange saddle sample port over it.</p>	Sample ports will be use to capture samples from the air that S-958 pulls from the process areas.	S958 Scrubber Duct on roof	ISA-01 Plant Ventilation System
19010	S-1190 (Water Glass) Ventilation Duct Sample Port Installation	<p>Cut two 3" holes 90 degree apart on S-1190 inlet duct located on Water Glass roof and install a 3" flange saddle sample port over it.</p> <p>Cut two 3" holes 90 degree apart on S-1190 exhaust stack on Water Glass roof and install a 3" flange saddle sample port over it.</p>	Sample ports will be use to capture samples from the air that S-1190 pulls from the process areas.	S1190 scrubber duct on Water Glass Roof	ISA-01 Plant Ventilation System
19011	S-4025(Plating Room) Ventilation Duct Sample Port Installation	<p>Cut two 4" holes 90 degree apart on S-4025 inlet duct located on mezzanine above Plating Room and install a 4" flange saddle sample port over it.</p> <p>Cut two 4" holes 90 degree apart on S-4025 exhaust stack on roof above scrubber and install a 4" flange saddle sample port over it.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	Sample ports will be use to capture samples from the air that S-4025 pulls from the process areas.	S-4025 Scrubber duct above Plating Room	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
19012	Pellet Press MODCON Enclosure Door Positioning Cylinder Control, CAP IR-2018-15242	<p>IR-2018-15242, Corrective Action #5 states: Install an interlock that will not allow the pellet press MODCON door with the outer seal to close until the adjacent door is shut.</p> <p>This will be a multi-phase CCF consisting for 4 phases. Each pellet press bulk container MODCON enclosure for lines 1-4 will constitute a phase. Line 5 and the ERBIA press MODCON enclosures do not have outer seals, therefore the change is not necessary and will only be implemented on lines 1-4.</p> <p>The design will consist of a limit switch on the left door and a normally closed solenoid valve on the air closure line for the right door. This will not allow the right door, with the outer seal, to shut until the left door is closed and trips the limit switch.</p>	This CCF will meet the requirements of IR-2018-15242, corrective action #5.	Pellet lines 1-4 have MODCON door enclosures with outer seals.	ISA-08 Pelleting
19013	Replace Dissolver pumps P-754A & P-754B	The existing P-754A & P-754B Eastern Pulsafeeder centrifugal pump will be replaced with Bredel DuCoNite 25 Peristaltic pumps	The existing Dirty safety Geometry Dissolver pumps P-754A and P-754B are not designed for solids, or abrasives and frequently fail causing product to leak on the floor.	URRS SOLX inside.	ISA-04 Safe Geometry Dissolver
19015	LR-230 Vent line moisture control	During the LR-230 offload of Uranyl Nitrate, operators notice UN vapors blowing out of the vent line during depressurization. An in line air water separator will be added to the vent valve to capture moister. Also the operation procedure will be modified to include the install of the separator before off loading and replacement of the filter if liquid accumulates in the filter.	Protecting the operators and environment from exposure to Uranyl Nitrate.	URRS outside LR-230 offload	ISA-02 Uranyl Nitrite Bulk Storage Tanks
19017	Install port in FL948-6A inlet piping	<p>Currently we perform DOP testing on HEPA filter FL948-6A. A PAO aerosol is input into the inlet line and readings are obtained from samples pulled after the filter.</p> <p>Our current input port is less than 6 inches from the filter and we are not getting adequate mixing of the aerosol into the gas stream.</p> <p>This project will install a new port about 10 feet from the HEPA.</p>	Inlet port is needed to facilitate proper DOP testing of the HEPA filter FL948-6A.	Penthouse	ISA-01 Plant Ventilation System
19019	Replace Conversion 419 tank discharge Pressure transmitter PT-419B with a Rosemount Chemical Seal transmitter.	Replace Conversion 419 tank discharge Pressure transmitter PT-419B / Gauge / Rubber Bladder type Chemical Isolator with a Rosemount stainless steel Chemical Seal transmitter.	The existing rubber isolator is prone to premature failure. The failure mode often will allow process to enter the bladder of the isolator which is very difficult to decontaminate. The hope is that the replacement transmitter will be more reliable, increase maintainability, and reduce downtime.	Conversion line 4 below the 419 tank	ISA-03 ADU Conversion
19020	Rewire Kitchen Electrical Feed to Equipment Receptacle	Rewire Kitchen Electrical Feed from 15A to 20A and from 2 wire to 3 wire.	New equipment requires 3 wire circuit	Kitchen electrical service.	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19021	S-1030 Scrubber Efficiency Testing	<p>Air emissions measurements will be performed by CleanAir Engineering on the inlet and outlet / near the exhaust to atmosphere ducts of the scrubber. Reference CCF 19006 (CCF linked) for specific locations of the test ports. The testing will consist of three, one hour runs simultaneously at the inlet and outlet of the scrubber to produce six total samples (3 inlet & 3 outlet). The parameters that will be sampled for are:</p> <p>?Filterable Particulate Matter (FPM) - Inlet ?Ammonia (NH3) - Outlet ?Hydrofluoric acid (HF) - Inlets & Outlets ?Nitric acid (HNO3) - Inlets & Outlets ?Nitrogen oxides (NOX) ? Outlets ?Flue gas composition (O2, CO2, H2O) - Inlets & Outlets ?Flue gas temperature - Inlet & Outlet ? Flue gas flow rate - Inlets & Outlets</p>	DHEC Permit Renewal Requirement	S-1030 Scrubber	ISA-01 Plant Ventilation System
19022	2A / 2B Scrubber Efficiency Testing	<p>Air emissions measurements will be performed by CleanAir Engineering on the inlet and outlet / near the exhaust to atmosphere ducts of the scrubber. Reference CCF 19007 (CCF linked) for specific locations of the test ports. The testing will consist of three, one hour runs simultaneously at the inlet and outlet of the scrubber to produce six total samples (3 inlet & 3 outlet). The parameters that will be sampled for are:</p> <p>?Hydrofluoric acid (HF) - Inlet & Outlet ?Ammonia (NH3) - Outlet ?Nitric acid (HNO3) - Inlet & Outlet ?Nitrogen oxides (NOX) ? Outlet ?Flue gas composition (O2, CO2, H2O) - Inlets & Outlet ?Flue gas temperature - Inlet & Outlet ? Flue gas flow rate - Inlet & Outlet</p>	DHEC Permit Renewal Requirement	2A / 2B Scrubber inside Scrap Cage area and exhaust stack on roof.	ISA-01 Plant Ventilation System
19023	S-1008 Scrubber Efficiency Testing	<p>Air emissions measurements will be performed by CleanAir Engineering on the inlet and outlet / near the exhaust to atmosphere ducts of the scrubber. Reference CCF 19008 (CCF linked) for specific locations of the test ports. The testing will consist of three, one hour runs simultaneously at the inlet and outlet of the scrubber to produce six total samples (3 inlet & 3 outlet). The parameters that will be sampled for are:</p> <p>?Hydrofluoric acid (HF) - Inlet & Outlet ?Ammonia (NH3) - Outlet ?Nitric acid (HNO3) - Inlet & Outlet ?Nitrogen oxides (NOX) ? Outlet ?Flue gas composition (O2, CO2, H2O) - Inlets & Outlet ?Flue gas temperature - Inlet & Outlet ? Flue gas flow rate - Inlet & Outlet</p>	DHEC Permit Renewal Requirement	S-1008 Scrubber	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
19024	S-958 Scrubber Efficiency Testing	<p>Air emissions measurements will be performed by CleanAir Engineering on the inlet and outlet / near the exhaust to atmosphere ducts of the scrubber. Reference CCF 19009 (CCF linked) for specific locations of the test ports. The testing will consist of three, one hour runs simultaneously at the inlet and outlet of the scrubber to produce six total samples (3 inlet & 3 outlet). The parameters that will be sampled for are:</p> <p>?Hydrofluoric acid (HF) - Inlet & Outlet ?Ammonia (NH3) - Outlet ?Nitric acid (HNO3) - Inlet & Outlet ?Nitrogen oxides (NOX) ? Outlet ?Flue gas composition (O2, CO2, H2O) - Inlets & Outlet ?Flue gas temperature - Inlet & Outlet ? Flue gas flow rate - Inlet & Outlet</p>	DHEC Permit Renewal Requirement	S-958 Scrubber	ISA-01 Plant Ventilation System
19025	S-1190 Scrubber Efficiency Testing	<p>Air emissions measurements will be performed by CleanAir Engineering on the inlet and outlet / near the exhaust to atmosphere ducts of the scrubber. Reference CCF 19010 (CCF linked) for specific locations of the test ports. The testing will consist of three, one hour runs simultaneously at the inlet and outlet of the scrubber to produce six total samples (3 inlet & 3 outlet). The parameters that will be sampled for are:</p> <p>?Hydrofluoric acid (HF) - Inlet & Outlet ?Ammonia (NH3) - Outlet ?Nitric acid (HNO3) - Inlet & Outlet ?Nitrogen oxides (NOX) ? Outlet ?Flue gas composition (O2, CO2, H2O) - Inlets & Outlet ?Flue gas temperature - Inlet & Outlet ? Flue gas flow rate - Inlet & Outlet</p>	DHEC Permit Renewal Requirement	S-1190 Scrubber on Water Glass Roof	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
19026	S-4025 Scrubber Efficiency Testing	<p>Air emissions measurements will be performed by CleanAir Engineering on the inlet and outlet / near the exhaust to atmosphere ducts of the scrubber. Reference CCF 19011 (CCF linked) for specific locations of the test ports. The testing will consist of three, one hour runs simultaneously at the inlet and outlet of the scrubber to produce six total samples (3 inlet & 3 outlet). The parameters that will be sampled for are:</p> <p>?Hydrofluoric acid (HF) - Inlet & Outlet ?Nitric acid (HNO3) - Inlet & Outlet ?Nitrogen oxides (NOX) ? Outlet ? Hydrochloric acid (HCl) - Inlet & Outlet ? Sulfuric acid (H2SO4) - Inlet & Outlet ? Boric acid (H3BO3) - Inlet & Outlet ?Flue gas composition (O2, CO2, H2O) - Inlet & Outlet ?Flue gas temperature - Inlet & Outlet ?Flue gas flow rate - Inlet & Outlet ?Multiple Metals* - Inlet & Outlet</p> <p>*Metals include antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, selenium, silver, thallium and zinc.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	DHEC Permit Renewal Requirement	S-4025 Scrubber (Plating Room)	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19027	Modify Cover for S4025 Fan's Drive Assembly	<p>Pre-approved Level 0 CCF:</p> <p>The bearings for the drive assembly associated with the S-4025 fan are running at elevated temperatures due to insufficient cooling if the cover for the fan's drive assembly is installed.</p> <p>In order to continue running the fan with acceptable temperatures, the cover was removed to facilitate cooling and the area was barricaded for safety.</p> <p>In order to provide adequate cooling to the drive assembly and to utilize a cover it is desired to modify the existing cover to include a perforated sheet. In addition to providing cooling the openings in the cover will also allow the reliability group to perform necessary testing without the need to remove the drive assembly's cover.</p> <p>The attached ANSI table provided by Industrial Safety prescribes the minimum safe distance required for openings of various dimensions. The nearest hazard associated with the S4025 fan drive assembly is presented front the drive belt. The drive belt is approximately 2.5" from where the cover is installed. The perforated sheet to be used for modifying the cover has round holes. The ANSI table allows for a hole opening size for the perforated sheet up to 0.39" based on the fact that the minimum safe distance of approximately 2.5" is greater than or equal to 0.20" but less than 3.1". Based on the guidance from the ANSI table a perforated sheet with 3/8" holes (0.375") will be used to modify the cover. The cover with the perforated sheet will provide an open area of approximately 40% which should help in facilitating the cooling of the drive assembly.</p>	<p>A permanent cover which can provide adequate cooling to the drive assembly is desired in order to remove the barricading that has been installed to allow the fan to operate without a cover in place on the drive assembly. The new permanent cover will need to provide adequate cooling to the drive assembly in order to prevent overheating of the bearings.</p>	Wet Filtration Scrubber (Above Plating Room)	
19028	This CCF will allow substitution for the manufacturer of the Hex Nut and Plug (parts #02 & 04) on UF6 Pigtail Copper Assembly	<p>This CCF will allow substitution for the manufacturer of the Hex Nut and Plug (parts #02 & 04) on UF6 Pigtail Copper Assembly</p> <p>An ITR is not required for this CCF per the requirements identified by TA-500, Rev. 37.</p>	<p>REF CAP IR-2019-333 and CAP IR-2019-1048. Original manufacturer (Parker Hannifin) utilizes a roll marking on their parts and it became a location where cracking of the hex nut occurred.</p> <p>This CCF will allow for the purchase and use of the parts from Parker, Hy-lok or Swagelok - as long as the parts have no mechanical stamping. Laser etching is allowable per drawing 357F04ME01.</p> <p>It is also allowable to fabricate these parts in the Tool Room per the drawings and requirements.</p>	UF6 Vaporization, Pigtail Assembly	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19029	IFBA Coater Modification to Remove IFBACTR-115 Assist from CHAMPS Software	<p>Update CHAMPS.SSC_IFBA_Area software package to remove reference to IFBACTR-115 and associated computer assist feature.</p> <p>The CSE is being revised to replace admin control IFBACTR-115 requiring the vacuuming of coater internals every three runs with new IROFS control, IFBACTR-121 requiring periodic inspection and cleaning of the coater bottom. To facilitate this change, the CHAMPS software requires minor modification to remove a prompt to IFBACTR-115 in the program instructing operator to open door for cleaning. Completion of the new SS OM (OMP-BA-FA1-001 ETAPS) will be managed in MAPCON to facilitate the completion of IFBACTR-121. The OM number will be added to the TA-500 checklists. The new IFBACTR-121 requires the cleaning and inspection to be performed at least once annually. The material removed from the coaters shall be weighed and recorded in the comment section of the MAPCON work order</p>	<p>A revision to CSE 14-B removes IFBACTR-115 and replaces it with IFBACTR-121. This CCF implements the revision to ensure conformity with the CHAMPS Maintenance screen.</p> <p>Currently the CHAMPS software notifies the operator to open the coater door every three runs to perform cleaning to remove any accumulation of material from inside the coater. However, some of the areas of most concern are not accessible for proper cleaning during these frequent cleaning cycles and therefore are not sufficiently cleaned. After investigation, it was determined that it is more effective to perform a less frequent deep cleaning and inspection of the coater internals during other significant maintenance because some of the internal equipment is removed making the hard to reach areas more accessible. Operators will continue to perform IROFS cleanings IFBACTR-116 and 117 during target changes and during shield wall and drum replacements.</p> <p>The CSE considers that since multiple, regularly scheduled inspection and maintenance evolutions are required to keep the coaters operational, significant long term accumulation relative to the amount of material required for criticality to occur is at least unlikely.</p> <p>In addition, the deep cleaning will result in cleaner coaters and will reduce door open frequency leading to lower pump down rates improving throughput.</p>	At each coater	ISA-14 IFBA Processing

CCF	Title	Description	Justification	Location	ISA ID
19036	Modify Flex Duct Piping for Remill Station #1 & #2's Bulk Container/Vibratory Feeder Connection	<p>Modification is being performed to address Greenbook 73938. The Greenbook was entered by EH&S Operations(HP) to address a safety concern associated with the large diameter flex duct hose that presents a tripping hazard on the upper platform for remill station #1 and #2. The diameter of the existing flex duct hose that is used for remill station #1 and #2 in this application is approximately 5" and is very cumbersome. The large diameter flex duct hose currently used does not allow for optimal routing of the ductwork/hose and it is often simply laid on the platform which presents a tripping hazard when personnel are working on the upper platform of the remill stations.</p> <p>The purpose of the flex duct hose is to contain powder leaks identified during remilling.</p> <p>This modification will reduce the diameter of the flex duct hose from the currently used diameter of approximately 5" to a diameter of 3". The reduction in the diameter of the flex duct hose to a 3" diameter will allow for the ductwork/hose to be routed in a more optimal manner to eliminate the tripping hazard. The 3" diameter ductwork/hose will then be hooked up to a fixture which will be placed as desired near the bulk container/vibratory feeder connection. The fixture will be advantageous over the existing configuration as it will have the ability to keep the hose in place rather than a large diameter flex duct being arbitrarily placed in the vicinity of the bulk container/vibratory feeder connection.</p> <p>This modification will be 2 phases. Phase 1 will be the modification for remill station #1 (MLL-914). Phase 2 will be the modification for remill station #2 (MLL-915).</p>	<p>Using a smaller diameter flex duct will allow for the hose to be routed in a manner that will reduce and/or eliminate the tripping hazard associated with the existing flex duct hose. The implementation of a fixture which the flex hose can connect to will be advantageous as it will keep the flex hose at the desired location where it will be placed. The use of a smaller diameter hose should not be detrimental to the design of the application as the velocity of the hose used for the application will be maintained or increased.</p> <p>Velocity of existing hoses were measured as follows on 1/15/19: Remill Station #1- 750 lfm at 4" from opening of 5" flex hose Remill Station #2- 950 lfm at 4" from opening of 5" flex hose</p>	Bulk Blending Room at Remill Station #1 & #2 Upper Level	ISA-05 ADU Bulk Powder Blending
19037	Add viewport to S-974 overflow pipe	Install 1-1/2" PVC cross and plug into existing overflow pipe so inspection can be completed with borescope.	One section of S-974 overflow piping is difficult to inspect, adding this viewport will allow a more thorough inspection.	Roof over chem lab	ISA-01 Plant Ventilation System
19042	Project Storage Building fire detection	<p>Provide wiring/programming to the existing two monitor modules, which is the water flow switch and tamper switch of the existing sprinkler system in the project storage building. Provide wiring/programing from the monitor modules to CFFF's fire alarm system.</p> <p>Pre-Approved Mod level 2 based off of CCF 17350.</p> <p>No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	There is currently no wiring/programming for the fire detection such as flow switch or tamper switch on the existing sprinkler system within the Project Storage Building to the CFFF's fire alarm system.	Project Storage Building	Grounds
19053	Pressurized Hot Water Lance at Cylinder Wash	Incorporate a high pressure, high temperature water spray lance inside the cylinder. Install necessary flex hoses, pipes, strainers, valves and pumps to route scale slurry downstream to vessels for treatment / disposal.	The current wash process is not efficient. Cylinders undergo washing cycles that can exceed 48 hours. We are not meeting production needs. This enhancement will also improve quality in internal cleanliness.	Cylinder Wash	ISA-09 UF6 Cylinder Wash
19054	Substitute Nitric Acid Flow to 1008 Scrubber magnetic flow Transmitter with a more process compatible unit.	The existing flow transmitter has 80% Platinum 29% Iridium Electrodes. The new transmitter will be the same except the electrodes will be Titanium.	Titanium is more durable in our harsh process environment 65% Nitric Acid).	1008 Ammonia Fume Scrubber in Conversion Scrap Area.	Components

CCF	Title	Description	Justification	Location	ISA ID
19055	Pellet Lines 2-5 Powder Lift Level Switch Replacement	Replace existing powder level switches with new switches similar to recent installation on Pellet Line 1 under CCF #17073. Install new panels to house contactors and safety relays. Remove existing switches and related control devices from existing control panel. Modify PLC program to remove logic associated with old probes.	<p>The existing level probes are not failsafe. Both types of the probes are obsolete and parts are not available. The Drexelbrook probes have had undetected failures and are subject to damage during cleanout activities. The SSC control components are located in the main control panel and share conduits and enclosures with BPCS controls which violates the standard of separation specified by FSS-012.</p> <p>The SSC control components for the doors are currently located in the main control panel and share conduits and enclosures with BPCS controls which violates the standard of separation specified by FSS-012. The existing control circuit does not latch and will allow the equipment to start automatically upon door closure which is an undesirable condition.</p>	Pellet Lines 2-5 Powder Lift Areas	ISA-08 Pelleting
19056	Substitution for TIT-1147	See Substitution CCF 18340. Replace obsolete and damaged TIT-1147 Transmitter. The existing transmitter is a Rosemount 444RL2U1B2E5 the new transmitter is a 3144PD1A1NAM5. The existing transmitter uses an three wire RTD with an 4-20ma output. The new transmitter has multiple input options including a three wire RTD. The output for the new transmitter will be 4-20 ma with Hart capability. See attached transmitter substitution document.	The existing transmitter is damaged and not functioning.	Tank park west of control room	Components
19057	ADU Rod Line 1 Disconnect replacement	<p>With this CCF, we will replace the original Westinghouse electrical disconnect Cat. No. MD263 with the equivalent Siemens Disconnect Part No. A7B91501321397.</p> <p>Specs reviewed: Flange door mount (handle location) Mechanical knife design Voltage and Amperage Physical size and Mount</p>	Original Westinghouse electrical disconnect Cat. No. MD263 has failed	ADU Rod Line 1 main electrical enclosure	Components
19058	Add VFD to URRS Crane	Add VFD to URRS Crane	Need speed control to safely use the crane.	URRS Cylinder Crane in the UF6 Bay.	ISA-09 UF6 Cylinder Wash
19060	Jockey Pump Piping Correction at Fire Pump House #2	<p>This CCF will be to correct a piping issue found during installation of the jockey pump (CCF 18026).</p> <p>The jockey pump was installed per the drawings within CCF 18026, however it did not meet NFPA 20. This CCF will correct the code violation.</p> <p>No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	<p>The jockey pump piping from the outlet needs to be corrected to meet NFPA 20. The piping is required to be connect to the CFFF's main fire water loop.</p> <p>Currently, there is a valve in place ahead of the piping. The piping will be reconfigured and placed ahead of the valve, and on the CFFF's main fire water loop. The jockey pump was installed per the drawing within CCF 18026, however it did not meet NFPA 20. This CCF will correct this code violation.</p>	Fire Pump House #2	Grounds
19061	Brazed Grid Robot	Installation of 1 new grid brazing robot and necessary support utilities (120VAC outlets and air supply piping to the east wall of grid area).	Capital Appropriation Request approval EF18301	Grid Area	Components

CCF	Title	Description	Justification	Location	ISA ID
19062	IFBA Acid Bath SCR Replacement	<p>With this CCF, we will replace a failed SCR controller p/n: 4001-35641 with the mfg (Chromalox) suggested replacement p/n CS1-04060 with add-on p/n 0113-10237. The suggested replacement meets the following the below criteria which are essential to the process.</p> <p>Single Phase Min 35 amps Up to 600Vac 4-20ma input signal Heat Sink built-in</p>	<p>The existing SCR controller p/n: 4001-35641 has failed and are no longer mfg.</p>	IFBA scrap area	ISA-14 IFBA Processing
19063	Wonderware Upgrade to Windows 7 and WW 11.1	<p>Wonderware Windows XP PC's that currently run InTouch applications (under Wonderware versions earlier than 11.1) that communicate to the PLC('s) for the purpose of providing an operator interface are to be upgraded to Windows 7 PC's running Wonderware 11.1. The InTouch applications will be converted from lower revision applications to 11.1 applications. The current I/O server for communication with the PLC(?s) will be upgraded to a Data Access Server running within the System Management Console. The conversion of the InTouch applications from earlier revisions to 11.1 is part of standard Wonderware functionality that requires no intervention by a programmer. The use of the new Data Access Servers within the System Management Console requires only minimal configuration to provide the PLC?s address. The mapping of inputs and outputs between the InTouch applications and the PLC('s) does not require modification. This CCF requests approval to use either the current approved configuration or the proposed configuration described above. This CCF only applies to Wonderware HMI applications that do not present indications associated with administrative safety significant controls with computer assist.</p>	<p>Removal of XP PC's from the Process Control Network</p>	URRS Solx. Control Room	ISA-07 Solvent Extraction
19064	Install a South Conversion Area Local Ventilation Pickup for CL3	<p>Modify the 4-inch PVC header which supplies the CL3 hydrolysis column passive overflow to include a local ventilation pickup. CL3 currently shares the local ventilation pickup which is installed on CL2. The hose from CL2 creates a tripping hazard for personnel when it is being utilized on CL3.</p> <p>The existing 4-inch PVC header which serves the CL3 hydrolysis column passive overflow will be modified to provide an additional 4" segment where a flex hose will be installed to provide local ventilation at the floor level.</p> <p>The flex hose shall be equipped with a grating or screen to prevent foreign items (e.g., gloves, rags, plastic sheets, etc.) from being introduced to the 2A/2B scrubber's ventilation system (SSC VENT-S2A2B-107).</p>	<p>This modification will eliminate a potential tripping hazard which is created when the flex hose from CL2 is utilized on CL3.</p> <p>CL3 is the only line which does not have its own local ventilation pickup in this application.</p> <p>The new flex hose to be installed shall be equipped with a grating or screen to satisfy the requirements of SSC VENT-S2A2B-107.</p>	Conversion Line 3 at the Process Ventilation Header Associated with the Hydrolysis Column Passive Overflow	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19067	Replace pumps on nitrate storage column	<p>Each nitrate storage tank is provided with at least one pump, P-x06A/B. All except P-505B and P-206A are centrifugal pumps with steel housings and seals that leak frequently. P-505B and P-206A are Mag Drive pumps. P-506B has been in service for over 5 years and had the seals repaired only once.</p> <p>This project will replace the centrifugal pumps, except P-406B, with Mag Drive pumps assemblies like P-505B. The assembly includes pump, motor, coupling and base. While line 4 currently has two pumps, P-406A/B, only one will be replaced. P-406B will be removed and not replaced. This demo may occur prior to the replacement of P-406A. Since P-206A already has an Iwaki Mag-drive pump, no work will be performed on line 2.</p> <p>Each of the actions listed below will constitute a phase for this project:</p> <ul style="list-style-type: none">- demo of P-406B and associated piping- demo and installation of 2 pumps on line 1- demo and installation of 1 pump on line 3- demo and installation of 1 pump on line 4- demo and installation of 1 pump, retainage 1 existing pump on line 5	Current pumps leak	Near south wall in conversion	ISA-03 ADU Conversion
19068	Install foot valves on dip tubes of clean up pumps at heat exchangers HX-x11	<p>Diaphragm pumps are used to transfer liquid (HF/nitric acid/UN) from cream cans at the HX-x11 heat exchangers. Each conversion line includes two such pumps. The pumps dip tube is placed in the can and the diaphragm pump is manually started. When the can is empty, the pump is manually stopped. The dip tube is removed, wiped, and placed in a bucket. After transfer acid leaks back down the dip tube onto the floor damaging the concrete.</p> <p>This project will install foot valves on the dip tubes to prevent liquid from running back from the de-energized pump and leaking onto the concrete.</p> <p>Since no SSC's are affected, no ITR is required.</p>	Prevent acid from dripping on the floor	Conversion	ISA-03 ADU Conversion
19069	Rod Line 7 Girth Welder - Servo Motor Replacement	<p>DC motor to be replaced with servo motor and drive. An Emerson servo motor replacement has been identified on 366F02EQ07 and is currently in use on line 5.</p> <p>Other welders have been developed using AB servos and drives. If it is decided to use the AB equipment, the drawing above must be modified to include those parts.</p> <p>The DC motor removed needs to be retained</p>	The current DC motor on the girth weld chuck on IFBA Rod Line 7 is obsolete.	IFBA Line 7 Welder	ISA-12 IFBA Fuel Rod Manufacturing

CCF	Title	Description	Justification	Location	ISA ID
19071	Substitution filter for Flanders 16"x20"x2" Pre-filter	<p>Substitute Flanders filter (MRO Part#21229) with DHA High Temp Pleated Filter 16x20x2 PLFMEH16202NHC.</p> <p>The filter media shall be comprised of a MERV8 or higher ultra fine fiberglass media for equivalency to the now obsolete Flanders filter.</p> <p>The existing Flanders filter has a MERV8 rating. The recommended DHA replacement has a MERV10 rating when evaluated in accordance with ASHRAE Standard 52.2-2012.</p> <p>The initial resistance to airflow, when tested at 500 fpm, shall not exceed 0.50" w.g.. The filter shall be rated for flammability (UL 900) by Underwriters Laboratories. The recommended DHA replacement has an initial resistance to airflow of 0.43" w.g. when tested at 500 fpm per the attached product spec sheet.</p> <p>This is not the filter associated with the plenums for the scrap cage Blue M hood. This filter is used as a pre-filter for the laminar flow modules in the following equipment applications: FC1602 (PLN2 Blue M Oven), FC1702 (PLN3 Blue M Oven), FC1802 (PLN4 Blue M Oven), OV1003 (Conversion Scrap Cage Blue M Oven# 1) and OV1004 (Conversion Scrap Cage Blue M Oven #2).</p>	<p>The Flanders supplied filter for this application is obsolete. Flanders is unable to recommend a substitution filter with a cardboard/beverage board frame. The Flanders recommended replacement is constructed of an aluminized steel u-channel frame which may be difficult to recycle and/or dispose of compared to the cardboard/beverage board frame of the existing filter.</p> <p>The DHA recommended replacement is available in a beverage board frame which is similar to the material of construction of the existing obsolete Flanders filter.</p> <p>In addition to maintaining the material of construction for the filter's frame, substitution with the DHA filter will provide a cost savings versus the Flanders supplied filters.</p>	Plant	ISA-19 Hoods and Containment
19072	4B Sintering Furnace Cooling Water Modification	<p>Route cooling water supply piping to have a separate manifold for the exit muffle and element cooling glands/thermocouple cooling water jackets. Install a Circuit Sentry and manual bypass on each manifold supply line. Support modified manifold as needed.</p> <p>This change does not adversely affect the structural integrity of the cooling water system, and thus has no affect on SSC Sketch 829013-1, PELSINT-122.</p>	<p>The current system attempts to control flow via the individual ball valves for the exit muffle cooling jacket, element cooling gland and thermocouple cooling jacket lines. Not only are ball valves a poor flow control device, but these valves have to be practically shut to restrict flow to the desired amount. Consequently, due to cooling water cleanliness issues, the valves often plug. When flow is re-established, some lines are hot enough to produce steam which can be a burn hazard. The Circuit Sentry will control flow to the cooling water manifold to allow the ball valves to be opened enough to reduce the propensity to plug. The manual bypass will provide a method to redirect flow should there be issues with the Circuit Sentry. Changes to the manifold require a different method of support.</p>	4B ADU Pelleting Sintering Furnace	ISA-08 Pelleting
19073	4B Sintering Furnace DI Water Supply Valve Actuator Replacement	<p>Replace the XV-S-2284B-9, XV-S-2284B-10 and XV-S-2284B-11 valve actuators on the 4B furnace with high temperature actuators.</p> <p>The existing actuators are MRO S/R# 372285 (VPVL100SR4/5BD). The high temperature actuators are MRO S/R# 105289 (VPVL100SR4/5BH7D)</p> <p>XV-S-2284B-9 and XV-S-2284B-11 are output device tag IDs for SSCs PELSINT-915 and PELSINT-916 per SSC sketch 829013-1.</p>	<p>These actuators are in close vicinity to the exit muffle on the furnace and are thus exposed to elevated temperatures. The current actuators have failed and need to be replaced on the 4B furnace. The high temperature actuators should help prevent future failures. Note that the high temperature actuators are in use on other furnaces.</p>	4B ADU Pelleting Sintering Furnace	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19074	Revise cap-bearing retainer and jaw retractor flange on Laser X	<p>Currently the cap-bearing retainer (29050-081) and the jaw retractor flange (29050-068) on laser X have failed. These parts are shown on 421F07EQ01:sheet 17.</p> <p>Both parts will be modified. The new cap-bearing retainer will be fabricated from AISI 4140 oil hardened steel. The jaw retractor flange will be fabricated from iolite SAE 841 bronze or SAE 600 bronze. The length of the press fit will change from 0.170 inch to 0.300 inch. The length of the counter bore will change from 0.250 inch to 0.315 inch.</p>	Parts per existing design failed.	on Laser X	Components
19075	Replace Elevator Lift Pan Extend and Retract Solenoid Pellet Line 1	<p>Substitution:</p> <p>Replace the extend and retract solenoid on the elevator lift pan extend and retract on pellet line 1. The existing miller valve PN 320-401-502-115AC-2635 will be replaced with an ASCO 8526A106H1G1.</p>	The existing solenoid and valve has been replaced 17 times since 2001 on the elevator pan extend retract cylinder PL1-PL5. The solenoid coil has also had multiple failures and is prone to overheating when energized for an extended time. Map-con shows the solenoids have been replaced 111 times since 2001. This CCF will cover only the solenoid/valve replacement on the pan extend and retract on pellet line 1.	Pellet Line 1	Grounds
19076	Substitute felt for Waterglass filter Press FL-1165A and FL-1165B	<p>The existing Waterglass filters uses 26 Felts per filter rebuilt, on average 260 felts are used per year. At this time the MRO store room has zero inventory of the felts. FL1165A is on line and FL1165B is rebuilt and standing by. Best case with both filters the plant has 2-6 months run time. We are sourcing a new felt and plan on installing them on FL1165B.</p> <p>The current FI-1165A & B felts are Tyvek laminated to a Polypropylene substrate the substitution will be Microporous polymer structure embedded onto and into polypropylene fabric substrate.</p>	The existing Waterglass filters uses 26 Felts per filter rebuilt at present the felts are not available in quantity's that are economical for purchase.	URRS outside Waterglass FL-1165 filters	ISA-15 URRS Wastewater Treatment System
19077	Replace the HF vent tank pump P-1191	<p>The current P-1191 has failed. We do not have a direct replacement on site and can not get one in a timely fashion.</p> <p>This project will replace the existing Wilden double diaphragm pump with an identical pump except:</p> <ul style="list-style-type: none">- the balls will be Viton instead of Teflon- the Gore diaphragm backing will be neoprene instead of Viton <p>The model number of the existing pump is P4/KKVPP/GOV/TF/KTV/502. The model number of the new pump is P4/KKVPP/GNU/VT/KTV/502.</p> <p>This change does not preclude returning to Teflon balls and/or Viton backing at some future date.</p> <p>Since no SSC's are affected, no ITR is required.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required, and a RAF-104-10 is not required.</p>	Existing pump has failed and a direct replacement is not timely available	Outside in the HF pad	ISA-06 Chemicals Receipt, Handling and Storage

CCF	Title	Description	Justification	Location	ISA ID
19078	Allow HF Spiking 1 and HF Spiking 2 systems to charge to Line 1 and/or Line 5.	<p>HF Spiking currently allows charging to either Line 1 or Line 5 during a batch from a given spiking station. This change will authorize processing to both lines from a single station for a batch in addition to the single line feature to better utilize the HF Spiking Stations.</p> <p>No physical changes will be required. The system is currently capable of selecting each line via PLC software selection.</p> <p>No software changes will be made under this CCF. Following approval of the CCF for startup, the PLC code will be modified to allow selection of both lines from a single HF Spiking Station and documented accordingly.</p> <p>This PLC does not contain any safety significant controls.</p>	Allow HF Spiking stations to be used more efficiently.	HF Spiking #1 and HF Spiking #2	ISA-03 ADU Conversion
19079	Single Phase Quick Connect Installation in Substation #6	<p>Pre-approved Level 0 CCF:</p> <p>With this CCF, we propose to install a 240Vac 60amp single phase quick connect on a receptacle panel located in Sub 6. This quick connect will immediately be used to service vendor equipment being used to monitor Scrubber 1190. This quick connect will remain and serve as a convenience connection for future Maintenance activities otherwise used serviced by gas powered generators.</p> <p>*No SSC are impacted by the configuration change.</p> <p>*No processes, systems, or components that contain, measure, handle, transport, process, or secure Uranium in any form are modified by this configuration change</p>	Vendor's (Clean Air Co.) equipment is typically serviced by hardwired electrical connections and not gas powered generators.	Sub 6	
19080	Replace Obsolete RPM Panel Meter for Solx Dissolvers	Replace Obsolete RPM Panel Meter for the Dissolvers Auger Speed. This CCF will allow us to use current Nidec / Shimpo panel meter DT-501XA to replace (as needed) SI-730A, SI-740A, SI-750A, SI-750B, or SI-750C .	The Current panel meter is obsolete. DT-501XA is the factory recommended replacement.	URRS Solvent Extraction Dirty Dissolvers.	ISA-04 Safe Geometry Dissolver
19084	CLN2 1ST Discharge Screw Gearmotor Replacement	This CCF will replace the Browning gearbox and motor assembly M209B with a complete integral gearmotor assembly.	The Browning double reduction gearbox currently in service has been obsolete for 35 years and replacement parts are not stock items.	CLN2 1ST Discharge Screw Gearmotor	ISA-03 ADU Conversion
19085	Cat Track modifications for bulger #2 and #3	The cat track for bulger 2 and 3 will be shortened to add additional bulger.	The skeleton area is adding another bulger 3A	skeleton assembly	Clean Side Rod Area
19086	2nd Substitute felt for Waterglass filter Press FL-1165A and FL-1165B	<p>The Waterglass filters FL1165 A & B use 26 felts per rebuilt the original felts are obsolete. We have installed a substitute felt made of Microporous polymer structure on a polypropylene fabric ccf 19076. This ccf will allow the use a Felt made of Polypropylene/ Polyethylene Composite with a Tyvek overlay.</p> <p>The Filters associated with CCF 19086 were found to be in unacceptable for this process.</p>	The existing Waterglass filters uses 26 Felts per filter rebuilt at present the felts are not available in quantity's that are economical for purchase. This will be the second set of felts that will be available for use	URRS outside Waterglass FL-1165 filters	ISA-15 URRS Wastewater Treatment System

CCF	Title	Description	Justification	Location	ISA ID
19087	Replace valve with double blind flanges	<p>During a walk down, EH&S discovered a UN line piped such that SNM solution could be inadvertently pumped from the scrap cage tanks to the outside UN bulk storage tanks if:</p> <ul style="list-style-type: none">- the three way valve was in the incorrect position- several valves were incorrectly opened- one of the spool pieces were installed. <p>At the time of the inspection the spool pieces were installed.</p> <p>This project will remove the valve closest to the 3-way valve and install blind flanges on each end of the open line.</p> <p>Since no SSC's are involved an ITR is not required.</p>	Response to Redbook 74805	UF6 bay near spiking station 1	ISA-02 Uranyl Nitrite Bulk Storage Tanks
19088	Replace Obsolete Contactors with Micro-Speed MD in Hoists (A through G) in Final Assembly Area	Replace the current obsolete Hoist Contactors with Micro-Speed MD. See CCF 18412 for replacement done on Hoist H.	Replacement of obsolete parts. The Micro-Speed feature is similar to the Smart Move feature that has worked well on the trolleys, and we would like to incorporate it on the hoists as well.	Final Assembly	ISA-17 Final Assembly
19089	Replace motor reducer on line 5 Fitzmill	<p>The motor/reduce on the line 5 Fitz mill has failed and that model is obsolete. This offset model has been replaced by the vendor with an inline model. This inline model was previously installed on the line 4 Fitz mill.</p> <p>This project will replace the motor/ reducer on line 5 with the more current in-line model.</p>	Motor reducer on line 5 has failed and model is obsolete. In-line model has already been installed on line 4	Conversion line 5	ISA-03 ADU Conversion
19090	IFBA Coater Insulator Minor Design Improvements/Corrections	<p>Use a phased approach for completing:</p> <p>Phase 1: CCF-18181 was used to increase the height of the side walls on the insulator box for use as an alternate design. Use this CCF to incorporate the high wall parts into the standard design, update spare parts sheets, and drawings to reflect. The current design will become the alternate.</p> <p>Phase 2: Resolve dimensional stack-up issues by incorporating T&D recommendations into drawings to eliminate tab interferences and related failures. Replace a part that is not used in our current design with a new washer which will slide over feed through tubes and reduce cathode line-of-sight exposure.</p>	<p>After testing in a coater no adverse effects were noted by the area engineering team and the performance of new parts seemed to reduce incidence arcing. The new parts are supposed to reduce the likelihood and frequency of arc strikes resulting in an increase insulator reliability and reduction in part failures and associated downtime.</p> <p>An ITR was not deemed to be necessary on this CCF for the following reasons:</p> <ul style="list-style-type: none">-No impact, additions, or changes to any SSCs.-Phase I is incorporating design of CCF 18181 into the standard design. <p>Conclusion of ITR on CCF-18181 would be the same as 19090, no impact.</p> <ul style="list-style-type: none">-The type of modifications in Phase II are consistent with changes in Phase I and CCF-18181 and do not impact SSCs.	All Coaters	ISA-14 IFBA Processing

CCF	Title	Description	Justification	Location	ISA ID
19091	Install an Ultrasonic Level Switch on West Lagoon #2	<p>Install an Emerson Milltronics Ultrasonic Level switch, Model Pointek ULS 200, Storeroom item #223022 on P-1132A and P-1132B. The switch will start and stop P-1132A/B West #2 Lagoon transfer pumps based on the level of the West #2 Lagoon sump. The configuration will be almost identical to what is installed on P-1131 West #1 Lagoon Pump.</p> <p>Install approximately a 3' 6" ' by 6' 9" concrete pad on dry land near the pumps for a new Pump Electrical Control Enclosure.</p> <p>For the West Lagoon 2 pumps, a check valve is being installed on each pump discharge in order to prevent creating a recirculating mode. Additionally, in order to comply with pump manufacturer recommendations, a 2"x3" expander is being installed directly on the discharge, requiring new 3" isolation valves be installed as well to replace the current 2" isolation ball valves. Minimal adjustments to the discharge piping will also be required.</p> <p>No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required</p>	<p>The current manual electrical configuration does not have a level switch, and can allow for P-1132A/B to run dry, routinely causing pump failure.</p> <p>The current piping configuration can allow for the pumps to lose prime, and run dry damaging the pumps.</p>	West Lagoon #2	Grounds
19092	Erbia Lab Security Doors	<p>Install electric strike mortise security locks, badge readers, infrared sensor and door closed sensor on the two entrances to the Erbium lab. A manual override will also be installed for exiting the door using the normal door hardware/handle.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required</p>	Control access required to satisfy MC&A Safeguards for uranium material testing.	Erbium Lab	ISA-18 Laboratories
19093	3rd Substitute felt for Waterglass filter Press FL-1165A and FL-1165B	The Waterglass filters FL1165 A & B use 26 felts per rebuilt the original felts are obsolete. We have installed a substitute felt made of Microporous polymer structure on a polypropylene fabric ccf 19076. This ccf will allow the use a Felt made of Polypropylene multi-spun filament yarn part number W3TSP4101.	The existing Waterglass filters uses 26 Felts per filter rebuilt at present the felts are not available in quantity's that are economical for purchase. This will be the second set of felts that will be available for use	URRS Outside Waterglass FL-1165A & B	ISA-15 URRS Wastewater Treatment System
19094	Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers	<p>Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers</p> <p>Currently the pressure gauges on the filters in the scrubber recirculation line for the Grid Lasers have a range of 0-100 psig. The typical pressure reading is 4-8 psig. They are used to determine the pressure drop across the filters.</p> <p>This project will replace the existing filters on laser 3 with gauges that range 0-15 psig. New gauges will be Ashcroft 25-1009-SWL-02L-15#.</p> <p>The gauges are not SSC's.</p>	Existing gauges can not be read precisely	Grid Laser welders	Components

CCF	Title	Description	Justification	Location	ISA ID
19095	Boiler House 2 Drain/Sump	<p>Two new boilers and associated water softeners are being installed as part of CCF 18137. This CCF is being written to install a drain from the building to capture the letdown from the top and bottom boiler blowdown as well as the regeneration flow from the softeners.</p> <p>The drain will be a 4" NPD stainless steel drain line that will connect the boiler house trench to a new sump tank located to the West of the boiler house; the blowdown separator will connect to the new sump via a 6" NPD stainless steel line. The sump will have 2 Goulds pumps mounted on top which will be controlled by guided wave radar level instruments (pumps and electrical are provided as part of CCF 18137). The discharge of the pumps will be routed along the pipe bridge to the process sump.</p> <p>This sump tank, pump, piping, and drain will not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	<p>The drain line is being sized and sloped to accommodate the worst case input from boiler blow down concurrent with water softener regeneration of around 238 gpm for 15 seconds. Stainless steel is being utilized to accommodate a life expectancy of 40 years while also being able to handle the salts from water softener regeneration. The tank will be designed to handle external pressure due to ground water and earth. The pump discharge piping will be stainless steel and will be supported in accordance with FSS-016.</p>	<p>The drain and sump tank will be installed on the south side of the road just to the west of the new boiler building.</p>	Grounds
19097	Viper Loop Flow Meter Calibration Test Set-up	<p>This project is to test the flow in the VIPER Loop in the exact same manner as the 2001 VIPER flow meter calibration test. A new adapter plate is being produced for attachment of the FACTS flow meter to the lower internals since the adapter used in 2001 has since been misplaced.</p> <p>Reference: Test Prospectus is THSE-19-8, Rev.0 Test Article Definition (TAD) is THSE-18-40, Rev.1</p>	<p>Engineers have questions about past flow readings from the Gosgen Lower Internal, that seemed odd and unexpected. This temporary setup will allow Engineers to test the flow and compare the readings of the Gentile Flow meter with the Gosgen Lower Internal and VCONE flow readings.</p>	Viper Loop	ISA-18 Laboratories
19098	New liquid Penetrant Inspection (LPI) station.	<p>This project will covers the installation of a Magnaflux ZA-1227 Fluorescent Penetrant Testing Equipment System. It will be installed in the Met Lab in an area referred to as the Dark room. The infrastructures needed to in stall the ZA-1227 Is 110v AC, cold water and drain connection, all utilities are presently located Within the room from previous demoed equipment.</p>	<p>The issue of the Met Lab personnel performing LPI inspection on large quantities of heavy metal top nozzle spring screws was identified several years ago as an ergonomic handling safety issue.</p> <p>Also reduced false rejects due to a less than properly controlled cleaning process. If 1% of the rejects were false and could be recovered, this would represent a savings of \$7,246 per year. This alone would give a ROI of about 3 years.</p>	Met Lab in an area known as the dark room	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
19099	ADU Conversion Lines 1, 2, 3, and 5 Calciner Seal Purge Modifications	<p>Failures of the seals maintaining the nitrogen blanket on the calciners have led to significant downtime. In order to improve the performance of the calciner seals, the following changes were made to the calciner on ADU Conversion Line 4:</p> <p>Relocated existing BPCS flow transmitters FT-409E and FT-409F on the primary purge lines to a location prior to the regulator.</p> <p>Installed new BPCS flow transmitters on the secondary seal purge lines.</p> <p>Replaced existing 0-10inWC gauges PI-409K and PI-409J with 0-50inWC gauges on the secondary seal purge line.</p> <p>Installed four new BPCS transmitters to measure pressure on both primary and secondary seals.</p> <p>Changed purge pressure setpoints from 5inWC on the secondary to 15 inWC</p> <p>Changed purge pressure setpoints from 20inWC on the primary to 30 inWC.</p> <p>No changes were made to the functionality of ADUCAL-913 as part of this change.</p> <p>Since the changes were implemented on line 4, the seals have not failed.</p> <p>This project will provide the same modifications to the other ADU lines.</p> <p>Phases 1, 2, 3, and 4: Mechanical installation of transmitters, regulators, and tubing modifications.</p> <p>Phases 5, 6, 7, and 8: Electrical connection of instrumentation to BPCS.</p>	Improve operation of the calciner seals. The relocation of the transmitters will remove a pressure drop in the line from the regulators to the seals. The regulators and setpoint change allow for a higher seal pressure to counter the calciner operating pressure.	Conversion lines 1, 2, 3, and 5	ISA-03 ADU Conversion
19100	Add Lexan Panel Beneath Tray Walking Beam at Grinder Line 6	<p>Pellets have the ability to fall from the pellet tray as the tray travels onto the roller conveyors after the pick and place on grinder line 6. The frequency which pellets fall is low, however, if the pellets do fall they end up in the aisle way between grinder line 6 and the 5B sintering furnace. Having pellets in the aisle way and on the floor is not desirable as it creates a potential safety hazard.</p> <p>The pellets can be prevented from falling into the aisle way by adding a small lexan panel beneath the tray walking beam on grinder line 6. The new lexan panel would be secured to the existing 80/20 structure that the walking beam table is fabricated from using appropriate hardware.</p> <p>The new lexan panel would only be designed to capture pellets and would not have the ability to accumulate moderator as the design of the new panel would be self draining.</p>	Eliminate potential safety hazards created from pellets dropping onto floor and aisle way. This modification will address ARC IR-2019-1502.	Grinder Line 6	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19101	Remove stanchion holding fire extinguisher in tool room west of OKK Machining Center.	Remove stanchion and fire extinguisher in tool room just west of OKK Machining Center. The OKK Machining (installed per CCF-18272) has a chip removal system that stanchion interferes with.	<p>The only purpose of the stanchion is to hold the fire extinguisher. Fire protection requires no more than 50' to a fire extinguisher in the machine shop. There are numerous fire extinguishers in the area making the 50' requirement easily met even with the removal of this fire extinguisher. The next closest fire extinguishers are as follows:</p> <p>1) At the corner of the mezzanine stairs - 9 ft North and 9 ft West 2) SW corner of Finished Grid Storage Enclosure - 40 ft South 3) Center of machine shop - 35 ft East</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	Tool room west of OKK Machining Center	Miscellaneous
19102	Upgrade of Honeywell Experion DCS System for Conversion (Phase 3 of 3 of Isolated Network Cutover)	<p>Phase 1 is to install a network switch cabinet, patch panel+cables, and fiber optic cabling in the Conversion Control Room to support migration.</p> <p>Phase 2 is to install new network switches for Isolated Honeywell Network in cabinet adjacent to existing PNC/Business network cabinet. Fiber Patch cables will be routed from new network switch (in phase 1 to this cabinet). Power for switches will be fed from existing adjacent cabinet.</p> <p>Phase 3 is to perform cutover of Honeywell 3.11 Controls to Honeywell 50X.X Controls and isolated network for common services and conversion line 5.</p> <p>Phase 4 is to perform cutover of Honeywell 3.11 Controls to Honeywell 50X.X Controls and isolated network for conversion lines 1&2.</p> <p>Phase 5 is to perform cutover of Honeywell 3.11 Controls to Honeywell 50X.X Controls and isolated network for conversion lines 3&4.</p> <p>Phase 6 is to replace the existing 4 ICON stations with a single Orion Console and Auxiliary Station end Pieces.</p> <p>Phase 7 is to create a temporary control station in the conversion conference room. This involves moving 1 wonderware computer, winLIMS computer, and 1 SIS (monitor keyboard & mouse) along with 8 Experion screens.</p> <p>Phase 8 is to demo the temporary control station and return conference room to layout prior to temporary control station.</p>	Hardware is mature and operation system is obsolete. Honeywell DCS version requires upgrading in order to maintain support	Chemical Side - Conversion Area	ISA-03 ADU Conversion
19103	Viper Loop Heater Element (HX-5801A) Replacement	With this CCF, we will substitute obsolete heater element 706-03F13213 with heater element 701-2042. Both heater elements are designed and manufactured by WATLOW. The new heater is designed to the same specs as the old heater: 480v, 3ph, 455kW, MAWP 480PSIG @ 500degF.	Old heater element has failed and are obsolete.	PE Development Lab	ISA-18 Laboratories

CCF	Title	Description	Justification	Location	ISA ID
19104	Simplex MAPNET Card Addition	<p>Installing a new Simplex MAPNET card in cabinet C2 for the fire detection system. P/N#4100-3102</p> <p>Once the card is installed and operational, cable number C2_102/103_SupC2 and the connected devices will be moved from the existing addressed M4 MAPNET card to the new addressed M5 MAPNET Card. After this is complete, all of the devices on this cable will be tested by Simplex in order to validate that all devices are properly working. The testing will be performed in the following phases:</p> <p>Phase 1: Butler Building</p> <p>Phase 2: Tank Farm Fire Pump House #1 Main Switch gear building</p> <p>Phase 3: Fire Pump House #2</p> <p>Phase 4: Ammonia Still building Sub 6 Building Water Glass Building</p> <p>No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain measure handle transport process or</p>	Cabinet C2 did not have enough open addresses for designations at CFFF	2nd floor utility closet next to IT	Grounds
19105	IFBA Coater Fixture Storage Cabinet	<p>IFBA coaters have specifically designed fixtures that hold the different size pellets for the coating process. When not in use they are stored in fixture racks/cabinets. The current cabinet configuration stores the fixtures horizontally. This presents a safety hazard as operators have to pull fixtures toward them in a relatively narrow room or reach up over their head to pull the upper fixtures out.</p> <p>The proposed change will orient the fixtures vertically, which will make pulling them down easier and safer for the operators.</p>	Improved safety of the IFBA operators.	IFBA Coater Fixture Storage Room	ISA-12 IFBA Fuel Rod Manufacturing
19106	Conversion Line 1 Calciner Scrubber Confirmatory Order Mechanical Improvements	<p>1. Add pH element, flow element, control valve and block valve for automatic pH control.</p> <p>2. Add a flow element to monitor DI water flow to scrubber.</p> <p>The above changes are for the piping and mechanical equipment only. The electrical and controls will be added with a separate CCF.</p>	These changes are to meet NRC confirmatory order commitments.	Line 1 Conversion Calciner Off-Gas Scrubber.	ISA-03 ADU Conversion
19107	Conversion Line 2 Calciner Scrubber Confirmatory Order Mechanical Improvements	<p>1. Add pH element, flow element, control valve and block valve for automatic pH control.</p> <p>2. Add a flow element to monitor DI water flow to scrubber.</p> <p>The above changes are for the piping and mechanical equipment only. The electrical and controls will be added with a separate CCF.</p>	These changes are to meet NRC confirmatory order commitments.	Line 2 Conversion Calciner Off-Gas Scrubber.	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19108	Conversion Line 3 Calciner Scrubber Confirmatory Order Mechanical Improvements	<p>1. Add pH element, flow element, control valve and block valve for automatic pH control.</p> <p>2. Add a flow element to monitor DI water flow to scrubber.</p> <p>The above changes are for the piping and mechanical equipment only. The electrical and controls will be added with a separate CCF.</p>	These changes are to meet NRC confirmatory order commitments.	Line 3 Conversion Calciner Off-Gas Scrubber.	ISA-03 ADU Conversion
19109	Conversion Line 4 Calciner Scrubber Confirmatory Order Mechanical Improvements	<p>This CCF will have 2 phases.</p> <p>The first phase will consist of the following:</p> <p>1. Add pH element, flow element, control valve and block valve for automatic pH control.</p> <p>2. Add a flow element to monitor DI water flow to the scrubber off-gas condenser.</p> <p>The second phase will remove the piping installed in CCF-18375. A straight bypass line will be installed in place of the removed piping, flow meter and pH elements from CCF-18375.</p> <p>The above changes are for the piping and mechanical equipment only. The electrical and controls installation and demolition is covered in CCF-19132.</p>	These changes are to meet NRC confirmatory order commitments	Line 4 Conversion Calciner Off-Gas Scrubber.	ISA-03 ADU Conversion
19110	Conversion Line 5 Calciner Scrubber Confirmatory Order Mechanical Improvements	<p>1. Add pH element with temperature indication, flow element, control valve and block valve for automatic pH control.</p> <p>2. Add a flow element to monitor DI water flow to scrubber.</p> <p>The above changes are for the piping and mechanical equipment only. The electrical and controls will be added with a separate CCF.</p>	These changes are to meet NRC confirmatory order commitments.	Line 5 Conversion Calciner Off-Gas Scrubber.	ISA-03 ADU Conversion
19111	IFBA Coater O-Ring Replacement	Change coater door o-ring hardness from 90D to 75D. The material is to remain Viton FKM fluorelastomer, with the same dimensions. The softer o-ring will result in a 10-20% increase in compression, allowing it to fill damage on the door sealing surface.	This CCF would not change the material used to achieve vacuum seal, and thus there is no risk to the product. 75D is already used extensively on the Coaters in other locations with improved sealing performance.	Coaters 1 - 5 and 7 & 8	ISA-14 IFBA Processing
19113	IFBA Coater 8, 6 & 3 Roller Supports Modification	This modification to the upper roller supports will move the rollers away from the cathodes to the center space between cathode and top of the Coater.	Currently design has the roller bearing support arms (items 26 & 27) too close to cathodes 4/6. This makes it impossible to insert the bearing cover. When no bearing cover is installed, the build-up of dust has caused arcing from the cathode to the cathode ground shield.	IFBA Coater #8, 6, 3	ISA-14 IFBA Processing
19114	Replace Obsolete Dry Trash Scales 2, 3, & 4	Replace Obsolete Dry Trash Scales 2, 3, & 4. We will be replacing the existing Scales (Displays and Platforms) with the current model IND570 display and 2888 platform. This CCF will be adding an individual alarm bell and horn for each station. The intent is to eliminate common mode failure. Currently there is a common horn and bell for stations 2,3, & 4. When each of the systems are taken down for the upgrade we will disconnect the electrical connections between the station being worked on and the common Alarm Panel. This is necessary as the contacts are "fail safe" and will cause the alarm to sound on a power loss. After the station is disconnected for the upgrade, the remain stations will be verified for proper operation.	The existing scales are obsolete and can longer be maintained.	Dry Trash Scales in the UF6 Bay	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19115	HP Storage Cabinet on Conversion Platform Roof Area	<p>Install two storage cabinet on roof on the NE side of the filter storage trailer # 1. Cabinets will be secured to Conversion platform grating.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	HP need storage cabinet on roof to store supplies, miscellaneous equipment etc. to use on tasks on the roof.	Roof	Grounds
19116	Pellet Furnace Exit End Gas line Protective Barrier	<p>Install two 1.5" rail pipe protective barrier mounted to the floor. Anchor bolt hole depth will be a maximum of 3". Rails will consist of aluminum or stainless steel material. The rails shall be the approximate height of the cart's shelves.</p> <p>Phase 1 - 1A Phase 2 - 1B Phase 3 - 1C Phase 4 - 2A Phase 5 - 3B Phase 6 - 3C Phase 7 - 4A Phase 8 - 5A</p>	Rails will be used to protect the pan carts from striking the gas lines.	Pellet Sintering Furnaces - 1A, 1B, 1C, 2A, 3B, 3C, 4A and 5A	ISA-08 Pelleting
19117	Conversion scrap cage filter press ventilation hood VH-1058 modification	The Modifications to filter hood VH-1058 are to increase passive over flows	Increase passive over flows from (4) 1" diameter holes to (4) 2 1/2" diameter holes. This will prevent a max solution level from exceeding 3.72"	Conversion Scrap cage	ISA-03 ADU Conversion
19119	Replace the pressure regulators (PRV-409Q, PRV-409U, and PRV-309U) on the natural gas lines to the calciner pilot burners.	<p>The gas lines to the pilot burners on the calciners include pressure regulators. The regulators on lines to the pilots on burners B-409A, B-409I and B-309A (The North American Manufacturing Company model 7348-01) are obsolete and leaking at their stem. The regulators on the gas lines to the other B-x09A and B-x09I pilots have previously been replaced with a The North American Manufacturing Company model 7350-01A regulator (1psi inlet; -1 to 1.5" WC outlet).</p> <p>This project will install the 7350-01A regulators on the gas lines to the pilot burners B-409A, B-409I and B-309A. The vendor assures us that the new regulators will operate the same as their obsolete model.</p> <p>The regulators are not SSC's.</p> <p>Phase 1 will cover line 4; phase 2, line 3.</p>	Existing regulators are obsolete and leaking.	On the calciner platforms lines 3 and 4	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19120	Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers	<p>Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers</p> <p>Currently the pressure gauges on the filters in the scrubber recirculation line for the Grid Lasers have a range of 0-100 psig. The typical pressure reading is 4-8 psig. They are used to determine the pressure drop across the filters.</p> <p>This project will replace the existing filters on laser 4 with gauges that range 0-15 psig. New gauges will be Ashcroft 25-1009-SWL-02L-15#.</p> <p>The gauges are not SSC's. See CCF19094 (linked) for DAP</p>	Existing gauges can not be read precisely	Grid Laser welders	Miscellaneous
19121	Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers	<p>Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers</p> <p>Currently the pressure gauges on the filters in the scrubber recirculation line for the Grid Lasers have a range of 0-100 psig. The typical pressure reading is 4-8 psig. They are used to determine the pressure drop across the filters.</p> <p>This project will replace the existing filters on laser 5 with gauges that range 0-15 psig. New gauges will be Ashcroft 25-1009-SWL-02L-15#.</p> <p>The gauges are not SSC's. See CCF19094 (linked) for DAP</p>	Existing gauges can not be read precisely	Grid Laser welders	Components
19122	Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers	<p>Replace pressure gauges on the filters in the recirculation line of the scrubber for the grid lasers</p> <p>Currently the pressure gauges on the filters in the scrubber recirculation line for the Grid Lasers have a range of 0-100 psig. The typical pressure reading is 4-8 psig. They are used to determine the pressure drop across the filters.</p> <p>This project will replace the existing filters on laser 6 with gauges that range 0-15 psig. New gauges will be Ashcroft 25-1009-SWL-02L-15#.</p> <p>The gauges are not SSC's. See CCF19094 (linked) for DAP</p>	Existing gauges can not be read precisely	Grid Laser welders	Components
19127	VFS-2 Vacuum Valve Replacement	<p>Replacing current Main Gate Valve on VFS2 with new valve Part Number: LPWA-10-ASA-N8-2O-V-EP-110-TAP, same as VFS1(CCF-17477). According to the OEM (Ipsen), this is the latest valve available for our furnaces and is compatible with the current setup. No electrical power change.</p> <p>"Pre-approved Level 2"</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	<p>Reference PRF-1962</p> <p>Current valve is obsolete and have some operational issues.</p>	Zirc Strap Cleaning & Annealing	Components

CCF	Title	Description	Justification	Location	ISA ID
19128	SOLX BPCS redundant Power & Battery backup power to C300	SOLX BPCS system is designed to have redundant power feeds. This project will add a secondary power to each I/O panel and controller panel. This change will eliminate the risk of upset due to the UPS power being dropped. The design is to pull 3 new power feeds from an RP panel, (1) to SOLX main BPCS, (1) SOLX remote I/O and 1 to SOLX C300 controllers. In addition, Honeywell offers a "RAM Charger module", which plugs into the C300 controller board. The purpose of the battery module is to keep power to the volatile memory during of power loss. The design is to mount the battery module inside the C300 cabinet & connect it to the Battery Connection for RAM Retention port on the C300 I/O termination assembly. This module will be added to both SOLX and Incinerator C300 cabinets.	SOLX has had intermittent issues, where power quality caused the area to shut down. This modification will reduce the risk of an upset due to power issues. In addition, the battery module will retain the volatile memory in the event of power loss from both UPS and incoming power, which will eliminate the need to reload the program.	SOLX and incinerator Controller Cabinets	ISA-07 Solvent Extraction
19130	Outlets For Old Station Meeting Room	<p>Pre-approved Level 2 CCF</p> <p>Installation of a transformer and circuit breaker panel for distribution of power in Equipment Room #1. This will provide a source of 120/208 volt power for the Old Station Meeting Room now converted into office space for several Final Assembly Team Managers .</p> <p>No CSE or SSCs will be impacted by this work. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form, therefore, an up-front NCS planning meeting and RAF-104-10 are not required.</p>	There are not enough circuits available for the newly converted space.	Equipment Room #1	Grounds
19137	Substitution of Di water feed actuated valve XV-1089-A	<p>Substitution CCF</p> <p>The existing Worcester actuated valve XV-1089-A has failed and is obsolete. The replacement valve will be a Metso Jamesbury. The valve and actuator will be replaced with a new 1"- 150# flanged stainless steel valve with a 120v solenoid, same as the existing.</p>	Existing Worcester valve is obsolete.	URRS SOLX Feed concentrator	Grounds
19138	Splash Guard for Fuel Assembly Rinse Tank Blow Off Ring	Fabricate removable splash guard to fit around the crit guard(item 2) of the Fuel Assembly Rinse Tank Blow Off Ring Assembly. The material used will be 1/4" thick polycarbonate (Lexan) bonded together, without mechanical fasteners. The open box type splash guard will sit on top of the blowing housing cover(item 4) and will not be mechanically fixed. see drawing 448F13EQ04 attached for reference	Splash guard will be used to prevent zirc and water from blowing out of the opening of the Wash Tank on to the floor when rinsing fuel assembly as it is lowered in the Wash Tank.	Final Assembly / Washing & Vacuuming	ISA-17 Final Assembly

CCF	Title	Description	Justification	Location	ISA ID
19139	Laser 6 Chamber A Paddle Mechanical Drive Components Replacement	<p>This CCF will facilitate the first installation of the newer interchangeable paddle drive components on Laser 6 Weld Chamber A. The Paddle assembly scope includes parts and sub-assemblies belonging to item #5 on 418F10EQ04:01. The three major components of the paddle assembly are the worm index sub-assembly item 175, worm gearbox sub-assembly item 174, and the turn table sub-assembly item 173. Paddle assembly item#5 has been sub-assembled in advance and can be installed, (but not limited to), as one piece.</p> <p>Spare parts are in storeroom. Due to age of machine and normal wear, it is not expected but it's possible that minor field fit or shimming of some mechanical elements may be necessary during installation to compensate for variability and aid in restoring equipment to operation. For example, (but not limited to) during functional testing belt may track differently in forward/reverse direction and tend to ride over edges of pulley tensioners. Shimming the individual pulleys will reduce likelihood of belt fraying and coming off pulley during operation.</p> <p>Also, some bolts need minor customization to better fit installation as begin to replace worn or damaged parts, due to availability, or to provide clearance between bolt and features in the housings. The deviations/modifications include (but are not limited to) length, bolt type, and chamfering. Modifications do not affect major components or interchangeability between future laser installations.</p> <p>There are no drawing changes with this CCF. All changes have been made previously. The purpose of the CCF is to document the swap. Drawing 418F10EQ04: 01, 02, and 03 rev 12 is covered under TA-507 and is linked to CCF as a reference. It is possible this drawing could be revised before</p>	<p>Refer to Subsequent pre-approved modifications to CCF-17169.</p> <p>Laser6 Chamber A belt failures been on the rise and the backlash measurement recorded by Process Engineer is continuing to trend high. Changing the paddle to new design is expected to improve reliability.</p>	Laser Welder 6, Weld Chamber A, W4220A	Components
19141	Substitution Replace Nitric Acid addition block valve to Scrap Cage Press Cake Dissolver	Replace failed Nitric Acid addition block valve to Scrap Cage Press Cake Dissolver with a Jamesbury (Metzo) valve.	The existing valve has failed and is obsolete. Jamesbury is our plant standard replacement.	Conversion Scrap Cage Filter Press Area	

CCF	Title	Description	Justification	Location	ISA ID
19142	Conversion Line 1-5 Calciner Scrubber Confirmatory Order I&C/Elec/Mech Level Improvements	<p>CCF Revision Note: demoted CCF on 10-9-19 to separate the mechanical scope from the electrical I&C scope by creating 5 more phases. No design changes were made.</p> <p>SCOPE:</p> <p>Install new automatic controls for flushing the Slab Scrubber Inlet Piping used for the Level Transmitter. Controls to consist of (2) Solenoid Valves (SV).</p> <p>Install new spool pieces to consist of the applicable configuration for installation of the (2) SV.</p> <p>One SV to be mounted in the DI supply water piping and the second SV to be mounted in the Level/Nitrogen Piping. When the controls in Auto, the Level/Nitrogen SV will periodically close and the DI Water SV will open for a set period of time to flush the pipe and tank nozzle. Operator will have the means to manually open/close these valves from the control room.</p> <p>Install new instrumentation for monitoring and alarming DI Water flow to the Scrubber Off-Gas Condenser. Instrumentation to consist of (1) Flow Meter. New instrumentation to be wired to existing Honeywell BPCS, line #1-5 ADU I/O Racks. Software changes to the existing BPCS to include modifications to existing HMI Graphical Display(s) and adding Low Flow Alarm.</p> <p>New controls to be wired to existing Honeywell BPCS, Line #1-5 ADU I/O Racks. Software changes to the existing BPCS to include modifications to the existing HMI Graphical Display(s) and incorporating new automatic</p>	These changes are to meet NRC Confirmatory Order EA-16-173 commitments	Line 1-5 Conversion Calciner Off-Gas Scrubber	ISA-03 ADU Conversion
19147	Nitrogen Header Update for Sintering Furnace 4C	<p>Nitrogen header servicing sintering furnace 4C has to be upgraded to accommodate safety upgrades that will be introduced by CCF 19014.</p> <p>A section of existing N2 pipe will be replaced with a new section that includes 2 new flanged valves.</p>	Sintering furnace 4C has been off line for significant period of time. The furnace is needed for continued pelleting operation of the plant. Upgrade of the N2 header is necessary to keep future production on schedule.	N2 Header for furnace 4C is located above the furnace on the exit end.	ISA-08 Pelleting
19151	Replace Obsolete Wet Trash Scales 1 & 2	Replace Obsolete Wet Trash Scales 1 & 2. We will be replacing the existing Scales (Displays and Platforms) with the current model IND570 display and 2888 platform.	The existing scales are obsolete and can longer be maintained.	Wet Trash Scales in the URRS area of the UF6 Bay	ISA-13 Low Level Radioactive Waste Processing
19152	Removal of Final Assembly Fence Portion between Final Assembly Area and BWR Area	<p>Removal of the section of fence that currently separates the Final Assembly area by top nozzles from the BWR area. By removing this fence, it will allow the area to be opened up and rearranged to better suit the area. The Final Assembly area will still remain completely fenced off as it is currently.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	By removing this fence, it will allow the area to be opened up and rearranged to better suit the area needs.	Final Assembly	ISA-17 Final Assembly

CCF	Title	Description	Justification	Location	ISA ID
19153	Replacement of 1087 Pumpout and Safe Dissolver PumpOut PLC's and Code Modification	<p>Replace 1087 PumpOut and Safe Geometry GE PLC's with later version GE PLC's. Revise programming code (for PLC's containing Admin w/Computer Assist) to address handshaking conflict between Wonderware and Honeywell systems. Project will be broken into 4 phases:</p> <p>Phase 1: Replace Safe Geometry Pumpout PLC with newer version PLC Phase 2: Replace 1087 PumpOut PLC with newer version PLC Phase 3: Revise code in Safe Geometry PLC for 736 and 746 Pumpout to utilize independent logic tags for Honeywell System and retain current logic tags for use only with Wonderware. Phase 4: Revise code in 1087 Pumpout PLC for 1087AB and 1087CD Pumpout to utilize independent logic tags for Honeywell System and retain current logic tags for use only with Wonderware.</p> <p>White Paper will demonstrate proper operation of each PLC after implementation.</p>	Addressing sharing of single logic tags between Wonderware and Honeywell by assigning new logic tags for Honeywell Experion. Addresses network latency issue with communication with Honeywell by replacing older PLC (lower speed).	Chemical Side - SOLX URRS Area	ISA-07 Solvent Extraction
19154	NILFISK Vacuum Disposable Bag Replacement	Replace current NILFISK paper type bag with polypropylene fleece bag. This is store room item #69262. The fleece bag have approximately the same capacity as the paper type bag per manufacturer.	NILFISK does not manufacture paper type bags anymore. Their replacement is 100% polypropylene material. The Store Room is out of the paper type bags.	Chemical Side	ISA-08 Pelleting
19155	UF6 Bay Replacement Hook for 7.5 ton Crane	Replace the UF6 Bay 7.5 Ton Overhead Crane hook with new Crosby hook. The OEM part number (308F455) for the hook has changed to new pat number (R38581D1F1). The dimensions of the hook and ratings are the same. This hook is used to transport UF6 cylinders within the UF6 bay.	The crane hooks for the 7.5 ton overhead cranes in UF6 Bay are being replaced due to wear.	UF6 Bay Crane	ISA-03 ADU Conversion
19156	Install Temporary Generator for EG-1	<p>Install a temporary generator to replace EG#1 during transition to permanent replacement for EG-1.</p> <p>No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required</p>	EG-1 is obsolete, had multiple break downs and has been proven to be unreliable.	EG-1 equipment room and outside	Grounds
19157	Modify Eyewash location	<p>Modify Eyewash to meet OSHA standard ANSI Z358.1-2004 33"-45" height from floor and 6" off wall or obstruction.</p> <p>This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form</p>	Modify Eyewash to meet OSHA standard ANSI Z358.1-2004 33"-45" height from floor and 6" off wall or obstruction.	Outside URRS on the LR-230 offload platform	ISA-02 Uranyl Nitrite Bulk Storage Tanks
19159	Modify Hose Connections for Centrifuge Feed Bowl	Modify the hose connections for the centrifuge feed bowls on ADU pelleting lines 1-5. The existing hose connections create a side-loading condition when the lid is opened that has the potential to cause the lid to slam creating a safety risk to hands and a potential damage to equipment. Modifying the existing rigid hose connections to implement a swivel would eliminate the side-loading condition to reduce the likelihood of an injury or equipment damage.	Existing rigid hose connections present potential safety risk and potential for equipment damage due to lid slamming. Use of a swivel connection would reduce both potential risks associated with a slamming lid.	ADU Pelleting Grinder Lines 1-5	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19160	Granulator Screen Roller Shaft Length Modification	Modify Granulator Screen Roller Shaft Length to allow proper fit. The current 20" shaft length is too long for Line 4. Other lines will be measured at a later time to see if a standard length can be determined.	Pellet Line 4 is currently down due to the granulator screen roller shaft length being too long.	Pellet Line 4 Granulator Screen Roller Assembly	ISA-08 Pelleting
19161	Secondary Source Hood Modifications	<p>The secondary source hood, which came in as a package unit, is being modified in order to accommodate a pellet tray and stand for the operator to use when working in the stand. See TDR-0003038 for additional details regarding the new tooling.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	Currently the operator is not able to safely perform their job task and is using make shift equipment. This change will provide a permanent solution to this problem. This CCF serves to document the tooling change via the TA-500 process.	Non Fuel	Clean Side Rod Area
19163	Modify Waste Treatment Chlorine instrumentation to improve reliability	<p>Add Redundant Chlorine Instrument. This CCF will allow us to relocate Chlorine analyzer CL-1115A (Aerator free chlorine) to Tank -1116 to be used as a redundant total Chlorine detector.</p> <p>This change does not constitute a modification to processes, systems, or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p> <p>Demoted on 04/10/19 due to an Enovia Issue. Unable to correct improper review requirement, had to demote to correct.</p>	Improve reliability of Chlorine monitoring.	Outside Waste Treatment River discharge, at EPA Building.	Grounds
19164	Chlorination and SO2 pump Y strainer	<p>Install Y strainers on the outlet of the Chlorination and SO2 pumps that connects to the ejection. The strainer basked will have smaller holes (0.125") that the orifice in the ejector (0.21875"). In the event that the basked blinds prematurely the option is available to remove the basket or change screen mesh size.</p> <p>This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form.</p>	The circulation pumps on each of the chlorination and SO2 have an ejector that can clog from debris. The strainer will help remove any material before it reached the ejector.	urrs outside waste treatment	Grounds
19165	Chlorine pit inlet from sanitary lagoon screens	<p>The waste water entering the chlorination pit needs a screen on the inlet to capture any material that could clog the chlorination ejectors. The screen may be removed for cleaning or if the flow from the sanitary lagoon becomes restricted two quickly from dabris</p> <p>This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form</p>	remove any material from clogging the chlorination ejectors.	urrs waste treatment	ISA-15 URRS Wastewater Treatment System

CCF	Title	Description	Justification	Location	ISA ID
19167	Replace motor reducer on line 1 Fitzmill	<p>The motor/reducer on the line 1 Fitz mill has failed and that model is obsolete. This offset model has been replaced by the vendor with an inline model. This inline model was previously installed on the line 4 Fitz mill.</p> <p>This project will replace the motor/ reducer on line 1 with the more current in-line model.</p>	Motor reducer on line 1 has failed and model is obsolete. In-line model has already been installed on line 4	Conversion line 1	ISA-03 ADU Conversion
19172	Rearrange Maintenance & Janitorial Service Area and Relocate Flammable Storage Cabinets	<p>Janitorial Service office will move to the old Maintenance Engineering storage area. Janitorial Storage area will move to the old maintenance storage area. Maintenance Rebuild shop will expand to the old Janitorial Storage area.</p> <p>Relocate MS-55 flammable storage cabinet from Maintenance Rebuild Shop to the new Janitorial Storage area.</p> <p>Relocate MS-43 flammable storage cabinet from Maintenance Tool Crib to Maintenance Rebuild Shop.</p> <p>Relocate MS-45 to the expanded area of the Maintenance Rebuild Shop</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	Management relocated areas to make it more convenient for workers to perform there tasks.	Mechanical Side Maintenance Area	Grounds
19174	Replace P-06 With Alternate Style of Air Diaphragm Pump	Replace P-06 With Alternate Style of Air Diaphragm Pump. This pump transfers solutions generated from washing cylinders to V-07A or V-07B.	Current P-06 is an obsolete model that is difficult to find parts for to maintain. This upgrade will make this pump more reliable and easier to service.	Cylinder Wash	ISA-09 UF6 Cylinder Wash
19175	Modify MAP Slab Tank V-676 Piping and Dike to Make Room for Equipment Installed at Cylinder Wash	<p>The following elements need to be removed from the MAP Scrubber Sump Tank V-676 system:</p> <ol style="list-style-type: none">1. Bottom piping header to the inlet of P-678A/B Recirculation Pump2. Part of a caustic line that directly ties into this bottom header3. LIT-676 instrument, supporting tubing, and stand4. Approximately 6 square feet of dike associated with containment around this system <p>The dike will be reconstructed to provide secondary containment of the remaining equipment.</p>	These items need to be removed in order to allow room for installation of new internal cylinder washing equipment. See CCF 19053, Pressurized Hot Water Lance at Cylinder Wash.	Back Wall at the Entrance to the UF6 Bay.	ISA-09 UF6 Cylinder Wash
19177	Demo UN Piping - Conversion Lines 2, 3, & 4	UN lines running from HF Spiking Station to Conversion Lines 2, 3, & 4 have been capped and abandoned in place.	Removing the pipe would free up more space in the UF6 bay and Conversion area.	UF6 bay downstream of the HF Spiking Station to Conversion Lines 2, 3, & 4.	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19178	Pellet Line 1 Polypak Roller Redesign	<p>Install direct drive polypak roller system in Pellet Line 1 Roll Hood. Installation will include covering the existing Roll Hood floor opening for the old style polypak roller with a stainless steel plate.</p> <p>Note: The new drive gear unit is filled with .24L (.06 gal) of oil from the manufacturer and is sealed for the life of the gear unit. This quantity falls within the range as specified per PELPREP-118.</p>	<p>The polypak rollers are currently chain driven with a drive system which hangs beneath an opening in Roll Hood floor. The new polypak rollers will be direct driven with the drive motor mounted inside the hood. The direct drive will eliminate the multiple chains/sprockets/shafts/belt that are prone to failure and require frequent maintenance. Also, all drive components can be accessed from the top side. This greatly simplifies the drive system and thus, improves the maintainability of the system. Covering the floor opening will eliminate a source of powder leaks. Having a system that does not have to be lifted up thru the floor opening will also reduce the chance of injury.</p>	Pellet Line 1 Roll Hood	ISA-08 Pelleting
19179	Pellet Line 2 Polypak Roller Redesign	<p>Install direct drive polypak roller system in Pellet Line 2 Roll Hood. Installation will include covering the existing Roll Hood floor opening for the old style polypak roller with a stainless steel plate.</p> <p>Note: The new drive gear unit is filled with .24L (.06 gal) of oil from the manufacturer and is sealed for the life of the gear unit. This quantity falls within the range as specified per PELPREP-118.</p>	<p>The polypak rollers are currently chain driven with a drive system which hangs beneath an opening in Roll Hood floor. The new polypak rollers will be direct driven with the drive motor mounted inside the hood. The direct drive will eliminate the multiple chains/sprockets/shafts/belt that are prone to failure and require frequent maintenance. Also, all drive components can be accessed from the top side. This greatly simplifies the drive system and thus, improves the maintainability of the system. Covering the floor opening will eliminate a source of powder leaks. Having a system that does not have to be lifted up thru the floor opening will also reduce the chance of injury.</p>	Pellet Line 2 Roll Hood	ISA-08 Pelleting
19180	Pellet Line 3 Polypak Roller Redesign	<p>Install direct drive polypak roller system in Pellet Line 3 Roll Hood. Installation will include covering the existing Roll Hood floor opening for the old style polypak roller with a stainless steel plate.</p> <p>Note: The new drive gear unit is filled with .24L (.06 gal) of oil from the manufacturer and is sealed for the life of the gear unit. This quantity falls within the range as specified per PELPREP-118.</p>	<p>The polypak rollers are currently chain driven with a drive system which hangs beneath an opening in Roll Hood floor. The new polypak rollers will be direct driven with the drive motor mounted inside the hood. The direct drive will eliminate the multiple chains/sprockets/shafts/belt that are prone to failure and require frequent maintenance. Also, all drive components can be accessed from the top side. This greatly simplifies the drive system and thus, improves the maintainability of the system. Covering the floor opening will eliminate a source of powder leaks. Having a system that does not have to be lifted up thru the floor opening will also reduce the chance of injury.</p>	Pellet Line 3 Roll Hood	ISA-08 Pelleting
19181	Pellet Line 4 Polypak Roller Redesign	<p>Install direct drive polypak roller system in Pellet Line 4 Roll Hood. Installation will include covering the existing Roll Hood floor opening for the old style polypak roller with a stainless steel plate.</p> <p>Note: The new drive gear unit is filled with .24L (.06 gal) of oil from the manufacturer and is sealed for the life of the gear unit. This quantity falls within the range as specified per PELPREP-118.</p>	<p>The polypak rollers are currently chain driven with a drive system which hangs beneath an opening in Roll Hood floor. The new polypak rollers will be direct driven with the drive motor mounted inside the hood. The direct drive will eliminate the multiple chains/sprockets/shafts/belt that are prone to failure and require frequent maintenance. Also, all drive components can be accessed from the top side. This greatly simplifies the drive system and thus, improves the maintainability of the system. Covering the floor opening will eliminate a source of powder leaks. Having a system that does not have to be lifted up thru the floor opening will also reduce the chance of injury.</p>	Pellet Line 4 Roll Hood	ISA-08 Pelleting
19182	Replace Obsolete Contactors with Micro-Speed MD in Hoists (I through V) in Final Assembly Area	Replace the current obsolete Hoist Contactors with Micro-Speed MD. See CCF 18412 for replacement done on Hoist H.	Replacement of obsolete parts. The Micro-Speed feature is similar to the Smart Move feature that has worked well on the trolleys, and we would like to incorporate it on the hoists as well.	Final Assembly	ISA-17 Final Assembly

CCF	Title	Description	Justification	Location	ISA ID
19183	Laser 4 Chamber B Paddle Mechanical Drive Components Replacement	<p>This CCF will facilitate the second installation of the newer interchangeable paddle drive components on Laser 4 Weld Chamber B. The Paddle assembly scope includes parts and sub-assemblies belonging to item #5 on 418F10EQ04:01. The three major components of the paddle assembly are the worm index sub-assembly item 175, worm gearbox sub-assembly item 174, and the turn table sub-assembly item 173. Paddle assembly item#5 has been sub-assembled in advance and can be installed, (but not limited to), as one piece.</p> <p>Spare parts are in storeroom. Due to age of machine and normal wear, it is not expected but it's possible that minor field fit or shimming of some mechanical elements may be necessary during installation to compensate for variability and aid in restoring equipment to operation. For example, (but not limited to) during functional testing belt may track differently in forward/reverse direction and tend to ride over edges of pulley tensioners. Shimming the individual pulleys will reduce likelihood of belt fraying and coming off pulley during operation.</p> <p>Also, some bolts need minor customization to better fit installation as begin to replace worn or damaged parts, due to availability, or to provide clearance between parts and features in the housings. The deviations/modifications include (but are not limited to) length, bolt type, and chamfering for improving fit between paddle and laser.</p> <p>The purpose of the CCF is to document the swap and to capture in the drawing minor improvements for improving interchangeability and maintainability. Drawing 418F10EQ04: 01, 02, and 03 rev 14 is covered under TA-507 and is linked to CCF and represents the latest paddle.</p>	<p>Refer to Subsequent pre-approved modifications to CCF-17169.</p> <p>Laser4 Chamber B backlash measurement recorded by Process Engineer is continuing to trend high, similar to a recent failure on Laser6. Changing the paddle to new design is expected to improve reliability.</p>	Laser 4, Chamber B	Components
19184	Dissolver hood screen modification	SOLX dissolver hoods have a screen that material is poured through to capture any unwanted items like bolts and nuts.	Existing screens have gaps between the sifter and screen frame that allows material to bypass without being screened. The unscreened material can damage equipment.	SOLX dissolvers	ISA-07 Solvent Extraction
19185	T1116 Tank inlet screens	<p>The waste water entering T1116 (round tank) needs a screen on the inlet to capture any material that could clog the SO2 ejectors.</p> <p>This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form</p>	Remove any material from clogging the SO2 ejectors.	urrs waste treatment	ISA-15 URRS Wastewater Treatment System
19186	UF6 Pigtail Plug and Sleeve Changes	<p>Make changes to both ends of the UF6 pigtail fabricated in the Tool Shop. This include details for fabrication of ITEM 03 & 04 in the Tool Room or by an outside tooling supplier.</p> <p>Changes Include Item 03 ? 40 degree angle on sleeve inside taper needs to be changed to 37 degrees to meet the J514 spec Item 04 ? Add Alternate Configuration for fabrication of this plug when parts can?t be purchased, Preferred Configuration will still be purchased items</p> <p>Reference TDR-0003191</p>	Due to the long lead-time of the Item 4 plug from all suppliers, this change will allow for an alternate part to be fabricated by the Tool Room per drawing. The change in the degree of the sleeve will improve a better seal.	UF6 Bay	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19188	Replace S-1030 duct heater	<p>Replace S-1030 duct heater</p> <p>The duct heater currently installed is an Indecco model 166X123313. The wiring cabinet has a hinged access door.</p> <p>The new duct heater is also an Indecco model 166X123313. The wiring cabinet has a bolt on access door. Voltage, watt density, and heater configuration are the same for both units.</p>	Duct heater design changed by Indecco	On roof	ISA-01 Plant Ventilation System
19191	Line 3 Oxidation Oven Door Lift Actuator Break substitution	<p>Substitution</p> <p>With this CCF, we will replace the MPC034-24-500 brake for the Line 3 Oxidation Oven door lift actuator with a JVL MAB34x-94 brake. The MPC034-24-500 brake has a flying lead connection. The JVL MAB34x-94 brake has an M8 connector with corresponding cable. The brake electrical and dimensional specifications are equivalent as per the attached information.</p>	The door on the Line 3 Oxidation Oven hesitates when lowering(does not lower smoothly as on Line 4). After practically eliminating the issue being with the door cam followers/door guides/pulley system, the door linear actuator brake is suspect. However, when attempting to replace the brake with the one set-up in the storeroom, the wire connection was found to be different[flying leads vs a (4) pin connector]. A CCF is required to update the electrical drawings to show the brake with the pin connector.	Line 3 Oxidation Oven	Components
19192	Reconnect EG1 and Remove Temporary Generator	<p>The existing emergency generator number 1 has been repaired and will be reconnected. The temporary generator installed for the plant power outage will be removed.</p> <p>Two Phases</p> <p>One for reconnecting the existing EG1</p> <p>One for removal of the temporary generator</p>	The temporary generator was installed to provide power throughout the power outage. EG1 has been repaired and can be reconnected to its original feed.	Compressor equipment room by receiving isle	Grounds
19196	Replace concentric expansion boot on powder line exiting the hot oil dryer	<p>Currently the boot on the powder line exiting the hot oil dryer is a 6" flange x 4" flange x 6" long concentric reducer (MAPCON 213005). It is fabricated from rubber with a Viton rubber wrap on the tube and cover. It is no longer available from our vendor Proco.</p> <p>This project will provide an alternate boot.</p> <p>The temperature of the boot while in service was determined to be less than 225 degrees F by taking measurements. See attachment. The new vendor, Flexicraft, proposed that we use an EPDM rubber wrap. EPDM is similar to Viton, but has a lower temperature rating. EPDM has an upper temperature rating of 300 degrees F and is compatible with uranium oxide powder. The quote is attached. The new boot will fit our existing piping without modification.</p> <p>No drawing revisions are required, but the product description will be changed in MAPCON. New parts will be ordered by stores, but no replacements are planned at this time.</p>	Current part is obsolete	Conversion lines 1 - 5 at the hot oil dryers	ISA-03 ADU Conversion
19215	UN-bulk storage and scrap cage transfer pipes to V1075	Install piping and valve from scrap cage to SOLX V1075. Modify existing piping in the UF6 bay to transfer from UN-bulk storage to V1075 with low point drain. Install High point in UN-bulk transfer pipe. modify V1075 Top tank flange by adding additional nozzle for passive overflow. Reference CCF 19223 for block valve installation	Install independent pipe lines from UN-Bulk storage and Conversion scrap cage to prevent the possibility of transferring material to an unfavorable geometry UN-Bulk storage tank.	URRS SOLX and Conversion Scrap Cage	ISA-07 Solvent Extraction

CCF	Title	Description	Justification	Location	ISA ID
19216	Isolate Parallel Coater #5 Roughing Pumps	Place paddle blind in flange between the isolation valve and VP-7069B. Update drawing with instruction; to configure to operate on VP-7069A install paddle blind, to configure to operate on VP-7069B, remove paddle blind.	With the installation of the dry screw roughing pump at VP-7069A Pump, there is a risk of pulling oil from Roughing pump VP-7069B as the butterfly valves don't seal completely.	ON Mezzanine behind Coater #5	ISA-14 IFBA Processing
19217	Power Master Boiler Pilot Gas Regulator Replacement	<p>Replace the Type 922 Fisher gas regulator for the pilot of the Power Master Boiler with a R622 Fisher regulator (spring control range of 9 to 13-inches w.c.). The new regulator has been specified by C&C Boiler.</p> <p>This change does not constitute a modification to a process, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	The current regulator has failed and is obsolete.	Power Master Boiler	Grounds
19220	V-x20 Overflow and P-x20 Air Supply Modifications	<p>Modify the piping on the centrate collection tank (V-x20) on ADU lines 1-5. The piping that will be modified is the overflow piping which leads to the auxiliary centrate pump. This will allow the auxiliary pump to be configured in a similar manner to the primary centrate pump where the suction is connected to the V-x20 tank's bottom discharge only. The overflow connected to the auxiliary pump's inlet will be removed. Removing the overflow piping to the inlet of the auxiliary pump will prevent the pump from unnecessarily running dry.</p> <p>In addition to the elimination of the overflow piping leading to the auxiliary pump the air supply for the auxiliary centrate pump will also be modified. The current configuration for the air supply is fabricated of stainless steel tubing and consists of a single regulator which then tees off after the regulator before being directed to the solenoid valves for the air supply to each pump. To ensure a pump has adequate air supply a tee will be installed prior to the existing regulator and a dedicated tubing line and regulator will be routed to the auxiliary pump and the primary pump will use the existing regulator and air supply as its dedicated supply. This should ensure an adequate volume of air and sufficient pressure independent of the operating condition of the other pump and should allow the opposite pump to run in the event of a diaphragm failure occurs on one of the pumps.</p> <p>This modification is being proposed as a 10 phase multi-phase CCF.</p> <p>Proposed phases for modification are as follows:</p> <p>1. Phase 1: Modify air supply to P-120A/B</p> <p>2. Phase 2: Modify overflow piping to P-120B</p>	Improve reliability of P-x20 pumps to reduce the likelihood of an overflow from one of the V-x20 centrate collection tanks.	ADU Lines 1-5 at the V-x20 centrate collection tanks	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19221	Equipment Room 1 Floor Hole Cover (EF2 Fan Removal)	<p>This project is to cover the floor opening where the old kitchen exhaust fan (EF2) was connected to the duct going through the Equipment Room 1 floor.</p> <p>Remove 3' concrete curb down flush with floor slab. Cut exhaust duct down below floor slab and cap.</p> <p>Cap 30"x 34" opening in concrete floor with 38"x 42" x ¼" reinforced steel diamond plate.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	Project is to cover floor opening to create a clear and level area that will prevent a safety hazard.	Equipment Room 1	Grounds
19222	FV-1161 Flow Control Valve Replacement	<p>Replace 1" ITT Engineering flow control valve used for water addition during waterglass makeup, with a Fisher flow control valve. The new valve has been specified based on flow requirements (7gpm with range 0-15 gpm) by Operation and should operate similar to current valve (approximately 7 CV Rating).</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p>	Current ITT Engineering has failed and is obsolete.	Waste Treatment Area	ISA-15 URRS Wastewater Treatment System
19223	Install Block Valve in the process line from Conversion Scrap Area to the Liquid Scrap tank V-1075 in Solx.	Install Block Valve and associated controls in the newly installed process line (see CCF 19215) from Conversion Scrap Area to the Liquid Scrap tank V-1075 in Solx..	New line installed to address potential unanalyzed condition (see CCF 19215). Valve and controls added for Process operation.	Solx., V-1075 Feed from Conversion Scrap Cage.	ISA-07 Solvent Extraction
19224	Boiler House 2 Drain - Excavation for Sump Tank	Excavation is needed for installation of a sump tank that is being designed and installed under CCF-19095. The scope of this CCF only covers the excavation. Excavation site will be restored to its final condition under CCF-19095. No SSCs are impacted. No CSEs are impacted. This excavation will not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.	Excavation is needed for installation of a sump tank that is being designed and installed under CCF-19095. This CCF is needed for the excavation work to finalize the design of the sump tank in CCF-19095 in case there are any obstructions identified during excavation.	Adjacent to new boiler house.	Grounds
19226	Modify spray head on Incinerator quench tower	Existing stray nozzle has a reducing elbow that will be replaced with an elbow and a bushing	Revise drawing to remove reducing elbow and bushing size.	URRS Incinerator	ISA-13 Low Level Radioactive Waste Processing
19227	IFBA Pellet coater water heater Bleed Ring	Install flanged bleed ring between heater and shell flange.	The water heaters are install horizontally that causes air to accumulate and create a dry area on the top of the heaters. The heaters over heat when not submerged under water and fail. Bleed rings are an option on each heaters. HX-7102, HX-7141, HX-7135, HX-7132, HX-7103, HX-7146, HX-7144, HX-7138. to be installed as needed.	IFBA Coater system heaters	ISA-14 IFBA Processing

CCF	Title	Description	Justification	Location	ISA ID
19228	Install DP Transmitters on FL-948A and FL-948B HEPA and Pre-Filter	<p>Install 4 DP transmitters; two SSC transmitters for the HEPA filters, and two BPCS transmitters for the Pre-Filters on filter banks FL-948A and FL-948B. Currently daily readings for VENT-IN CIN-902 are taken from the magnehelic gauges per MCP-108104 and recorded on CF-84-006. The transmitters will replace the gauges and readings will be taken from the SSC and BPCS transmitters. These readings will be taken in the field at the same location as the magnehelics. Procedures will be modified to reflect these changes for proper identification on forms and procedures. The SSC transmitter will be installed across the HEPA filters and the BPCS transmitter will installed across the Pre-filters.</p> <p>Additionally the two SSC transmitters (HEPA filters) will connect directly to the incinerator SIS PLC. The two BPCS transmitters (pre-filters) will connect directly to the BPCS Honeywell rack. The inputs will be displayed in DP Inches of Water on the BPCS.</p> <p>The magnahelics will be removed once the transmitters are on line. This CCF will have two phases, one for each filter bank FL-948A and FL-948B.</p> <p>Demoted on 10/18/19 to modify text on CCF to exclude the addition of the HEPA high differential pressure alarming function and differential pressure displays. This functionality is desirable and may be added in the future via another CCF, but to meet the current schedule it has been removed from this CCF. The ITR had not addressed the software changes required for this alarming and display feature.</p>	Filters have failed due to excessive pressure across filters. See CAP -IR-2018-20410. The ability to trend the DP across the filters will assist with predicting filter changes and will allow operations to correlate specific incinerator operations with filter loading.	Penthouse	ISA-01 Plant Ventilation System
19231	Splash guards for HF pumps P-1173 and P-1174	<p>HF transfer pump P-1174 failed during a maintenance operation. The failure was the result of a near hole in the pump casing. No one was injured, but there was a potential for HF to have sprayed inside the dike.</p> <p>P-1174 has been replaced. Its companion pump, P-1173, was/will be replaced also. Some future project will replace both pumps with more appropriately designed pumps.</p> <p>This project will install splash shields around both pumps to greatly reduce the possibility of HF being sprayed on an employee if either pump should catastrophically fail.</p> <p>Since no SSC's are affected, an ITR is not required.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure uranium in any form. Therefore, no up front planning meeting with NCS is required, and a RAF-104-10 is not needed.</p>	Reduce potential of injury from HF exposure	Outside URRS in HF pad	ISA-06 Chemicals Receipt, Handling and Storage
19232	Substitution: GM furnace 1 and 2 argon metering valve	<p>The existing argon metering valve is obsolete.</p> <p>ASCO offers a replacement valve 8262H090VH 24/DC.</p>	current valve is obsolete	GM furnace	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19233	Relocation of Fixture 6 Full Forward Limit Photo Eye (PE-000408)	This CCF serves as documentation for the relocation of the full forward limit photo eye (PE-000408) on Skeleton Fixture 6. The photo eye currently picks up on the 4th guide block, which moves as the bulge tools drive into the skeleton. The proposed location would pick up on the bulger head since this controls the distance the tools travel.	When building a skeleton on 5/22/19, the operator overtraveled the bulge tools, and ended up crashing them into the dashpot region of the thimble tubes (EPN-0137536A). The relocation of this photo eye will establish a better location to ensure the issue does not reoccur.	Skeleton Area	Clean Side Rod Area
19234	Installation of Vertical No-Loss Stack to S-958 A&B Horizontal Exhaust Duct	Remove flanged spool piece duct from the end of the horizontal exhaust duct of S-958(FN-972A&B) and replace it with an elbow connected with vertical no-loss stack. No-loss stack will be additional 8' high (4x the diameter of 24") duct attached to the horizontal exhaust duct to prevent water intrusion. Phase 1 - FN-972 Fan B Phase 2 - FN-972 Fan A	An analysis performed to support the new CFFF air permit indicates that the S-958 current stack configuration is not passing for 1-hr NO2. The current configuration of the S-958 stack has a horizontal discharge. Horizontal discharge means a very low vertical velocity is used in the model. Low vertical velocity and a stack height not much more than the building height means downwash. The model predicts that wind blowing over the building will create vortices that will take S-958 emissions down to the ground (ie downwash) instead of allowing them to disperse in the atmosphere.	FN-972A & B on the roof	ISA-01 Plant Ventilation System
19235	S-1030A Exhaust Stack Hole Repair	Seal hole that is approximately 3 inches in diameter and a second hole that is approximately 1/2 inch in diameter with stainless steel patch on the S-1030 Exhaust Stack A. Create an access port by welding a 1/2" a stainless steel coupling around the third hole (approx. 1/8") and seal with plug.	Consequences- VENT-CON-108-S-1030 is a degraded SSC and the potential for moderator to get into the filter house is increased due to the presence of the holes. Port will allow HP to continue sampling as well as seal the hole with plug.	S-1030 Exhaust Stack A on roof	ISA-01 Plant Ventilation System
19237	Obsolete diffusion pump cooling water valve	With this CCF, we will replace the obsolete diffusion pump cooling water valve with a suitable replacement. The replacement valve suitable for this application will be ASCO 8263G319. No SSC will be impacted by this substitution.	Obsolete diffusion pump cooling water valve is failing open and needs to be replaced.	Ipsen Furnace #3	Grounds
19238	DHEC Remedial Investigation	Perform remedial investigation activities as described in the Remedial Investigation Work Plan (attached to CCF). These activities require land disturbance to install groundwater wells, perform lithologic borings and complete other environmental assessment. This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form.	Implementation of the Remedial Investigation work plan is required under DHEC Consent Agreement 19-02-HW.	plant grounds inside and outside	Grounds
19239	Add Conversion LN-5 Decanter Feed Shutoff on V-20 High Level	AddConversion LN-5 Decanter Feed Shutoff on V-20 High Level	When tank overfills it can dump to floor.	Conversion Line 5 at Decanter.	ISA-03 ADU Conversion
19241	Sealand Container C-40 Removal	Safely remove sealand container C-40 once emptied, and properly package it for offsite disposal. Update 600F00AR02-01 & 02 to remove container C-40 from drawing and table.	The container floor is rotten and the roof is leaking.	Outside Plant Grounds	Grounds
19242	Relocation of Fixture 4 Full Forward Limit Photo Eye (PE-000108)	This CCF serves as documentation for the relocation of the full forward limit photo eye (PE-000108) on Skeleton Fixture 4. The photo eye currently picks up on the 4th guide block, which moves as the bulge tools drive into the skeleton. The proposed location would pick up on the bulger head since this controls the distance the tools travel.	The relocation of this photo eye will establish a better location to ensure the issue does not reoccur. This is an extent of condition from an incident on Skeleton Fixture 6. See CCF 19233.	Skeleton Area	Clean Side Rod Area
19243	Replace LVS-73 Weigh Hopper Overfull Limit Switch on Pellet Line 2	Install new 1.5" fitting in weigh hopper chute and install new Endress Hauser Fork Level Switch.	The existing switch is not functioning and spare parts are obsolete and not available.	Pellet Line 2	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19245	Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #1 Hood	Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #1 Hood	Need immediate notification to operator if there in not enough ventilation in the hood so he can respond appropriately.	Blue M Oven #1 in Conversion Scrap Cage	ISA-19 Hoods and Containment
19246	Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #2 Hood	Add Face Velocity Monitor for Conv. Scrap Cage "Blue M" #2 Hood	Need immediate notification to operator if there in not enough ventilation in the hood so he can respond appropriately.	Blue M #2 in Conversion Scrap Cage	ISA-19 Hoods and Containment
19247	Increase Pipe Diameter on V-03 Drain from 1" to 2"	Increase pipe diameter on V-03 drain from 1" to 2" Remove obsolete LI-03 off of bottom of vessel.	The current drain is undersized to support overflows as specified by CSE-9-B Revision 7. Level indicator no longer is functioning or required. Note: the level indicator was previously electrically disconnected and abandoned-in-place.	UF6 Bay Cylinder Wash	ISA-09 UF6 Cylinder Wash
19248	Relocate Ductwork Access Door #14 on Line 6 ADU Pellet Grinder Ventilation System	Relocate Ductwork Access Door #14 on Line 6 ADU Pellet Grinder Ventilation System. Access Door #14 was inadvertently obstructed during Major Project piping installation for relocating Chilled and City Water lines from on top of the Bulk Room.	The line 6 ADU Pellet Grinder Ventilation system is covered by Criticality Safety Evaluation (CSE) 1-AA. This change affects two SSC's. VENT-PEL-108- Operators shall perform a periodic visual inspection of ductwork to ensure against fissile material build-up. Material build up greater than a light dusting shall be removed. Relocation of Access Door #14 will not impact the ability for 100% inspection of the ducting during scheduled duct inspection PM's. VENT-PEL-109- The structural integrity of the piping and equipment for the Line 6 ADU pellet grinder ventilation system prevents liquid moderator from being pulled into the ventilation system. The system design includes 1/8" thick neoprene gaskets at flanged joints in ductwork to prevent liquid moderator from being pulled into the ventilation system. Ducting will be assembled per dwg. 500F03HV11 sh 2, to ensure integrity to prevent liquids from entering the system.	In overhead above Pellet Furnace 5B, south end	ISA-01 Plant Ventilation System
19249	Redirect exhaust flow from FN-8662B Reactivation Blower on PK-9662 Dehumidifier	The purpose of this CCF is to redirect exhaust flow from the Reactivation Blower away from the wall to the east to reduce the likelihood of exhausted air from being recycled by the newly installed air compressors and/or dehumidifier. No SSCs are impacted. No CSEs are impacted. This modification to the fan will not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.	The newly installed Atlas Copco Air Compressors that are installed directly to the south of dehumidifier are experiencing cooling issues. One contributor is exhaust flow from the Reactivation Fan on the Dehumidifier. This CCF will redirect exhaust air from the dehumidifier that is being directed towards the wall and then being deflected towards the air compressors. Instead of directing exhaust flow towards the wall, the plan will be to direct exhaust vertically away from the dehumidifier and air compressors.	Directly to the north of Dock 7 and the newly installed Air Compressors. Outside of ERBIA Rodline Dryroom.	Grounds
19250	Modification of conduit run from Pelleting Area mezzanine to Line 3 control panels to facilitate removal of out-of-service Furnace 3A control panel.	Modify the conduit routing between the Pelleting Area mezzanine main nitrogen header pressures switches. The switch wired to furnace 3B passes through the furnace 3A panel which is out of service and requires demolition. The conduit will be reworked to provide a new drop to control panel 3B and the 3A drop will be eliminated. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	Permit removal of furnace 3A out-of-service control panel and facilitate future demolition of the remaining panel.	Pelleting Line 3	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19252	20' Sea-land Containers	Purchase of (4) 20' Sea-land Containers	Sea-lands will be used to store wet combustible waste containing uranium from URRS.	Outside Plant Grounds	ISA-13 Low Level Radioactive Waste Processing
19253	Add a Spring Close Actuated Valve on Air Supply to the Blowdowns for S-2A/2B Bag Filters	<p>Add a new fail-close actuated valve to the existing instrument air line supplied to the blowdowns for the S-2A/2B bag filters (FL-951A, FL-951B and FL-952A).</p> <p>The new actuated valve will be installed in the common air supply to the bag filter blowdowns upstream of the 3 manual spring loaded valves which are installed in parallel going to each of the bag filters.</p> <p>The air supply to the actuator for the new actuated valve will be supplied from the same line in which the new valve is installed upstream of the new valve, so that upon loss of instrument air, the valve will fail closed to prevent back flow of SNM.</p> <p>In addition to the new actuated valve three additional ball valves will be installed to allow for the functional testing of the new actuated valve. The three additional ball valves will be installed in a double block and bleed configuration.</p>	<p>This modification was requested by NCS per EWO 833142. This modification has regulatory significance as it is being implemented as a new IROFS. This modification will allow for the implementation of CSE-1-G rev 10.</p> <p>The new IROFS will provide double contingency to prevent the backflow of uranium bearing liquid into the plant air system.</p> <p>The new IROFS will implement SSC ADUSCRA-147 as the primary contingency to prevent backflow of uranium bearing liquid into the plant air system. The secondary contingency to prevent backflow of uranium bearing liquid into the plant air system will credit the 3 existing manually operated spring loaded valves and SSC VENT-S2A2B-131 will be implemented.</p>	Instrument air supply line to the S-2A/2B bag filter blowdowns	ISA-01 Plant Ventilation System
19257	Modify I/O assignments to split existing I/O between the two C200 Common Services BPCS Controllers.	Modify I/O assignments to split existing I/O between the two C200 Common Services BPCS Controllers. Existing I/O racks will be split between the two C200 Common Services BPCS Controllers and Control Net Interfaces to reduce load on individual processor and interface modules.	In October the Experian software upgrade will require less I/O per processor and Control Net Interface card. Modifying the I/O assignments will reduce loading on processor and interface cards.	In conversion	ISA-03 ADU Conversion
19259	Grid Marking System Design Improvements	<p>After equipment was placed into service, there were some performance issues that were identified with the grid marking system.</p> <p>1) The center boss (Item 9 from 418F08EQ01) will be changed from 300 series SS to bronze.</p> <p>2) The turntable (Item 24 from 418F08EQ01) will be modified at the locator pin slots to allow for a slot insert (Item 27) to be used.</p> <p>3) The compression washer (Item 11 from 418F08EQ01) will be changed to a harder durometer rubber.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required, and thus no RAF-104-10 is required.</p> <p>This is a multiphase CCF that will be detailed as follows: Phase 1 - Laser A Phase 2 - Laser 3 Phase 3 - Laser 4 Phase 4 - Laser 5 Phase 5 - Laser 6 Phase 6 - Braze 1 Phase 7 - Braze 2</p>	<p>1) Since the center boss and turn table were both 300 series SS, there was some galling that was occurring. Going to a dissimilar metal will minimize this potential, and the center boss will be treated as a wear part.</p> <p>2) Since the locator pin and turn table were both 300 series SS, there was some galling that was occurring. Going to a dissimilar metal insert will minimize this potential, and the insert will be treated as a wear part.</p> <p>3) The compression washer was too soft, and would lead to the barcode reading not going to the right height as it wore, therefore being unable to read the barcode.</p>	Grid Area	Components

CCF	Title	Description	Justification	Location	ISA ID
19260	Pellet LN3 Blue M Oven Door Wire Rope Clips Substitution	Substitution CCF Cable and clamp that meets all requirements of Standard ASME B30.26 will be used to repair Pellet LN3 Blue M Oven Door. The type of material is identified on installation instructions attached to CCF 18001 and this CCF.	Current cable clamps have failed. New clamps and cable are better designed to prevent premature failure.	PELLET LINE 3 BLUE M OVEN	ISA-19 Hoods and Containment
19266	Substitution for Pellet Line 3- Replace Elevator Pan Extend and Retract Solenoid	Replace the extend and retract solenoid on the elevator lift pan extend and retract on pellet line 3. The existing miller valve PN 320-401-502-115AC-2635 will be replaced with an ASCO 8562A106H1G2GF0	The existing solenoid and valve has been replaced 17 times since 2001 on the elevator pan extend retract cylinder PL1-PL5. The solenoid coil has also had multiple failures and is prone to overheating when energized for an extended time. Map-con shows the solenoids have been replaced 111 times since 2001. This CCF will cover only the solenoid/valve replacement on the pan extend and retract on pellet line 2	Pellet Line 3	Grounds
19267	Substitution for Pellet Line 4- Replace Elevator Pan Extend and Retract Solenoid	Replace the extend and retract solenoid on the elevator lift pan extend and retract on pellet line 4. The existing miller valve PN 320-401-502-115AC-2635 will be replaced with an ASCO 8562A106H1G2GF0	The existing solenoid and valve has been replaced 17 times since 2001 on the elevator pan extend retract cylinder PL1-PL5. The solenoid coil has also had multiple failures and is prone to overheating when energized for an extended time. Map-con shows the solenoids have been replaced 111 times since 2001. This CCF will cover only the solenoid/valve replacement on the pan extend and retract on pellet line 4	Pellet Line 4	Grounds
19268	Substitution for Pellet Line 5- Replace Elevator Pan Extend and Retract Solenoid	Replace the extend and retract solenoid on the elevator lift pan extend and retract on pellet line 5. The existing miller valve PN 320-401-502-115AC-2635 will be replaced with an ASCO 8562A106H1G2GF0	The existing solenoid and valve has been replaced 17 times since 2001 on the elevator pan extend retract cylinder PL1-PL5. The solenoid coil has also had multiple failures and is prone to overheating when energized for an extended time. Map-con shows the solenoids have been replaced 111 times since 2001. This CCF will cover only the solenoid/valve replacement on the pan extend and retract on pellet line 5	Pellet Line 5	Grounds
19269	Substitution for Pellet Line 1- Replace Elevator Pan Extend and Retract Solenoid	Replace the extend and retract solenoid on the elevator lift pan extend and retract on pellet line 1. The existing ASCO Valve 8562A106H1G1GF0 will be replaced with an ASCO 8562A106H1G2GF0	For troubleshooting purposes on the cylinder retract and extend a valve with manual actuation is required	Pellet Line 1	Grounds
19270	Remove S-1030 Fan Speed Manual Control Potentiometer	Remove S-1030 Fan Speed Manual Control Potentiometer	Fan speed can be manually controlled by placing the Honeywell UDC controller in manual and regulating the output as desired. Having the external potentiometer is superfluous and can be an error precursor when performing maintenance on the fan..	1030 Scrubber Fan on the Roof	ISA-01 Plant Ventilation System
19272	Incinerator FN-948 Exhaust Duct Sample Ports Installation	Cut two 3" sample port holes 90 degree apart (approx. 3' above the roof) on the Incinerator FN-948 exhaust stack on Pent House roof; weld 3" flanges with blind to seal it. Cut one 2" velocity measurement port hole approximately 8-12" above sample ports on the Incinerator FN-948 exhaust stack on Pent House roof; weld 2" flanges with blind to seal it.	To provide sample ports for EH& S and contractor to use for emissions testing.	Pent House Roof	ISA-01 Plant Ventilation System
19273	QC Receiving Starrett CMM Replacement	Replace the current Starrett CMM machine with the new Hexagon CMM machine. It is a Coordinate Measurement Machine used to perform dimensional inspections on the Spider assemblies and Spider vanes. Electrical power will not change. This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.	New machine is an upgrade and improvement from the current machine.	QC Receiving	Miscellaneous

CCF	Title	Description	Justification	Location	ISA ID
19274	New power feeder for Pellet Line 3 welding receptacle.	Installation of a new power feeder for Pellet Line 3 welding receptacle. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up front planning meeting with NCS is required and thus no RAF-104-10 is required.	The main 480V power feed for furnace 3B was moved from a buss duct to MCC2215 under a different CCF. The new furnace power panel does not have capacity to supply the welding receptacle. A new feed will be installed from a spare bucket in MCC 2215 for connection to this welding receptacle.	Pellet Line 3 Furnace 3B Unload End.	ISA-08 Pelleting
19275	Cafeteria Drain Pipe Repair	The cafeteria has a drain that backs up and cannot be cleared. The floor must be taken up and the pipe replaced to tie back into the line beyond where the damage/plugging is. The existing drawings do a poor job indicating this drain, the drawings indicate the drain is a kitchen waste line that flows to the grease trap, however the camera probe indicates it flows toward to the sanitary sewer lines. Determination of which system is involved will be made once the excavation is complete. The new drain lines will be installed with PVC material.	The cafeteria cannot operate with a backed up drain. It is an unsanitary condition for an area where food preparation is taking place.	South end of kitchen near the south end of the walk in freezer.	Grounds
19276	Install Replacement Transformer for Pellet Line 3 Torrit Dust Collector	The existing transformer melted and needs replacement with the same size and rating 500 VA. The current configuration for protecting the transformer needs to be changed to meet the NEC. Primary and secondary protection will be installed.	The existing design does not meet the NEC primary and secondary fuse protection needs to be added.	Pellet Line 3	ISA-08 Pelleting
19277	Pelleting Dust collection DC1515 internal insulation removal.	Removal of the interior insulation in the 90 Deg. rectangular duct between the top and north side plenum on the Line 1 Dust Collector.	To prevent plugging of the duct by the interior insulation.	Line 1 Pelleting dust collection.	ISA-08 Pelleting
19279	Remove small unused segment of T-1163 piping	Remove small unused segment of T-1163 piping (T and drain from T-1163 to P-1163). This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form therefore an RAF-104-10 and NCS upfront planning meeting is not required.	All piping from the T-1163 must be heat traced to provide flow. This leg is not heat traced and is not required for process.	Waterglass - outside URRS	ISA-15 URRS Wastewater Treatment System
19280	F-1165 Filter Hose Substitution	Substitute existing filtrate hoses on F-1165A/B with a different type of hose: braided ethyl-vinyl-acetate tubing with Viton gasket and stainless steel fittings.	Existing hoses have been in service for a long time and risk deterioration; one hose has already been compromised. Material compatibility for the new hoses with ammonium hydroxide is excellent.	URRS Outside / Waterglass	ISA-15 URRS Wastewater Treatment System
19282	Install Drain Pan in Tube Prep Component Wash Area	A drain pan measuring 23"x26"x7" will be installed in the corner of the components parts washing area in Tube Prep. This pan will go over the floor drain and be installed using a sealant around the mouth of the drain.	Periodically, this floor drain will back up and soapy water will be on the floor, which creates a slip hazard for the operator working in the area. This drain pan will increase the amount of water storage prior to having an impact on the operator. The drain pan is sized so that it will be able to accommodate the maximum overflow amount for the space.	Tube Prep	Components
19284	Pellet Line 1,2,4 and 5 Torrit Dust Collector Transformer Upgrade	The current configuration for protecting the transformer needs to be changed to meet the NEC. The transformers on lines 1,2 and 4 will be replaced with new transformers. Primary and secondary fuses will be added to the circuit to properly protect the transformer. The line 5 transformer is a different size and newer, Primary and secondary fuses will be added to the circuit to properly protect the transformer.	The existing design does not meet the NEC primary and secondary fuse protection needs to be added. The transformers on lines 1,2 and 4 will be replaced due to age and obsolescence.	Pellet Lines 1,2,4 & 5	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19286	Replace Cooling Tower Supply and Return Lines to Oxide Coater #1	<p>Eliminate some of the obsolete and unnecessary piping to eliminate excessive pressure drop for Oxide Coater #1.</p> <p>This CCF does not affect any SSC's this configuration change does not modify any process, system, or component that contains, measure, handle, transport, process, or secure Uranium in any form therefore an RAF-104-10 and NCS upfront planning meeting is not required.</p>	<p>The existing supply and return cooling tower piping for cooling tower water to OC 1 seems to have excessive pressure drop and a circuitous path from the header to the system extending down to leak check. A more direct installation of new piping should eliminate some of the existing cooling problems. This could be accomplished by pre-working new piping from the existing 4" header at the South wall near OC 2 operator station to column 10-C above OC 1 operator station. Once this pre-work is complete the final tie-ins could be scheduled to minimize system down time. P&ID 510F36PI03-02 will be revised.</p>	<p>Piping starts at the wall behind Oxide Coater #2, at ceiling until drop down at Oxide Coater #1</p>	Miscellaneous
19288	Provide two new flammable cabinets for behind the wall	<p>Operations has requested that two new flammable cabinets be provided for drum storage in the chemical area. Each cabinet will have the capacity to hold two 55 gal drums. The shelf above the drums will be removed from each cabinet or made unusable prior to installation behind the wall.</p> <p>The cabinets will be located in the URRS UF6 bay near column AA-01. Both cabinets will be within 30 feet of fire extinguisher 208. The cabinets will not be bolted to the floor or grounded. The type chemicals stored in the cabinets will be controlled by new and existing procedures. Both cabinets will be labeled with the cabinet number (given on drawing 522E01AR01 Sheet 1), the location, and responsible organization (URRS). A laminated copy of SYF-300-1 will also be attached to each cabinet.</p> <p>This process, system, or component does not contain, measure, handle, transport, process, or secure uranium in any form. Therefore, no upfront planning meeting with NCS is required, and a RAF-104-10 is not needed.</p>	<p>Operations requires additional capacity for storing flammable liquids</p>	<p>In the UF^ bay</p>	ISA-07 Solvent Extraction
19289	Replace blind flange on bottom of spiking #1 tank	<p>Currently the discharge configuration on the #1 spiking station includes a 6" blind flange. This carbon steel flange is protected from the tank contents (HF and UN) by only a full face Gore (PTFE) gasket.</p> <p>Since the gasket is not under compression in the center portion of the pipe, UN and HF can permeate the gasket and expose the metal of the flange. See attached.</p> <p>This project will replace the carbon steel blind flange and full face gasket with a 6", 150# PVDF blind flange and Gore ring gasket. Spiking station #2 has been redesigned to eliminate this blind flange.</p> <p>This modification does not require a drawing change.</p>	<p>Existing configuration is leaking.</p>	<p>UF6 bay</p>	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19291	IFBA Temporary Rental Chiller Installation	<p>This CCF will core drill two 8" exterior wall penetrations in the IFBA Mechanical Room and install 6" carbon steel piping through the cored holes to connect temporary rental chillers to the existing CH-7096 plant piping. The wall penetration holes will then be grouted to seal around the exterior of the 6" piping.</p> <p>The following list of equipment will be set up on the south side of the IFBA Facility on two flatbed trailers.</p> <p>Flatbed Trailer 1: (1) Carrier Model 30RAP060F-0C104 Chiller (1) Carrier Model 30XA242F9-03R03 Chiller</p> <p>Flatbed Trailer 2: (1) Carrier MMG425 Generator (1) Carrier MMG465 Generator (1) Carrier 100TCG-2000-7570 Dual Wall Fuel Tank</p> <p>Technical specifications for all listed rental equipment have been attached to this CCF.</p> <p>No SNM systems are affected as a result of this change. No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.</p>	<p>The gearbox on IFBA Chiller CH-7096 has failed. This CCF will install a temporary rental chillers, generators and associated pipework while CH-7096 is repaired / replaced.</p>	IFBA Chiller CH-7096	Grounds
19292	Alternate vendor for dryer bag filters	<p>Currently a Gore-Tex filter bag, 57SF24067 is used in the dryer filters on the calciner platforms in conversion. Gore has been unable to supply these bags in the quantity that we require.</p> <p>DHA offers a comparable bag, DB162219-B. However it has a lower Mullen Burst Strength, 400 psi vs. 675 psi.</p> <p>Phase 1 of this project allows that the DHA bags or the Gore-Tex bags can be used on line 5 only. Lines 1 - 4 will remain on the Gore-Tex filter bags.</p> <p>The performance of the DHA bags will be evaluated for an unspecified time frame and their use either extended or terminated under phase 2.</p> <p>Since no SSC's are affected, an ITR was not performed. The manufacturer of the bags is not mentioned on any drawings, so no drawing revisions are planned. The component description in MAPCON will be modified as required.</p>	<p>Our existing vendor has not been able to supply us with a sufficient quantity of bags</p>	Conversion line 5	ISA-03 ADU Conversion
19295	Construction Contractors Tool Room and Foreman's Office Fire Protection Speaker Installation	<p>With this CCF, we will be adding two (2) Fire Protection Speakers to the current system. One speaker will be in Contractors Tool Room, the second speaker will be located in the Foreman's Office. These new speakers will be designated S-225, and S-226.</p>	<p>As per the Fire Excellence program post project check it was discovered that these areas required additional speaker coverage.</p>	Construction Contractors Tool Room and Foreman's Office	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19297	WABA room, new pre-action sprinkler system controls and fire alarm installation and tie in	<p>Within the WABA room, we are installing a new pre-action sprinkler system releasing panel, horn/strobes, pull stations, smoke detectors, as well as corresponding fire alarm circuits, and tying them back into the existing CFFF (Simplex) fire alarm systems per NFPA 72. This CCF encompasses only the electrical interface needed from the new pre-action fire system controls to the existing CFFF (Simplex) fire alarm system.</p> <p>Pre-Approved Mod level 2 based off of CCF 17350.</p> <p>No SSCs are impacted, No CSEs are impacted. This process, system, or component does not contain measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	There is a possibility of zirc fires which exist within WABA room, so a pre-action ?dry? sprinkler system is required per NFPA 13.	WABA room, interior and above pre-action valve	Grounds
19299	Grid Laser 3 Chamber 'B' O2 Analyzer Rotameter Replacement	<p>Replace the Grid Laser 3 Chamber 'B' O2 analyzer sample and bypass rotameters and install a new needle valve for flow control.</p> <p>Sample flow -- Brooks MR3A13SNVT</p> <p>Bypass flow -- Brooks MR3A17SVVT</p> <p>See attached specification sheets.</p>	The affected items are not safety significant. The existing rotameter for sample is not ranged correctly. It appears to have been from a previous O2 analyzer. The system will not calibrate or run correctly without having the rotameter replaced.	Grid Welding Laser 3	Components
19301	Update Rinse Tanks 1 and 3 to have the Same Components and Function	<p>Currently rinse tank 1 (T3601) has an air blower and water sprayer, but it does not have a conductivity meter. Rinse tank 2 (T3602) has an air blower and conductivity meter, but it does not have a water sprayer. The area is requesting that each tank be capable of doing all 3 operations.</p> <p>The penetrations are already present, this CCF will serve to update the drawings and do the field installation.</p>	Currently the Final Assembly operators have to use both tanks during the rinse process. This change will eliminate the need to raise and lower an assembly an additional time and create a single tank process.	Final Assembly	ISA-17 Final Assembly
19302	URRS SOLX steam supply header to HX-1084 & HX-1484 PSV change	Change the Pressure safety valve set pressure from 100 to 125.	The pressure relief valve on the steam supply to the SOLX concentrators activates every startup and shutdown. This results in steam/hot condensate being discharged in the area, which has the potential to cause burns. Note that this pressure relief valve was replaced recently with a 100 psig relief valve - the drawing calls for a 100 psig relief valve, but the valve that had been installed was 125 psig	URRS SOLX chemical side	ISA-07 Solvent Extraction
19309	Installation of Grid Area Chillers CH-4212A/B.	New Grid Area chillers CH-4212A and CH-4212B are being set and bolted to their concrete pad.	This work is being split off from CCF 18075 to separate the chiller placement from the plumbing and electrical.	Outside the north wall of the facility	Components
19310	Modification of Quick Release Pin T-Handle and Addition of Retainer Cap and Lanyard	The quick release pin T-handle on the upender arms in the packing area are being modified from 2 inches to 3 inches long. This additional length will allow for the addition of a retainer cap on the other end to ensure the pin is secured in the upender arms. A lanyard will also be added to the retainer cap to ensure there is no potential that it can fall from an elevated height.	There was an incident in the packing area, where a container almost fell due to the pin not being present in the upender arms. The thought was that the pin came removed at some point during the operation, and created this unsafe condition. With that addition of a retainer cap, this is an additional layer of defense to keep the operation safe.	Final Assembly Packing	ISA-17 Final Assembly

CCF	Title	Description	Justification	Location	ISA ID
19311	Process Temperature Indicator Substitution	<p>This CCF will allow substitution of non-SSC Process Temperature Indicators using approved substitution criteria listed below:</p> <p>The evaluation will consider at minimum the following:</p> <p>?Fill materials (if applicable)</p> <p>?Instrument Range / Scale</p> <p>?Materials compatibility</p> <p>?Mounting style and type</p> <p>?Physical requirements</p> <p>?Wetted end materials compatibility?</p> <p>No upfront -10 meeting required</p>	We have a failed thermometer on a chiller which is obsolete and currently have no path forward other than CCF for replacement. This CCF will allow substitution via the above equivalency criteria.	Part Substitution	Grounds
19312	Roll Compactor Siletta Feed Boot Alternate	Allow use of alternative neoprene material thickness up to 1/8". Currently the boot material used is neoprene with thickness of 3/32".	There have been repeated failures of the neoprene boots on the inlet and outlet of the Roll Compactor Siletta feeder on all lines. However, due to the failure rate, obtaining replacements for the specified boots is difficult. This will provide access to a more readily available boot.	Pellet Area	ISA-08 Pelleting
19314	Incinerator Stack Testing 480v Service Disconnect	With this CCF, we will be installing a 480v Service Disconnect with the appropriate quick connect mounted to the bottom. This disconnect will be located in Dock 3. Its initial use will be in support of the Incinerator Stack Testing, going forward it will serve as a convenience 30amp welding disconnect.	Outside contractors coming in to perform the independent testing require a 480v 30amp service drop for their equipment.	Power panel (PP-Dock3) located in Dock 3 just inside URRS.	Grounds
19315	Modify Conversion scrap cage filter wringer	The filter wringer will be modified with a small piece of stainless steel blocks to help grip and pull the filters through the wringer.	Recent environmental and licensing concerns on the URRS incinerator and wet combustible trash collection require a new process to dry filter bags generated in Conversion. The filter bags are dripping wet after the Scrap Cage manual washing process removes gross uranium contamination. Bag filters are generated from all conversion lines, the q-tanks, V-1016, and all scrubbers (S1008, S1030 and S2A/2B).	conversion scrap cage	ISA-11 Scrap Uranium Processing
19317	Flanders PrecisionCell II Mini-Pleat Filter Replacement	<p>Flanders has discontinued production of the PrecisionCell II mini-pleat filter, Store Room part # 21110.</p> <p>DHA Filters will provide a replacement filter with the following specs:</p> <ul style="list-style-type: none">- MERV 11 rating in accordance with ASHRAE Standard 52.2-1999- Nominal Size of 16" X 20" X 2"- Average dust spot efficiency of 60 - 65% in accordance with ASHRAE Standard 52.2-1999- UL 900 Classified flammability rating- When tested at 500 FPM, the initial resistance to airflow shall not exceed 0.25" wg <p>The replacement filter from DHA Filters is only to be used on Air Handler A/H 7306, which provides comfort air to the Chem Lab, MET Lab and Men's Change Room.</p> <p>No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required</p>	Flanders has discontinued production of the PrecisionCell II mini-pleat filter, Store Room part # 21110.	Air Handler A/H 7306	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
19318	IFBA Fixture Cart Caster Replacement	IFBA fixture carts are riding on their original caster bodies and need refurbishment. The original casters are no longer manufactured. This CCF will update the callout for a modern replacement caster.	The new casters will maintain the same wheel size/width (5"x2"), total height (6.5"), and wheel design (polyurethane tread on aluminum core). Capacity will be 1000 lb each, leaving significant margin for impact loads and rough handling.	IFBA	ISA-14 IFBA Processing
19321	URRS Dirty Dissolver Flapper restraint clip	URRS Dirty Safety Geometry Dissolvers have a flapper that will over rotate around and get caught on the shaft of the dissolver and bend or brake.	URRS operations and maintenance are unnecessarily exposed to chemical and radiological hazards when the Flapper / scavenger plate is removed and reinstalled. A replacement scavenger plate (part # is 298349) is \$570.31. This clip installment would greatly improve the safety, efficiency and reliability of the dirty dissolver process	URRS contaminated area	ISA-04 Safe Geometry Dissolver
19322	Pellet Line 5 Grinder Rear Guide Block	The Pellet Line 5 grinder has a gap between the grinding wheel and the rear guide block. The gap allows the leading edge of ground pellets to catch on the rear guide block creating quality defects. A new rear guide block will be created specifically for use on the Pellet Line 5 grinder with a longer overall length to eliminate the gap between the grinding wheel and guide block.	Creating a new rear guide block with a longer overall length will reduce the gap between the grinding wheel and the rear guide block, thus eliminating defects such as undersized and out of shape pellets.	Pellet Line 5 Grinder	ISA-08 Pelleting
19323	S-1030 B Fan and Inlet Damper Modifications	Changing the fan sheave size to match the B fan speed at full motor RPM to the A fan speed at 75% motor RPM. Then remove the damper from the B fan inlet duct. Note - The A fan has a VFD where the B fan does not.	This is the most cost effective method for ensuring the damper does not cause a catastrophic failure of the fan during operation. It is known that the B fan runs at full fan speed pulling approximately 30,000 cfm causing the damper to vibrate and degrade over time. Repeated replacement/repair of the ring flow damper and/or upgrade of the motor drive to a VFD is costly.	S-1030 Scrubber Platform, Roof	ISA-01 Plant Ventilation System
19324	IFBA Temporary Chiller Replacement	This CCF will replace the current temporary 300 ton chiller with a 500 ton chiller. With the current chiller arrangement, if the ERBIA or IFBA 1 chiller go down, the plant will not have adequate chiller capacity with the 300 ton temporary chiller. Replacing the 300 ton chiller with a 500 ton chiller will eliminate the single point failure mode. The Carrier MMG425 Generator will also be replaced with a Carrier MMG465 Generator to support the 500 ton chiller. No SNM systems are affected as a result of this change. No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form.	Increase temporary chiller capacity from 300 to 500 tons to eliminate the single point failure mode if the ERBIA or IFBA 1 chiller go down.	Plant Grounds	Grounds
19327	Elect Svc for Temporary IFBA-ERBIA Chillers	With this CCF, will install a distribution panel in the area of dock 9 near the IFBA dehumidification skid. We will also install concrete foundation to support the outdoor distribution panel. The panel will contain an 800amp main breaker, and several distribution breakers to support the temporary chiller. The service for this distribution panel be fed from Substation #1. The power feed would also remain as a plant fixed asset after the chiller is removed.	*Potential safety implications having 2 Mechanics per day refueling the Day Tank for the temporary generator *Temporary chiller is currently being fed from a temporary generator utilizing 400 gallons of diesel fuel per day at an average cost of \$2.75 per gal. *Potential environmental impacts involved with 2 Mechanics transporting and pumping diesel fuel into the Day Tank per day	area of dock 9 near the IFBA dehumidification skid	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19328	UF6 Pigtail Hex Nut and Sleeve Material Change	Fabricate UF6 Pigtail hex nuts(Item 02) and sleeves(Item 03) from one of several different grades of brass approved by Tooling Engineer based from stress test. Per Tooling Engineer, testing has shown that a lower zinc content material will provide robust parts that will prevent premature failure during conditions that are both more harsh and longer in duration. See attachments for material options. This change does not impact any SSCs.	After additional material testing for TDR-3150, it was determined that the best approach to mitigate stress corrosion cracking failures was to change the material of the hex nut (Item 2). Additionally, the sleeve (Item 3) is also exposed to the same environment and load conditions and would benefit from a similar change.	UF6 Bay	ISA-03 ADU Conversion
19334	Improve mechanical protection of trough sensor at IFBA Vibratory Loader Station	Add more protection to the trough sensor at the Vibratory Loader Station to prevent damage when operators are handling channels.	The trough sensor is a stalk sensor and has been damaged in the past when operators are handling channels. This CCF will provide a wider support for the sensor, and utilizes the same material (UHMW)	IFBA Dry Room - Vibratory Loader Station	ISA-12 IFBA Fuel Rod Manufacturing
19336	V-1454 installation of drain hose connection	This CCF will allow the connection of a drain hose to the discharge piping of V-1454 to allow the offload of spent solvent (perchloroethylene) into drums from disposal.	Installation of a drain hose is needed to transfer spent solvent mixture (kerosene, tributyl phosphate, perchloroethylene) from V-1454 to 55-gal stainless steel drums for off-site shipment and disposal.	SOLX V-1454.	ISA-07 Solvent Extraction
19337	Install Low Air Flow Alarm for 1190 Water Glass Ammonia Scrubber	Install Low Air Flow switch to generate an alarm for the 1190 Water Glass Ammonia Scrubber low air flow This change does not constitute a modification to processes, systems, or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.	Need to detect loss of Flow	Waterglass Scrubber Outside	ISA-01 Plant Ventilation System
19346	Replace K-Tron Feeder Stirrer & Recycle Feeder Gearbox for Store Rm# 021004 & 021005	Replace obsolete Sumitomo HFS-1805 gearbox (43:1 ratio Store Rm# 021005 and 29:1 ratio Store Rm# 021004) with a Sumitomo CNFS-6095Y-43 (?S? = w/ U-dim. = ¾ in. dia. 43:1 ratio) and CNFS-6095Y-29 (?S? = w/ U-dim. = ¾ in. dia. 29:1 ratio). The standard output shaft diameter is 1.125", but will be machined down by manufacture to .75" to fit the current sprocket. The gearbox is manufacture recommended and is the closest fit to the current design. CNF-6095Y is the direct replacement HF-3095 that we had in the storeroom.	Current gear drive is obsolete.	K-TRON Feeder	ISA-03 ADU Conversion
19351	CLN4 Fan Piping Mods	Modify inlet piping to dryer condenser exhaust fan FN0427 to prevent water carryover to the fan.	Water is entering the fan housing and dripping on the floor.	Line 4 Conversion	ISA-03 ADU Conversion
19358	T-1166 Half Couplings	During the recent upgrades to the T-1166, the sample valves on the supply piping were installed with 3/4" Threadolets. However, these Threadolets do not allow the sample valves to be inserted fully into the sample stream. Replacing the 3/4" Threadolets with vendor recommended half couplings should allow proper sampling to recommence.	Installing the half couplings allows operators to pull required samples as intended.	Waterglass	ISA-15 URRS Wastewater Treatment System
19361	Conversion waste press (The Squisher)	This CCF is for the implementation of the Press that will be used to extract liquid from filter bags. The Press will be located in the scrap cage area in conversion. It will be fabricated from 304 stainless steel and be equipped with a hydraulic cylinder that will force a plate down to a screen that will press the liquid out onto a sloped catch pan that drains into a cream can. This CCF will also remover from operations the Filter Wringer. The Wringer will be dismantled and discarded.	Operators are currently removing excess liquid from filters by hanging them to drip dry or manually twisting and ringing filters. The Filter press will improve the efficiency of the process and reduce the operators exposure to acid.	Conversion Scrap Cage	ISA-11 Scrap Uranium Processing

CCF	Title	Description	Justification	Location	ISA ID
19363	Install transfer piping from V-1476 to V-1076	<p>Install transfer piping from V-1476 to V-1076</p> <p>Currently a temporary flex hose is used to facilitate transfer from V-1476A/B/C to V-1076A/B/C/D. When the hose is removed it allows both hose stub outs to function as drains.</p> <p>This project will replace the temporary hose with hard piping. Valves will be installed in the piping to facilitate draining at each end.</p>	Since the transfer between V-1476 and V-1076 is now part of the process, a temporary hose is not sufficient.	SOLEX	ISA-07 Solvent Extraction
19364	Install louver panels in the Boiler exterior walls for ventilation.	<p>New Greenheck louver panels (quantity 8) will be installed in the exterior walls of the new boiler building. These (48" W x 36" H) weather louvers come with a bird screen will be installed as per drawing, for efficient ventilation.</p> <p>No SSCs are impacted. No CSEs are impacted. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, no up-front planning meeting with NCS is required and thus no RAF-104-10 is required.</p>	New Greenheck louver panels (quantity 8) will be installed in the exterior walls of the new boiler building, to provide needed passive ventilation.	Boiler house for BO1300 & BO1301	Grounds
19365	Modify Gravity Separator be able to Recirculate	The piping will be modified at the suction wand pipe to allow for the addition of DI water/dilute nitric acid to recover additional uranium from spent solvent. There is already an AOD pump connected to the suction wand. The recirculation of the Uranium-laden solvent with DI water/dilute nitric would recover more uranium picked up by the TBP.	This mod would allow us to add more volume per drum that is shipped offsite for disposal. We are currently constrained by the U235 gram count per drum. Lowering the concentration lowers the gram count	SOLX gravity seperator	ISA-07 Solvent Extraction
19367	Update PM9300 Datalogic Scan Gun to PM9500 Due to Obsolescence	The new Datalogic Scan Gun Powerscan PM9500, which has already been approved for use for tubes and rods via CCF 18274, will be implemented across the plant as a replacement for the PM9300.	The PM9300 was deemed to be obsolete by the supplier, and the PM9500 is the suggested replacement.	Operations	ISA-10 ADU Rods
19368	IFBA VACUUM OVEN #3: REPLACE OBSOLETE HELIUM PRESSURE CONTROL AND BACKFILL SOLENOID VALVES	See EWO# 859387: IFBA vacuum oven# 3 is down for major repairs. Before that, the oven has been struggling to pull a vacuum for an extended period of time and these two valves could be contributing to this issue. Valves should be replaced but are obsolete. Valves are on order but a CCF is required to use the valves. Please process CCF to allow use of valves. Also, make sure new valves are setup in storeroom. See attached marked up prints, vendor cut sheets, and reference configuration pictures.	SUSPECT SOLENOID VALVES COULD BE CONTRIBUTION TO EXTENSIVE DOWNTIME, PARTS REQUIRE REPLACED BUT ARE OBSOLETE	Vacuum Oven#3, IFBA	ISA-14 IFBA Processing
19373	Line 5 Grinder Water Chute Change & Grinder Hood Splash Guard	<p>Replace Line 5 grinder water chute</p> <p>Replace the 080364 Chute with the 080191 Chute (modified to fit). Piping to the chute will need to be modified as done on Line 1-4. Existing Chute pipe port in the grinder housing will need to be plugged. Rear cover panel of the Hood will need to have hole drilled for the pipe to come thru.</p> <p>Close up the opening on the west panel(Right Side View on 361F08EQ07, Sht 02). We can either weld pieces to the existing panel, attach lexan to existing panel or just remake.</p>	Current design is spraying uranium laden water outside of the current hood creating potential for higher contamination and airborne.	Line 5 Grinder Pelleting	ISA-08 Pelleting

CCF	Title	Description	Justification	Location	ISA ID
19374	Modifications for Reliability Purposes for the New Air Cooled Compressors	<p>This CCF will cover the installation of structural steel to support extended exhaust deflectors beyond the roof line of the current shed. The purpose is to reduce the potential to recycle cooling air for the compressors. Additionally, this CCF will provide a solution to provide shade on the compressors as the sun sets in the west by means of privacy fence or other solution.</p> <p>Phase 1: Extended ductwork and structural steel on ZT315 Air Compressor Phase 2: Extended ductwork and structural steel on ZT250 Air Compressor Phase 3: Blocking direct sunlight solution on ZT315 and ZT250 Air Compressors</p>	The Air Cooled Instrument Air Compressors are tripping on Inverter Overtemp and Main Motor Overtemp. Additionally this modification is to help reduce the exit air temperature on the compressors.	New Air Cooled Air Compressors	Grounds
19380	Install New Style Agitator at CLN4 Cream Can Mixing Station	<p>Install a new style agitator at the CLN4 cream can mixing station. Existing agitator has paddles which are bolted onto an agitator shaft that has a 1/2" diameter. Existing agitator paddles often times fall off due to the bolt on assembly. New style agitator has paddles which are welded onto the shaft. New agitator has an OAL of 24" which is similar to the existing agitator. New agitator has a quantity of 3 paddles (1 paddle located on bottom, 1 paddle located 6" above bottom and 1 paddle located 12" above bottom). All materials of new agitator are 316 stainless steel. A Kynar coating (0.025" thick) is applied to the bottom 18" of the new style agitator where the agitator will come into contact with the contents of the cream can. The Kynar coating is desired to improve the lifespan of the equipment.</p> <p>New style agitator will be a drop in replacement for the existing agitator design.</p>	Improved design and coating should improve the lifespan of the equipment. Purpose and function of agitator will remain the same. This modification was also an Operations improvement idea.	Conversion Line #4 Cream Can Mixing Station	ISA-03 ADU Conversion
19383	Pallet Racks for Patriot Building	This CCF will install pallet racks on the south wall in the Patriot Building.	5S improvement.	Patriot Building	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19384	Install 30B Valve Cover Shelf in UF6 Bay	<p>Install a shelf in the UF6 Bay on the exterior wall of the Conversion Hot Oil Room across from the steam chests. This shelf will primarily be used to store UF6 cylinder valve covers.</p> <p>The following mechanisms may be used to mount the shelf to the wall:</p> <ul style="list-style-type: none">oConcrete anchors may be ideal if the hole is drilled in solid portion of the concrete blockoToggle bolts may be ideal if the hole is drilled in a hollow portion of the concrete blockoAll thread rods that penetrate the entire wall may be ideal for maximum shelf loading potential <p>If the shelf is attached to the wall with stainless steel fully threaded rods and studs that penetrate through the fire wall. MCP-108232, Maintaining Integrity of Fire Barriers, requires bolt penetrations be caulked on both sides of the wall or ceiling with a fireproof caulking such as 3M 2000 Silicone Sealant SL, StRm #49268 or Flame Stop V, StRm #49269. This will maintain the integrity of SSC ADUHOS-906, found in Sketch 815417-4, ADU Dryer Through Calciner Safety Significant Controls.</p> <p>No CSEs are impacted. This process, system, or component does not contain measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	Valve covers are currently being stored on the floor beside the steam chests. Conversion needs a designated storage space for valve covers so that they will not get damaged, lost, or contaminated.	Exterior Wall of Conversion Hot Oil Room Across from UF6 Cylinder Steam Chests	ISA-03 ADU Conversion
19388	Isolate supply drums from solvent makeup tanks.	The purpose of this CCF is to isolate the supply drums from the solvent makeup vessels in the SOLX process by installing a stainless steel blind flange in the supply line at the connection to each supply drum. This is being done to address the potential backflow of uranium bearing solution from the solvent makeup tanks to the fresh solvent drums.	Prevent uranium backflow into a NFG container.	Fresh Solvent Supply System	ISA-07 Solvent Extraction
19391	Chemical Laboratory Ventilation System FL-10A / Fan FN-10A Transition Duct Replacement	Replace transition duct and flex joint for Filter FL-10 / Fan FN-10A for the Chem Lab.	The existing duct and flex boot is degraded and no longer serviceable.	Filter FL - 10A	ISA-01 Plant Ventilation System
19392	Replace Solx Dust Collector Pulse Cleaner Circuit board for DC-1070	Replace Solx Dust Collector Pulse Cleaner Circuit board DNC-T2010-A10 with a DNC-T2010-R20. This is for Dust Collector DC-1070.	The existing Circuit board DNC-T2010-A10 is obsolete, the direct replacement from Ametek is DNC-T2010-R20. The board layout is different the but the size and specifications are the same.	Dust Collector in Solvent Extraction	ISA-01 Plant Ventilation System
19393	Remove 400HP Rental Boiler	<p>Remove the temporary 400HP Rental Boiler and supplemental temporary lines installed by CCF 18052. Maintain the CFFF process pipe connection isolation valves, blind flanges/caps/plugs, and power supply breaker installed by CCF 18050 if the need arises to install a temporary boiler in future. A CCF will be required prior to use of a temporary boiler.</p> <p>This change does not constitute a modification to a processes, systems or components that contain, measure, transport or secure Uranium in any form. Therefore per TA-500 the RAF-104-10 form is not required.</p> <p>No SSCs are impacted, no new SSCs are planned, an ITR is not required.</p>	Permanent boilers have been installed and turned over under CCF 18137. The temporary rental boiler is no longer required to be onsite.	Proximity of Boiler House	Grounds

CCF	Title	Description	Justification	Location	ISA ID
19394	Line 6 Table Modification	This modification will require the angle to be disconnected from the bottom end plugger on line 6. It will then be cut to 16" length and connected to the frame via a piece of flat bar (1"x5"x1/8") and screws. See image attached.	A new bottom end plugger is being installed in Non-Fuel via CCF 16610. This table is currently attached directly to the plugger. By creating this new bracket, it allows the table to be stand alone, and secures the rails that hold the cookie sheets of tubing.	Non Fuel	Components
19401	Modification of Thermal Stability System "A" to improve door interlocks for hydrogen and nitrogen flows.	Modification of Thermal Stability System "A" to improve door interlocks for hydrogen and nitrogen flows.	Address CAP IR-2019-14495 for Redbook #75333. This work will improve door interlocks to prevent nitrogen and hydrogen flow with doors open. The electrical and process instrumentation drawings will be reviewed and updated to as-built condition.	Thermal Stability System "A" (MAP System)	ISA-08 Pelleting
19402	Add a second Passive overflow to V-1092 and V-1492	To resolve the regulatory noncompliance, the simplest solution would be to add a second 2 inch overflow to both V-1092 and V-1492 to match the existing 2 inch overflows already installed on both tanks. To make room for the second 2" overflow the two existing 1/2" solvent lines will be combined to free up space on the top of the tank. Included in this ccf is to remove the blind flanges from the solvent piping and reattached the drum suction pipes.	To resolve the regulatory noncompliance, the simplest solution would be to add a second 2 inch overflow to both V-1092 and V-1492 to match the existing 2 inch overflows already installed on both tanks.	URRS SOLX	ISA-07 Solvent Extraction
19403	Flame Curtain Solenoid Valve Replacement	Substitution CCF: Replace current defective ASCO 1/2" threaded gas solenoid valve with new ASCO 1/2" threaded gas solenoid valve (Item# 8214G020-120V). New solenoid valve is similar to the current solenoid valves and is used on other furnaces (4C furnace etc).	The current solenoid valve is not operating properly.	2A Furnace	Grounds
19404	Extend vent on HF overflow tank	Extend vent on HF overflow tank When HF is unloaded into T-1174, the HF storage tank, the conservation vent, PSV-S-1174-A opens and air and HF fumes from T-1174 are forced through a dip tube to near the bottom of T-1191, HF overflow tank. This tank is partially filled with water so HF is scrubbed from the air stream before it breaks the surface of the liquid and escapes through the vent located on the top of T-1191. In addition, when HF is drained from piping in the HF pit it is pumped into T-1191. The vent on the tank exhausts though a 180degree elbow at about face level. This project will extend the vent down to a location approximately 12 " from the pad surface. This process, system, or component does not contain, measure, handle, transport, process, or secure Uranium in any form. Therefore, neither an up front planning meeting with NCS nor an RAF-104-10 is required.	Reduce potential for exposure to low levels of HF fumes	In HF storage pit	ISA-06 Chemicals Receipt, Handling and Storage
19407	Allow Alternative High Heat High Nickle Alloy Wire to Secure Gasket in Quench Section of the Incinerator Off Gas Scrubber System	Allow Alternative High Heat High Nickle Alloy Wire to Secure Gasket in Quench Section of the Incinerator Off Gas Scrubber System	The wire specified to secure the ceramic fiber tadpole gasket with ceramic cloth cover was specified to be made of Hastelloy. The wire sewing the ends of the bulb gasket is necessary to secure the gasket for installation, but not a wetted part during operation. An alternative high heat, high Nichol alloy wire is acceptable for use in this application.	Incinerator Scrubber System	ISA-01 Plant Ventilation System

CCF	Title	Description	Justification	Location	ISA ID
19411	Sea-land Container Removal	<p>This CCF will remove the following Sea-land containers from site per procedure CA-022:</p> <p>C18 C20 C31 C32 C33 C37 C39 C43 C51 C58 C61</p>	Eliminate environmental hazard.	Outside Plant Grounds	Grounds
19412	Incinerator Duct Spring Hanger Replacement	This CCF will replace the spring hangers supporting the Incinerator ductwork.	One of the existing spring hangers has failed and cannot be repaired. The second spring hanger is being replaced and relocated to resolve interference with fire suppression piping.	Incinerator Penthouse Ductwork	ISA-13 Low Level Radioactive Waste Processing
19415	UF6 Cylinder Recertification Building Exit Conveyor Modification	<p>Project is to install one tube beam (approximately 3"X6"X44-5/8") cross member perpendicular to the rails approximately 32.5" from the exit end of the rail. Install two tube beams (approximately 3"X6"X58") by connecting it to the added cross member and existing cross member. The two tube beams will run parallel with the existing conveyor rails. The new beams will be located inside the existing conveyor rails, positioned to allow clearance space for the cutting mechanism.</p>	The new beams will be used to hold the UF6 cylinders and prevent it from falling to the floor when cut in half. This will support the de-risking of the facility through disposal of U-bearing wastes.	UF6 Cylinder Recertification Building	ISA-09 UF6 Cylinder Wash
19419	User Station Breathing Air Regulator Part Substitution	<p>The Mapcon System description for the current regulator is as follows: Regulator for Breathing Air System, Oxxweld PN 19151, Model R-76-150-024. This regulator is labeled as a heavy duty station regulator rated for Oxygen service.</p> <p>The substitution regulator is a Harris Products Group PN 723C-125-000-D-1. This regulator is also designed to operate in high purity gas applications. The body/bonnet is constructed of chrome plated brass barstock with 316L Stainless Steel diaphragms. It has a one piece encapsulated PTFE Teflon seat design that includes a nickel-plated sintered bronze 10 micron filter to protect the seat from particulate contamination.</p> <p>No CSEs are impacted. This process, system, or component does not contain measure, handle, transport, process, or secure Uranium in any form. Therefore, no upfront planning meeting with NCS is required, and thus no RAF-104-10 is required.</p>	<p>Airgas vendor relayed information that the current Mapcon Storeroom Number 235046 is obsolete and is no longer available.</p> <p>Airgas recommended Harris Products Group PN 723C-125-000-D-1 regulator after review of our application requirements.</p>	Breathing Air Stanchions Throughout CFFF Manufacturing Areas	Grounds
19425	Access Doors on 4C/4D Containment System Duct.	Install four access doors on the 4C/4D ducts. In phase one the holes will be cut and a temporary cover installed. Phase 2 will remove the temporary covers and install permanent ones. The duct integrity will be verified after each installation is complete.	Access Doors are needed to aid in the inspection and cleaning of the ducts.	4C/4D ducts	ISA-03 ADU Conversion

CCF	Title	Description	Justification	Location	ISA ID
19427	Line 6 Grinder Water Chute Change	Replace Line 6 grinder water chute Replace the 080364 Chute with the 080191 Chute (modified to fit). Piping to the chute will need to be modified as done on Line 5. Existing Chute pipe port in the grinder housing will need to be plugged. Rear cover panel of the hood may need to have hole drilled for the pipe to come thru.	Current designed water chute is not directing enough water on to the pellet when grinding, causing high airborne.	Pellet Grinder 6	ISA-08 Pelleting
19436	Pellet Line 3 Bulk Container Enclosure Door Pneumatic Cylinder Replacement	This change will replace the pneumatic cylinder used for door open / close on the Pellet Line 3 Bulk Container Enclosure.	The existing pneumatic cylinder has failed and replacements are not available.	Pellet Line 3 Bulk Container Enclosure	ISA-08 Pelleting
19437	V119 AUGER REMOVAL - TRIAL	The project will remove the Auger Operation for V119 system. During the trial, process data will be accumulated so to verify the Auger function. Phase 1, remove the Auger from operations and replace if necessary. Phase 2, a decision will be made for Auger usage. The Auger Housing dimensions will not be impacted by this CCF.	THE PROJECT WILL REMOVE AUGER OPERATION ON TRIAL BASIS TO ACCUMULATE DATA FOR FUTURE AUGER REMOVAL AS PART OF V-X19 PUMP REPLACEMENTS PER CCF 19429.	Conversion	ISA-03 ADU Conversion
19439	Substitution for Non-Safety Significant (SSC) SCR Power Controllers	This CCF will allow substitution of non-SSC SCR Power Controllers using approved substitution criteria on non-RMP covered systems. The substitution equivalency criteria for the components can be found in PSEDoc-0006347 which is linked to this CCF. The applicable form in the equivalency document will be filled out for each substitution and attached to the required subsequent CCF.	Electrical components are subject to obsolescence as technology advances. As long as the components meet the design requirements for the non-safety significant application, updated components are acceptable for use. No processes, systems or components that contain, measure, handle, transport, process or secure uranium in any form are modified by this configuration change.	Plant wide	Grounds
19450	Modify UT2 I/O wiring configuration to DEC computer	Modify UT2 I/O wiring configuration to DEC computer.	Signal ground moved from pin 17 to 18 to eliminate signal noise issues.	UT2 at Rod Inspection	ISA-03 ADU Conversion
19460	IFBA Rod Line 5 Pellet Loader Machine Guard	Install guarding to prevent operators from coming in contact with pellet tray guides.	Eliminate safety hazard.	IFBA Pellet Line 5 Dry Room	ISA-12 IFBA Fuel Rod Manufacturing
19470	Access Panel in ADU Women's Restroom	Cut square access hole in the south side (between sinks) of the ADU women's restroom to gain access to drain pipes. Install cover panel over hole when finished.	Access is needed to clear drain piping.	ADU Conversion Women's Restroom	ISA-03 ADU Conversion
19474	Emergency CCF for UF6 Cylinder Wash Station Pump Timer	Correct the wiring to the new Crouzet Multifunction Timer so the pump has a Delay off feature once the Start Push Button is pressed of approximately 3 minutes, or as needed by the Process.	Current wiring and configuration of Timer does not work.	S.W. Decon UF6 Cylinder Wash Station	ISA-09 UF6 Cylinder Wash
19478	Eductor flange for spiking station #2	Eductor flange for spiking station #2 Currently the flange has through holes for a nut and bolt set. The new flange will have threaded holes.	More durable construction	UF6 bay	ISA-03 ADU Conversion