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May 1, 1998 GDP 98-0088

Dr. Carl J. Paperiello Director, Office of Nuclear Material Safety and Safeguards Attention: Document Control Desk United States Nuclear Regulatory Commission Washington, DC 20555-0001

Paducah Gaseous Diffusion Plant (PGDP) Portsmouth Gaseous Diffusion Plant (PORTS) Docket Nos. 70-7001 & 70-7002 Response to NRC Request for Additional Information (TAC NOS. L32043 & L32044)

Dear Dr. Paperiello:

By letter dated February 25, 1998 (see the reference), the U.S. Nuclear Regulatory Commission (NRC) forwarded to the United States Farichment Corporation (USEC) various questions on the certificate amendment requests to Update the Application Safety Analysis Reports (SARUP) for the Paducah, Kentucky and Portsmouth, Ohio gaseous diffusion plants.

Enclosure 1 provides USEC's response to question 17 from the referenced NRC letter.

If you have any que tions on USEC's response, please call me at (301) 564-3250 or Steve Routh at (301) 564-3251. There are no new commitments identified in this submittal.

Sincerely,

S.D. Rothfor

Steven A. Toelle Nuclear Regulatory Assurance and Policy Manager

Reference: Letter from Charles Cox (NRC) to Mr. James H. Miller (USEC), Paducah and Portsmouth Certificate Amendment Requests-Update the Application Safety Analysis (TAC Nos. L32043 & L32044), dated February 25, 1998.

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Enclosure: Response to NRC Request for Additional Information Concerning Paducah and Portsmouth Safety Analysis Report Update (TAC Nos. L32043 & L32044), United States Enrichment Corporation, Paducah and Portsmouth Gaseous Diffusion Plants, Docket Nos. 70-7001 and 70-7002, Response to Question 17

cc: Mr. Robert C. Pierson, NRC NRC Region III NRC Resident Inspector - PGDP NRC Resident Inspector - PORTS Mr. Randall M. DeVault, DOE Enclosure to GDP 98-0088 (55 pages total)

Response to NRC Request for Additional Information Concerning Paducah & Portsmouth Safety Analysis Report Update (TAC Nos. L32043 & L32044) United States Enrichment Corporation Paducah and Portsmouth Gaseous Diffusion Plants Docket Nos. 70-7001 and 70-7002

Response to Question 17

May 1, 1998

SARUPQ17

PGDP/PORTS - General Comment

TSRs - many Certification TSR limits (safety limits, limiting control setting, limiting condition for operation, surveillance) have been deleted in the SARUP purportedly based on the new accident analysis. Specifically identify each TSR that was deleted in the PORTS and Paducah SARUP from USEC-01 and USEC-02 and the basis for deleting them. (Question 4 and 5 are examples of questions arising from such deletions without adequate bases provided).

Response:

Tables 1 and 2 provide "maps" between the existing TSRs and the SARUP TSRs for PGDP and PORTS, respectively. Where an existing TSR Safety Limit, Limiting Condition for Operation, Surveillance Requirement, or Design Feature is not included in the SARUP TSRs, a specific basis is provided.

As indicated in Tables 1 and 2, current TSRs that involve only administrative controls or requirements and not controls on active SSCs were typically not incorporated into the SARUP TSRs. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO (see SARUP Section 4.2.3). However, many of these administrative controls are identified in other sections of the SAR and certification application, and, thus, are required to be implemented through written procedures.

SARUP Revision:

No revisions required.

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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
1.0	Definitions	Addressed in SARUP TSR Section 1.0.
2.1	Specific TSRs for Toll Transfer and Sampling Facility (C-360)	Addressed in SARUP TSR Section 2.6.
2.1.1	Operational Modes	Addressed in SARUP TSR Section 2.6.1.
2.1.2.1	Autoclave Shell Pressure (Safety Limit)	This requirement is a passive design feature with no special surveillance requirement (the autoclave pressure decay test is included in SARUP TSR 2.6.3.1-2). Passive design features were only included in the SARUP TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Furthermore, according to the limiting accident scenario for cylinder failure inside an autoclave (SARUP Section 4.3.2.2.14), this control does not prevent an EBE which could exceed the offsite EGs (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the offsite EGs were considered for establishing a Safety Limit or Limiting Control Setting). Therefore, this existing safety limit was not included in the SARUP TSRs.
2.1.2.2	UF ₆ Cylinder Temperature (Safety Limit)	Addressed in SARUP TSR Section 2.6.2.1.
2.1.3.1	Autoclave High Pressure Isolation System	LCO and SRs are addressed in SARUP TSR Section 2.6.3.1.

Table 1.	"Map"	Retween	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.3.2	Autoclave Pressure Relief System	SARUP Section 4.3.2.2.14 (which provides for the worst case pressure rise inside the autoclave) concluded that the pressure inside the autoclave would not reach the maximum allowable working pressure (MAWP) for any of the autoclaves for any of the autoclave/cylinder configurations. The autoclave pressure relief system was not considered an essential control in this analysis and, therefore, this system does not qualify under the SARUP TSR selection criteria (SARUP Section 4.2.3) and is not included as a SARUP TSR LCO.
2.1.3.3	Autoclave Steam Pressure Control System	LCO and SRs are addressed in SARUP TSR Section 2.6.3.7.
2.1.4.1	UF ₆ Release Detection System - Laboratory (Zone 1)	LCO and SRs are addressed in SARUP TSR Section 2.6.3.6.
2.1.4.2a	UF ₆ Release Detection System- Basement Transfer Room (a portion of Zone 4)	LCO and SRs are addressed in SARUP TSR Section 2.6.3.6.
2.1.4.2b	UF ₆ Release Detection System - Autoclave Heated Housings (Zones 5-8)	Zone 1 and 4 of this system provide automatic isolation upon a release of UF_6 . SARUP Section 4.3.2.2 does not rely on the Zones 5-8 smoke detectors for detection of a UF_6 releases; rather, facility operators are relied upon to detect and isolate the release. Therefore, this system was not identified as an essential control, does not meet the SARUP TSR selection criteria, and was not included as a SARUP TSR LCO.
2.1.4.3	Autoclave Water Inventory Control System	LCO and SRs are addressed in SARUP TSR Section 2.6.3.4.
2.1.4.4	Cylinder Scale Cart Movement Prevention System	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TUR was not included as a SARUP TSR LCO.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.4.5	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.6.3.5.
2.1.4.6	Cylinder Heating - Cylinder Accountability Weight	This TSR is an administrative control and does not satisfy the SARUP TSR LCO selection criteria. The weight and void volume requirements, as well as the heating allowances, under this TSR are included in SARUP TSR 1.2.7 and in the Basis statements for SARUP TSRs 2.6.2.1, 2.6.3.7 and 2.6.4.1. For these reasons, this TSR was not included as a "stand-alone" LCO in the SARUP TSRs.
2.1.4.7	Cylinder Heating - List of Cylinders Not to be Heated	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. The specific cylinders that can be heated are delineated in SARUP TSR 1.2.7. For these reasons, this TSR was not included as a "stand-alone" LCO in the SARUP TSRs.
2.1.4.8	Cylinder Heating and Filling: Cylinder Pre-Heat and Pre-fill Inspection	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.9	Cylinder Heating - Cylinder Cold Pressure	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.7. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.4.10	Cylinder Filling - Pre-fill Weight	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.10. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.11	Cylinder Filling - Limiting Number of Autoclaves in Mode 6B	This TSR is an administrative control that was not identifed as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.12	Cylinder Filling - Cylinder Fill Limit	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The cylinder is only a concern if it is heated following overfilling, which is controlled by cylinder category. This control is identified in SARUP Section 4.3.2.2.2. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO. Cylinder void volume requirements are included in the SARUP TSR 1.2.7 and in the Basis statements for SARUP TSRs 2.6.2.1 and 2.6.3.7.
2.1.4.13	Cylinder Handling - Cylinder Rolling and Tilting	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.10. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

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May 1, 1998

USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.4.14	Cylinder Handling - Cylinder Disconnection	This TSR is an administrative control and does not meet the RUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The requirement to purge and evacuate UF ₆ lines prior to opening the primary system is identified in SARUP Section 4.3.2.2.10. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.15	Cylinder Handling - Cylinder Valve Covers	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.16	Cylinder Handling - Approved Cranes for Liquid Cylinders	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.17	Cylinder Lifting Restriction	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.18	Heating UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-0- TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.4.19	Cylinder Heating - Valve Clarity	As described in SARUP Table 4.2-11, the event, "Plugged Valve/Pigtail" was analyzed by SARUP as having only limited consequences. This conclusion is based on the use of administrative controls that were not identified as essential controls in the SARUP analyses and do not meet the SARUP TSR LCO selection criteria. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.20	Cylinder Heating - Valve Clarity/Heating Cycle Interruptions	As described in SARUP Table 4.2-11, the events, "Plugged Valve/Pigtail" and 'Plugged/Blocked Process Line" was analyzed as having only limited consequences. This conclusion is based on the use of administrative controls that were not identified as essential controls in the SARUP analyses and do not meet the SARUP TSR LCO selection criteria. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.4.21	Scales	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.5.1	UF_{6} Cylinder Slings and Lifting Fixtures (Design Feature)	These design feature requirements and SRs are addressed in SARUP TSR Section 2.6.4.2.
2.1.5.2	Crane Design (Design Feature)	Design feature requirements are addressed in SARUP TSR Section 2.6.4.2. This SARUP TSR and SARUP TSR Section 1.6.3.1, require this system to be operable prior to lifting any liquid UF ₆ cylinders. This system does not meet the SARUP TSR selection criteria for an LCO. SRs in the existing TSRs that require performance of OSHA inspections (SRs 2.1.5.2-1, -2 and -3) were not included as SARUP TSR surveillances because they are not credited in the SARUP analyses. Rather, the Basis statement in the SARUP TSR requires that the cranes must meet the applicable codes and standards described in SAR Chapter 1, Appendix A.

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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.5.3	UF ₆ Cylinders (Design Feature)	Design feature requirements are included in SARUP TSR Section 2.6.4.1. Existing SR 2.1.5.3-1 that requires cylinder inspections prior to filling or heating is not included in SARUP TSR 2.6.4.1. Instead, a statement was added to the Basis that requires cylinders containing liquid UF ₆ to meet the ANSI N14.1 requirements described in SAR Chapter 1, Appendix A. This addition to the Basis is more accurate and broader in scope. Cylinder design requirements are described in SARUP Section 3.15.6.1.
2.1.5.4	UF ₆ Cylinder Pigtails (Design Feature)	This requirement is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the SARUP TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a Design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this TSR is not included as a SARUP TSR LCO or design feature. The requirement for initial pigtail inspections is addressed in SARUP Sections 4.3.2.2.10 and 4.3.2.2.11, as an administrative control. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Pigtail design requirements are described in SARUP Section 3.15.5.4.
2.1.5.5	Scale Cart Design (Design Feature)	Design feature requirements are included in SARUP TSR Section 2.6.4.5.
2.1.5.6	Hydraulic Lifts - Lift Capacity (Design Feature)	Design feature requirements are included in SARUP TSR Section 2.6.4.4.
2.1.5.7	Hydraulic Lifts - Interlock With Scale Cart Air Supply (Design Feature)	Design feature requirements included in SARUP TSR Section 2.6.4.4.

Table 1. "Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs	
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.5.8	Hydraulic Lifts - Rail Stops (Design Feature)	This requirement is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the SARUP TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this TSR was not included as a SARUP TSR LCO. This design feature is identified in SARUP Section 4.3.2.2.4.
2.2	Specific TSRs for UF ₆ Facilities (C-333-A and C-337- A)	Addressed in SARUP TSR Section 2.2.
2.2.1	Operational fodes	Addressed in SARUP TSR Section 2.2.1.
2.2.2.1	Autoclave Shell Pressure (Safety Limit)	This requirement is a passive design feature with no special surveillance requirement (the autoclave pressure decay test is conducted under SARUP TSR 2.2.3.1-2). Passive design features were only included in the SARUP TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying SR). Furthermore, according to the limiting accident scenario for cylinder failure inside an autoclave (SARUP Section 4.3.2.2.14), this control does not prevent an EBE which could exceed the offsite EGs (Reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting). Therefore, this existing safety limit was not included in the SARUP TSRs.
2.2.2.2	UF ₆ Cylinder Temperature (Safety Limit)	Addressed in SARUP TSR Section 2.2.2.1. No surveillance requirement is applicable.
2.2.3.1	Autoclave High Pressure Isolation System	LCO and SRs are addressed in SARUP TSR Section 2.2.3.1.

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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.3.2	Autoclave Pressure Relief System	SARUP Section 4.3.2.2.14 (which provides for the worst case pressure rise inside the autoclave) concluded that the pressure inside the autoclave would not reach the maximum allowable working pressure (MAWP) for any of the autoclaves for any of the autoclave/cylinder configurations. The autoclave pressure relief system was not considered an essential control in this analysis and, therefore, this system does not qualify under the SARUP TSR selection criteria (SARUP Section 4.2.3) and was not included as a SARUP TSR LCO.
2.2.3.3	Autoclave Steam Pressure Control System	LCO and SRs are addressed in SARUP TSR Section 2.2.3.7.
2.2.4.1	UF ₆ Release Detection System - Autoclave Heated Housings, Piping Trench, Jet Station, West Wall Detectors (C-337-A ONLY)	SARUP Section 4.3.2.2 does not rely on autoclave smoke detectors for detection of a UF ₆ releases outside of the autoclave; rather, facility operators are relied upon to detect and isolate the release. Therefore, this system was not identified as an essential control, does not meet the SARUP TSR selection criteria, and was not included as a SARUP TSR LCO. A description of this system is provided in SARUP Section 3.15.7.3.
2.2.4.2	Autoclave Water Inventory Control System	LCO and SRs are addressed in SARUP TSR Section 2.2.3.5.
2.2.4.3	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.2.3.6.
2.2.4.4	Cylinder Heating - Cylinder Accountability Weight	This TSR is an administrative control and does not satisfy the SARUP TSR LCO selection criteria. The weight and void volume requirements, as well as the heating allowances, under this TSR are included in SARUP TSR 1.2.7 and in the Basis statements for SARUP TSRs 2.2.2.1 and 2.2.3.7. For these reasons, this TSR was not included as a "stand-alone" LCO in the SARUP TSRs. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.4.5	Cylinder Heating - List of Cylinders Not to be Heated	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. The specific cylinders that can be heated is delineated in SARUP TSR 1.2.7. For these reasons, this TSR was not included as a "stand-alone" LCO in the SARUP TSRs. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.4.6	Cylinder Heating - Cylinder Pre-Heat Inspection	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.4.7	Cylinder Heating - Cylinder Cold Pressure	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This requirement is identified in SARUP Section 4.3.2.2.7. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.4.8	Cylinder Handling - Cylinder Disconnection	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The requirement to purge and evacuate UF ₆ lines prior to opening the primary system is identified in SARUP Section 4.3.2.2.10. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.4.9	Heating UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

Table 1. "	Map" Between	Existing P(GDP TSRs	and SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.4.10	Cylinder Heating - Valve Clarity	As described in SARUP Table 4.2-11, the event, "Plugged Valve/Pigtail" was analyzed by SARUP as having only limited consequences. This conclusion is based on the use of administrative controls that were not identified as essential controls in the SARUP analyses and do not meet the SARUP TSR LCO selection criteria. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.4.11	Cylinder Heating - Valve Clarity/Heating Cycle Interruptions	As described in SARUP Table 4.2-11, the event, "Plugged Valve/Pigtail" was analyzed by SARUP as having only limited consequences. This conclusion is based on the use of administrative controls that were not identified as essential controls in the SARUP analyses and do not meet the SARUP TSR LCO selection criteria. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.4.12	Scales	This TSR is an administrative control that was not identified in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.5.1	UF ₆ Cylinder Slings and Lifting Fixtures (Design Feature)	These design feature requirements and SRs are addressed in SARUP TSR Section 2.2.4.1.
2.2.5.2	Crane Design (Design Feature)	Design feature requirements are addressed in SARUP TSR 2.2.4.1. This SARUP TSR and SARUP TSR 1.6.3.1, require this system to be operable prior to lifting any liquid UF ₆ cylinders. This system does not meet the SARUP TSR selection criteria for an LCO. SRs in the existing TSRs that require performance of OSHA inspections (SRs 2.2.5.2-1, -2 and -3) were not included as SARUP TSR surveillances because they are not credited in the SARUP analyses. Rather, the Basis statement in the SARUP TSR requires that the cranes must meet the applicable codes and standards described in SAR Chapter 1, Appendix A.

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Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs

USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.5.3	UF ₆ Cylinders (Design Feature)	The control provided by cylinders during heating is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this TSR is not included as a SARUP TSR LCO. This control is identified in SARUP Sections 4.3.2.2.2, .4, .6, .7, .9, .10, and .14. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. SARUP TSRs 2.6.4.1, 2.3.4.1, or 2.5.4.1 identify additional requirements prior to filling. Cylinder design requirements are described in SARUP Section 3.15.6.1.
2.2.5	UF ₆ Cylinder Pigtails (Design Feature)	This requirement is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this TSR is not included as a SARUP TSR LCO or design feature. The requirement for initial pigtail inspections is addressed in SARUP Sections 4.3.2.2.10 and 4.3.2.2.11, as an administrative control. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Pigtail design requirements are described in SARUP Section 3.15.5.4.
2.3	Specific TSRs for Product and Tails Withdrawal Facilities	Addressed in SARUP TSR Sections 2.3 and 2.5.
2.3.1	Operational Modes	Addressed in SARUP TSR Sections 2.3.1 and 2.5.1.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.2.1	Normetex Pump Discharge Pressure (Safety Limit)	SARUP Section 4.3.2.2 analyzed withdrawal facility accidents. In no scenario was normetex pump pressure considered a control necessary to prevent an EBE which could exceed the ooffsitesite EGs. Therefore, the normetex system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).
2.3.2.2	UF ₆ Cordenser Coolan' *ressure (Safer mit)	As described in SARUP Table 4.2-11, the event "Coolant Tube Rupture into Primary System" (for the withdrawal facilities) was analyzed as having only limited consequences. Consequently, these limits are not controls necessary to prevent an EBE which could exceed the offsite EGs. Additionally, this system (a rupture disk) is not an active SSC. Therefore, these requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only active controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).
2.3.3.1	Normetex Pump High Discharge Pressure System	LCO and SRs are addressed in SARUP TSR Section 2.3.3.4
2.3.3.2	Coolant Overpressure Control System	SARUP Section 4.3.2.2 analyzed withdrawal facility accidents. In no scenario was UF ₆ condenser coolant pressure determined to be a control necessary to prevent an EBE which could exceed the offsite EGs. Additionally, this system (a rupture disk) is not an active SSC. Therefore, the UF ₆ condenser system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only active controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.4.1	UF ₆ Release Detection and Isolation System - Low Voltage ("New") System at the UF ₆ Withdrawal	LCO and SRs are addressed in SARUP TSR Sections 2.3.3.1 and 2.5.3.1.
2.3.4.2	UF ₆ Release Detection System - Low Voltage System at the UF ₆ Withdrawal Room Ceiling	LCO and SRs are addressed in SARUP TSR Sections 2.3.3.1 and 2.5.3.1
2.3.4.3	UF ₆ Ressule Detection System - Normetex Pump	LCO and SRs are addressed in SARUP TSR Sections 2.3.3.5 and 2.5.3.6.
2.3.4.4	UF ₆ Release Detection System - High Voltage ("Old") System for UF ₆ Condensers etc.	The SARUP accident analysis of the withdrawal facilities, Section 4.3.2.2, does not rely on these smoke detectors for detection of a UF ₆ releases in this area; rather, facility operators are relied upon to detect and if possible isolate the release. Therefore, this system was not identified as an essential control, does not meet the SARUP TSR selection criteria, and was not included as a SARUP TSR LCO. A description of this system is provided in SARUP Section 3.15.7.3. The UF ₆ release detection and isolation low voltage systems did meet the SARUP TSR selection criteria and are addressed in SARUP TSR Sections 2.3.3.1 and 2.5.3.1.
2.3.4.5	UF ₆ Release Detection System - High Speed Centrifugal Pumps	As discussed in the response to Question 19 (NRC $2/25/98$ Letter), failures in smaller enrichment and purge compressors would not meet SARUP TSR criterion 3 because the amount of UF ₆ material at risk is small, and this equipment operates below atmospheric pressure. The exposure of workers within the building from any releases would be minimized by evacuation and would preclude exceeding the PSOA onsite thresholds. Therefore, this system was not identified as an essential control in the SARUP analyses and was not included as a SARUP TSR LCO.

USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.4.6	Facility Assay Limits	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.3.4.7	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.3.3.3
2.3.4.8	Fire Protection System - Building Sprinkler System	LCO and SRs are addressed in SARUP TSR Sections 2.3.3.2 and 2.5.3.2.
2.3.4.9	Fire Protection System - High Pressure Fire Water Distribution Mains	LCO and SRs are addressed in SARUP TSR Section 2.3.3.2 and 2.5.3.2. SAR TSRs 2.3.4.8 and 2.3.4.9 were combined into a single TSR for each facility.
2.3.4.10	Fire Protection System- Water Supply Basin	LCO and SRs are addressed in SARUP TSR Section 2.4.3.1. SAR TSRs 2.3.4.10 and 2.3.4.11 were combined into a single TSR.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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Table 1. "	'Map"	Between	Existing	PGDP	TSRs a	and S.	ARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.4.11	Fire Protection System- High Pressure Fire Water Pumps	LCO and SRs are addressed in SARUP TSR Section 2.4.3.1. The SRs were modified as follows: The annual automatic start test of the electric high pressure fire water pumps was deleted and replaced with a monthly requirement to manually start the high pressure fire water pumps locally and from C-300. The automatic start feature is not relied on in the SARUP accident analysis. Furthermore, the addition of a monthly start test from C-300 provides assurance that if the fire water storage tank falls to the point where fire pumps are needed, a C- 300 operator action can start the operable pumps.
2.3.4.12	Fire Protection System - High Pressure Fire Water Storage Tank	LCO and SRs are addressed in SARUP TSR Section 2.4.3.2.
2.3.4.13	Fire Protection System - Hot Work Limitations	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.14	Cylinder Scale Cart Movement Prevention System	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.4.15	Cylinder Filling - Pre-Fill Weight	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.10. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.16	Cylinder Filling - Cylinder Pre-Fill Inspection	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.17	Cylinder Filling - Cylinder Fill Limit	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The cylinder is only a concern if it is heated following overfilling, which is controlled by cylinder category. This control is identified in SARUP Section 4.3.2.2.2. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures.
2.3.4.18	Cylinder Handling - Cylinder Disconnection	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The requirement to purge and evacuate UF ₆ lines prior to opening the primary system is identified in SARUP Section 4.3.2.2.11. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

Table 1. *	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.4.19	Cylinder Handling - Cylinder Valve Covers	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.20	Cylinder Handling - Approved Cranes for Liquid Cylinders	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.21	Cylinder Lifting Restriction	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.22	Heating UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCC selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.3.4.23	Scales	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs					
2.3.5.1	UF ₆ Cylinder Slings and Lifting Fixtures (Design Feature)	These design feature requirements and SRs are addressed in SARUP TSR Sections 2.3.4.2 and 2.5.4.2.					
2.3.5.2	Crane Design (Design Feature)	Design feature requirements are addressed in SARUP TSRs 2.3.4.2 and 2.5.4.2. This SARUP TSR and SARUP TSR 1.6.3.1, require this system to be operable prior to lifting any liquid UF ₆ cylinders. This system does not meet the SARUP TSR selection criteria for an LCO. SRs in the existing TSRs that require performance of OSHA inspections (SRs 2.3.5.2-1, -2 and -3) were not included as SARUP TSR surveillances because they are not credited in the SARUP analyses. Rather, the Basis statement in the SARUP TSR requires that the cranes must meet the applicable codes and standards described in SAR Chapter 1, Appendix A.					
2.3.5.3	UF ₆ Cylinders (Design Feature)	Design feature requirements are included in SARUP TSRs 2.3.4.1 and 2.5.4.1. Existing SR 2.3.5.3-1 that requires cylinder inspections prior to filling or heating is not included in SARUP TSRs 2.3.4.1 and 2.5.4.1. Instead, a statement was added to the Basis that requires cylinders containing liquid UF ₆ to meet the ANSI N14.1 requirements described in SAR Chapter 1, Appendix A. This addition to the Basis is more accurate and broader in scope. Cylinder design requirements are described in SARUP Section 3.15.6.1.					
2.3.5.4	UF ₆ Cylinder Pigtails (Design Feature)	This requirement is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this TSR is not included as a SARUP TSR LCO or design feature. The requirement for initial pigtail inspections is addressed in SARUP Sections 4.3.2.2.10 and 4.3.2.2.11, as an administrative control. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Pigtail design requirements are described in SARUP Section 3.15.5.4.					

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.5.5	Scale Cart Design (Design Feature)	Design feature requirements included in SARUP TSR Sections 2.3.4.3 and 2.5.4.3.
2.3.5.6	UF ₆ Condenser Accumulator Minimum Wall Thickness	This requirement is a passive design feature with an administratively controlled inspection requirement to determine estimated remaining life and verify the vessel wall han ot been reduced below minimum required metal thickness per the current version of the National Boiler Inspection Code. This requirement was not identified as an essential control in the SARUP analyses. Therefore, this TSR is not included as a SARUP TSR LCO or design feature.
2.4	Specific TSRs for Enrichment Cascade Facilities	Addressed in SARUP TSR Section 2.1.
2.4.1	Operational Modes	Addressed in SARUP TSR Section 2.1.1
2.4.2.1	Freezer/Submlimer UF ₆ Weight Limit (Safety Limit)	As discussed in the hazard analysis for the "Rupture of F/S Vessel" event, the failure of the F/S vessel is unlikely given the multiple failures and operator errors required to take place. However, even if the vessel did fail, the analysis concludes that the consequences would be only local and would be minimized by the low pressures associated with the "A" line when in the sublime mode. These consequences would not significantly impact workers ability to "see and flee." Consequently, it is not a control necessary to prevent an EBE which could exceed the offsite EGs. Therefore, these requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).

Table 1. "Map" Between	Existing	PGDP	TSRs and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs				
2.4.2.2	Coolant (R-114) Overpressure Protection Systems (Safety Limit)	SARUP Section 4.3.2.1.6 analyzed the accident addressed by this TSR. If left unmitigated, this event does not exceed offsite EGs. Additionally, this system (a rupture disk) is not an "active SSC." Therefore, the coolant system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).				
2.4.2.3	Cascade Pressure Limit (Safety Limit)	SARUP Section 4.3.2.1 analyzed cascade facility accidents. In no scenario was cascade pressure determined to be a control necessary to prevent an EBE which could exceed the offsite EGs. Therefore, the cascade system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragrapt . last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).				
2.4.3.1	Freezer/Sublimer High-High Weight Trip System	As discussed in the hazard analysis for the "Rupture of E/S Vessel" event, the failure of the F/S vessel is unlikely given the multiple failures and operator errors required to take place. However, even if the vessel did fail, the analysis concludes that the consequences would be only local and would be minimized by the low pressures associated with the "A" line when in the sublime mode. These consequences would not significantly impact workers ability to "see and flee." This system was not identified as an essential control in the SARUP analyses, does not satisfy the SARUP TSR LCO selection criteria, and was not included as a SARUP TSR LCO. This system, including weight limits, is described in SARUP Section 3.15.3.5.				
2.4.3.2	Freezer/Sublimer UF ₆ Vent Line Manual Block Valve	As described in SARUP Table 4.2-11, the event "Stress Rupture of F/S Vessel" was analyzed as having only limited consequences. This system was not identified as an essential control in the SARUP analyses, does not satisfy the SARUP TSR LCO selection criteria, and was not included as a SARUP TSR LCO. This control is identified in SARUP Section 3.15.3.4.				

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Table 1. "M	ap" Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.4.3.3	Freezer/Sublimer R- 114 Vent Line Manual Block Valve	As described in SARUP Table 4.2-11, the event "Coolant Tube Rupture into Primary System" for the freezer/sublimer process was analyzed as having only limited consequences. This system was not identified as an essential control in the SARUP analyses, does not satisfy the SARUF TSR LCO selection criteria, and therefore, was not included as a SARUP TSR LCO.
2.4.3.4	R-114 Coolant Overpressure Control System	SARUP Section 4.3.2.1.6 analyzed the accident addressed by this TSR. The coolant high pressure relief system is not identified as an essential control for this accident. Additionally, this system (a rupture disk) is not an active SSC. For these reasons, this system does not satisfy the SARUP TSR LCO selection criteria. This system is described in SARUP Section 3.15.3.4.
2.4.3.5	Intermediate Gas Removal High Temperature Control System	SARUP did not analyze any hazards associated with this system because it has never operated and there are currently no plans to operate it. Further analysis would be required to support operation. Therefore, this system was not included in the SARUP TSRs. The current TSR specifies that the system shall not be operated.
2.4.4.1	UF ₆ Release Detection System	LCO and S Rs are addressed in SARUP TSR Section 2.1.3.4.
2.4.4.2	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.1.3.3.
2.4.4.3	Cascade Equipment Assay Limitations	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. As discussed in SARUP Section 4.3.1.1.4, a TSR surveillance requirement was included in the SARUP TSRs if it was necessary to ensure that the control (i.e., the LCO or Design Feature) is functioning within the constraints assumed in the accident analysis. For these reasons, this TSR was not included as a SARUP TSR LCO.

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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.4.4.4	Cascade Wet Air Inleakage	LCO and SRs are addressed in SARUP TSR Section 2.1.3.6.
2.4.4.5	Fire Protection System - Building Sprinkler System	LCO and SRs are addressed in SARUP TSR Section 2.1.3.5.
2.4.4.6	Fire Protection System - High Pressure Fire Water Distribution Mains	LCO and SRs are addressed in SARUP TSR Section 2.1.3.5. SAR TSR 2.4.4.5 and 2.4.4.6 were combined into a single TSR.
2.4.4.7	Fire Protection System - Water Supply Basin	LCO and SRs are addressed in SARUP TSR Section 2.4.3.1. SAR TSR 2.4.4.7 and 2.4.4.8 were combined into a single TSR.
2.4.4.8	Fire Protection System - High Pressure Fire Water Pumps	LCO and SRs are addressed in SARUP TSR Section 2.4.3.1. The SRs were modified as follows: The annual automatic start test of the electric high pressure fire water pumps was deleted and replaced with a monthly requirement to manually start the high pressure fire water pumps locally and from C-300. The automatic start feature is not relied on in the accident analysis. Furthermore, the addition of a monthly start test from C-300 provides assurance that if the fire water storage tank falls to the point where fire pumps are needed, a C- 300 operator action can start the operable pumps.
2.4.4.9	Fire Protection System - High Pressure Fire Water Storage Tank	LCO and SRs are addressed in SARUP TSR Section 2.4.3.2

Table 1.	"Map"	Between	Existing	PGDP	TSRs and	SARUP	TSRs
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Table 1. "	'Map"	Between	Existing	PGDP	TSRs	and	SARUP	TSRs
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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.4.4.10	Fire Protection System - Hot Work Limitations	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.4.4.11	Cascade Pressure Limitation	SARUP Section 4.3.2.1 analyzed cascade facility accidents. In no scenario was cascade pressure determined to be an essential control or an operating restriction that meets any of the SARUP TSR LCO selection criteria. Therefore, the cascade system pressure requirements were not included as a SARUP TSR LCO.
2.4.4.12	Cascade Cell Trip Function	LCO and SRs are addressed in SARUP-TSR Section 2.1.3.1.
2.4.4.13	Heavy Equipment Handling	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.1.8. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.4.4.14	Heating UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.5	Equipment Removal Activities	Addressed in SARUP TSR Sections 2.1, 2.3, and 2.4.
2.5.4.1	Pre-Removal Examination	LCO and SRs are addressed in SARUP TSR Sections 2.1.3.7, 2.3.3.7, and 2.4.3.4.
2.5.4.2	Post-Removal Examination	LCO and SRs are addressed in SARUP TSR Sections 2.1.3.7, 2.3.3.7, and 2.4.3.4.
2.5.4.3	PEH Equipment Openings	LCO and SRs are addressed in SARUP TSR Sections 2.1.3.6 and 2.3.3.6.

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USEC-01 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.5.4.4	РЕН	LCO and SRs are addressed in SARUP TSR Sections 2.1.3.6 and 2.3.3.6.
2.6	CAAS (Non-Cascade Facilities	Addressed in SARUP TSR Section 2.4.
2.6.4.1	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR, Section 2.4.3.3.
3.0	Administrative Controls	Addressed in SARUP TSR Section 3.0.

Table 1.	"Map"	Between	Existing	PGDP	TSRs	and	SARIP	TSR
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Table 2. "N	Map" Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
1.0	Definitions	Addressed in SARUP TSR Section 1.0. Current TSR Definition 1.2.4 was deleted because this term is not used in the SARUP TSRs.
2.1	Specific TSRs for X-342, X-343, and X-344 Facilities	Addressed in SARUP TSR Section 2.2.
2.1.1	X-342, X-343, X- 344 Autoclave Operational Modes	Addressed in SARUP TSR Section 2.2.1.
2.1.2.1	Autoclave Pressure (Safety Limit)	This requirement is a passive design feature with no special surveillance requirement (the autoclave pressure decay test is conducted under SARUP TSR 2.2.3.1-2). Passive design features were only included in the SARUP TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Furthermore, according to the limiting accident scenario for a cylinder failure inside an autoclave (SARUP Section 4.3.2.2.14), this control does not prevent an EBE, which could exceed the offsite EGs (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting). Therefore, this existing safety limit is not included in the SARUP TSRs.
2.1.2.2	Cylinder Heating	Addressed in SARUP TSR Section 2.2.2.1. No surveillance requirement is applicable.
2.1.3.1	Criticality Accident Alarm System (CAAS)	LCO and SRs are addressed in SARUP TSR Section 2.2.3.6.
2.1.3.2	UF ₆ Cylinder High Pressure Autoclave Steam Shutoff	LCO and SRs are addressed in SARUP TSR Section 2.2.3.4.

Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.3.3	UF ₆ Cylinder High Temperature Autoclave Steam Shutoff	LCO and SRs are addressed in SARUP TSR Section 2.2.3.8.
2.1.3.4	Autoclave Shell High Steam Pressure Shutdown	This system was determined in the SARUP to provide "defense- in-depth" and, thus, does not meet the SARUP TSR selection criteria. SARUP Sections 4.3.2.2.6, 4.3.2.2.9, and 4.3.2.2.14 support this position. Therefore, this control was not included as a SARUP TSR LCO.
2.1.3.5	Autoclave Shell High Pressure Containment Shutdown	LCO and SRs are addressed in SARUP TSR Section 2.2.3.1.
2.1.3.6	Autoclave Shell High Pressure Relief System	SARUP Section 4.3.2.2.14 (which provides for the worst case pressure rise inside the autoclave) concluded that the pressure inside the autoclave would not reach the maximum allowable working pressure (MAWP) for any of the autoclaves for any of the autoclave/cylinder configurations. The autoclave shell high pressure relief system was not considered an essential control in this analysis and, therefore, this system does not qualify under the SARUP TSR selection criteria (SARUP Section 4.2.3) and is not included as a SARUP TSR LCO.
2.1.3.7	High Condensate Level Shutoff	LCO and SRs are addressed in SARUP TSR Section 2.2.3.5.
2.1.3.8	Cylinder Heating	This TSR is an administrative control and does not satisfy the SARUP TSR LCO selection criteria. The weight and void volume requirements, as well as the heating allowances, under this TSR were included in SARUP TSR 1.2.7, and in the Basis statements for SARUP TSRs 2.2.2.1, 2.2.3.8, and 2.2.4.1. For these reasons, this TSR was not included as a "stand-alone" LCO in the SARUP TSRs.

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Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.3.9	Low Cylinder Pressure Shutoff	As described in SARUP Table 4.2-11, the event for which this system was intended to provide protection, a plugged cylinder valve/pigtail, was analyzed by SARUP as having only limited consequences. This conclusion is based on the use of administrative controls that do not meet the SARUP TSR LCO selection criteria.
2.1.3.10	Cylinder Assay Limitations	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (cc nsistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.1.3.11	Autoclave Smoke Detection System	SARUP Section 4.3.2.2, does not rely on autoclave smoke detectors for detection of a UF ₆ releases outside of the autoclave; rather, facility operators are relied upon to detect and if possible isolate the release. Therefore, this system was not identified as an essential control, does not meet the SARUP TSR selection criteria, and was not included as a SARUP TSR LCO. A description of this system is provided in SARUP Section 3.8.7.3.
2.1.3.12	Liquid UF ₆ Handling Cranes	The LCO requirements are addressed in SARUP TSR Section 2.2.4.2. This SARUP TSR and SARUP TSR 1.6.3.1, require this system to be operable prior to lifting any liquid UF ₆ cylinders. This system does not meet the SARUP TSR selection criteria for an LCO. SRs in the existing TSRs that require performance of OSHA inspections (SRs 2.1.3.12.3 and 2.1.3.12.4) were not included as SARUP TSR surveillances because they are not credited in the SARUP analyses. Rather, the Basis statement in the SARUP TSR requires that the cranes must meet the applicable codes and standards described in SAR Chapter 1, Appendix A.
2.1.3.13	Pigtail Line Isolation	LCO and SRs are addressed in SARUP TSR Sections 2.2.3.2 (for X-342-A and X-343) and 2.2.3.7 (for X-344-A).

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.3.14	Liquid UF ₆ Movement	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.3.15	Receiving Cylinder Fill Weights	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The cylinder is only a concern if it is heated following overfilling, which is controlled by cylinder category. This control is identified in SARUP Section 4.3.2.2.2. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO. Cylinder void volume requirements are included in the SARUP TSR 1.2.7 and in the Basis statements for SARUP TSRs 2.2.2.1 and 2.2.3.8.
2.1.3.16	UF ₆ Cylinder Crane Movement	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.1.3.17	UF ₆ Cylinder Weight Discrepancy	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.10. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.3.18	UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO.
2.1.4.1	UF ₆ Cylinder Lifting Fixtures (Design Feature)	These design feature requirements and SRs are addressed in SARUP TSR Section 2.2.4.2.
2.1.4.2	UF ₆ Cylinders (Design Feature)	Design feature requirements are included in SARUP TSR 2.2.4.1. Existing SR 2.1.4.2.2 that requires cylinder inspections prior to filling or heating is not included in SARUP TSR 2.2.4.1. Instead, a statement was added to the Basis that required cylinders containing liquid UF ₆ to meet the ANSI N14.1 requirements described in SAR Chapter 1, Appendix A. This addition to the Basis is more accurate and broader in scope. Cylinder design requirements are described in SARUP Section $3.8.6.1$.
2.1.4.3	UF ₆ Cylinder Pigtails (Design Feature)	This requirement is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this TSR is not included as a SARUP TSR LCO or design feature. The requirement for initial pigtail inspections is addressed in SARUP Sections 4.3.2.2.10 and 4.3.2.2.11, as an administrative control. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Pigtail design requirements are included in SARUP Section 3.8.5.4.

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Table 2. '	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.1.4.4	X-342 Condensate Sump and Oil Interceptor (Design Feature)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO or Design Feature.
2.1.4.5	Autoclave Shell (Design Feature)	The pressure test requirements for the autoclave shell are addressed under SARUP TSR 2.2.3.1-2. Other than this test, this existing TSR requirement represents a passive design feature. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a DF in the TSR if there was no accompanying surveillance requirement). Therefore, this existing design feature was not included in the SARUP TSRs. The National Board Inspection Code inspection covered by the existing TSR continues to be required under the SAR Chapter 1, Appendix A.
2.1.4.6	Overhead Crane Capacity (Design Feature)	The requirement to test cranes that carry liquid UF ₆ cylinders at 100% rated load is included in SARUP TSR 2.2.4.2. Other than this test, this existing TSR requirement represents a passive design feature. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a design feature in the SARUP TSRs if there was no accompanying surveillance requirement). Therefore, this existing design feature was not included as a "stand-alone" design feature in the SARUP TSRs. These cranes are described in SARUP Section 3.8.6.2.
2.3	Specific TSRs for X-330 and X-333 Cascade Facilities	Addressed in SARUP TSR Section 2.1.
2.2.1	X-330/X-333 Cascade Operational Modes	Addressed in SARUP TSR Section 2.1.1.

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.2.1	Coolant Pressures (Safety Limit)	SARUP Section 4.3.2.1.6 analyzed the accident addressed by this TSR. If left unmitigated, this event does not exceed offsite EGs. Therefore, the coolant system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).
2.2.2.2	Cascade Pressures (Safety Limit)	SARUP Section 4.3.2.1 analyzed cascade facility accidents. In no scenario was cascade pressure determined to be a control necessary to prevent an EBE which could exceed the offsite EGs. Therefore, the cascade system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).
2.2.3.1	Coolant High Pressure Relief System	SARUP Section 4.3.2.1.6 analyzed the accident addressed by this TSR. The coolant high pressure relief system is not identified as an essential control for this accident. Additionally, this system (a rupture disk) is not an active SSC. For these reasons, this system does not satisfy the SARUP TSR LCO selection criteria. This system is described in SARUP Section 3.8.3.4.
2.2.3.2	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.1.3.3.
2.2.3.3	CADP UF ₆ Smoke Detection System	LCO and SRs are addressed in SARUP TSR Section 2.1.3.4.

Table 2. "Map" Between Existing PORTS TSRs and SARUP TSRs

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.3.4	High Pressure Fire Water System	 LCO and SRs are addressed in SARUP TSRs 2.1.3.5 (Sprinklers), 2.4.3.1 (Fire Water Pumps), and 2.4.3.2 (Fire Water Storage Tanks). SARUP TSR SRs were revised from the existing TSR SRs. SRs were added from the existing TSRs were deleted as follows: (a) The annual verification of supervisory alarms (USEC-02 TSR 2.2.3.4.7) was replaced with the monthly verification of control and sectionalizing valve alignment (SARUP TSR 2.1.3.5-1) because the monthly check is considered more reliable than the annual check of the supervisory alarm system. (b) The annual automatic start test of the electric high pressure fire water pumps was deleted and replaced with a monthly requirement to manually start the high pressure fire water pumps locally and from the X-300. The automatic start feature does not exist for diesel fire pumps and this pump feature is not relied upon in the accident analysis. Furthermore, the addition of a monthly start test from the X-300 building provides added assurance that if the fire water storage tank level falls to the point where fire pumps are needed, a PCF operator action can start the operable pumps. (c) A SR was added to verify on a monthly basis that the water supply tanks for the pumps contain sufficient inventory.
2.2.3.5	Coolant Removal	Explosive concentration limits and other related operational restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.

Table 2. "	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.3.6	Cell Treatment Monitoring	Explosive concentration limits and other operational restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.2.3.7	Cell Inverse Recycle Treatment	Explosive concentration limits and other related operational restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.2.3.8	Seal Exhaust Station Enrichment	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.2.3.9	Evacuation Booster Station (EBS) Enrichment	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.

Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs	
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.3.10	Crane Movement of Cascade Equipment	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.1.8. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.2.3.11	Evacuation Booster Station Oxidant Limit	Explosive concentration limits and other operational restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.2.3.12	UF ₆ Plugs	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO.
2.2.3.13	Cascade Pressure Limitations	SARUP Section 4.3.2.1 analyzed cascade facility accidents. In no scenario was cascade pressure determined to be an essential control or an operating restriction that meets any of the SARUP TSR LCO selection criteria. Therefore, the cascade system pressure requirements were not included as a SARUP TSR LCO.
2.2.3.14	Cascade DC Control Power	LCO and SRs are addressed in SARUP TSR Section 2.1.3.1.
2.2.3.15	Moderation Control	LCO and SRs are addressed in SARUP TSR Section 2.1.3.6.
2.2.3.16	Removed Equipment with Deposits	LCO and SRs are addressed in SARUP TSR Section 2.1.3.7.

Table 2. "Map" Between Existin	PORTS TSRs and SARUP TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.2.4.1	Seal Exhaust Pump Overflows (Design Feature)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current T3R 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO or Design Feature.
2.3	Specific TSRs for X-333 Freezer Sublimers	Not included in SARUP TSRs. See below.
2.3.1	Freezer Sublimer Operational Modes	As discussed below, there were no controls specifically involving the freezer sublimers that satisfied the SARUP TSR LCO selection criteria. Therefore, these operating modes were not included in the SARUP TSRs.
2.3.2.1	UF ₆ Weight Limit for Freezer Sublimers (Safety Limit)	As discussed in the hazard analysis for the "Rupture of F/S Vessel" event, the failure of the F/S vessel is unlikely given the multiple failures and operator errors required to take place. However, even if the vessel did fail, the analysis concludes that the consequences would be only local and would be minimized by the low pressures associated with the "A" Line when in the sublime mode. These consequences would not significantly impact workers' ability to "see and flee." Consequently, it is not a control necessary to prevent an EBE which could exceed the offsite EGs. Therefore, these requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (Reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.3.3.1	Freezer/Sublimer UF ₆ High-High Weight Trip System	As discussed in the hazard analysis for the "Rupture of F/S Vessel" event, the failure of the F/S vessel is unlikely given the multiple failures and operator errors required to take place. However, even if the vessel did fail, the analysis concludes that the consequences would be only local and would be minimized by the low pressures associated with the "A" Line when in the sublime mode. These consequences would not significantly impact workers' ability to "see and flee." This system was not identified as an essential control in the SARUP analysis, does not satisfy the SARUP TSR LCO selection criteria, and was not included as a SARUP TSR LCO. This system, including weight limits, is described in SARUP Section 3.8.3.5.
2.3.5.	Assay Limitations	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.3.3.3	Freezer/Sublimer Venting	This TSR is an administrative control and not an active SSC. TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this control does not satisfy any SARUP TSR selection criteria and is not included as a SARUP TSR LCO. This control is identified in SARUP Section 3.8.3.4.
2.4	Specific TSRs for X-330 and X-333 Cold Recovery	Not included in SARUP TSRs. See below.
2.4.1	Cold Recovery Operational Modes	As discussed below, there were no controls specifically involving the cold recovery system that satisfied the SARUP TSR LCO selection criteria. Therefore, these operating modes were not considered necessary for the SARUP TSRs.

Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.4.3.1	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.1.3.3.
2.4.3.2	Cold Trap Pressure Relief System	As discussed in SARUP Section 4.2.6.4.4.4, the primary administrative controls identified for the cold recovery process are to limit operating pressures to below atmospheric pressure. These controls minimize any release of UF ₆ should a failure in the primary system occur. Only two initiating events involving the cold recovery system potentially exceeded the PSOA threshold, criticality and evacuation (refer to SARUP Table 4.2- 11). The criticality event is not applicable to this TSR. The evacuation event was analyzed in SARUP Section 4.3.2.1.5. The conclusion for the cold recovery system was that even if the system ruptured only local effects would result (but because of the evacuation, no workers would be in the area). No essential controls were identified for cold recovery in this SARUP scenario. Therefore, this system does not satisfy the SARUP TSR LCO selection criteria and was not included as a SARUP TSR LCO.
2.4.3.3	Cold Recovery Enrichment	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.4.3.4	X-333 Wet Air Evacuation Enrichment	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.4.3.5	Reaction Products	Explosive concentration limits and operating restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.5	Specific TSRs for X-326 ERP, X-333 LAW, and X-330 Tails Withdrawal Stations	Addressed in SARUP TSR Section 2.3.
2.5.1	Withdrawal Station Operating Modes	Addressed in SARUP TSR Section 2.3.1.
2.5.2.1	Solant Pressure (Safety Limits)	As described in SARUP Table 4.2-11, the event "Coolant Tube Rupture into Primary System" (for the withdrawal facilities) does not have consequences that exceeded the PSOA threshold. Consequently, these limits are not controls necessary to prevent an EBE which could exceed the offsite EGs. Therefore, these requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off- site EGs were considered for establishing a Safety Limit or Limiting Control Setting).
2.5.3.1	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.3.3.3.

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.5.3.2	Coolant High Pressure Relief System	As described in SARUP Table 4.2-11, the event "Coolant Tube Rupture into Primary System" (for the withdrawal facilities) does not have consequences that exceeded the PSOA threshold. Additionally, this system (a rupture disk) is not an active SSC. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. For these reasons, the coolant high pressure relief system does not satisfy the SARUP TSR LCO selection criteria. This system and operating restrictions are described in SARUP Section 3.8.3.4.
2.5.3.3	UF ₆ Smoke Detectors	LCO and SRs addressed in SARUP TSR Section 2.3.3.6.
2.5.3.4	Pigtail Line Isolation System	LCO and SRs addressed in SARUP TSR Section 2.3.3.1.
2.5.3.5	Assay Monitoring	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.5.3.6	Withdrawal Accumulator Enrichment	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.5.3.7	UF ₆ Cylinder Enrichment	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.5.3.8	UF ₆ Cylinder Cart Movement	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.11. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.5.3.9	Liquid UF ₆ Cylinder Movement	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.5.3.10	Liquid UF ₆ Handling Cranes	The LCO requirements are addressed in SARUP TSR 2.3.4.2 (Design Feature). This SARUP TSR and SARUP TSR 1.6.3.1, require this system to be operable prior to lifting any liquid UF ₆ cylinders. This system does not meet the SARUP TSR selection criteria for an LCO. SRs in the existing TSRs that require performance of OSHA inspections (SRs 2.5.3.10.3 and 2.5.3.10.4) were not included as SARUP TSR surveillances because they are not credited in the SARUP analyses. Rather, the Basis statement in the SARUP TSR requires that the cranes must meet the applicable codes and standards described in SAR Chapter 1, Appendix A.

Table 2. "Map" Between Existing PORTS TSRs and SARUP TSRs

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Table 2. "Map" Between Existing PO	RTS TSRs and SARUP TSRs
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USEC-02 T3R Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.5.3.11	Cylinder Fill Weights	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. The cylinder is only a concern if it is heated following overfilling, which is controlled by cylinder category. This control is identified in SARUP Section 4.3.2.2.2. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO. Cylinder void volume requirements are included in the SARUP TSR 1.2.7 and in the Basis statements for SARUP TSRs 2.2.2.1 and 2.2.3.8.
2.5.3.12	UF ₆ Cylinder Crane Movement	This TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO. This control is identified in SARUP Section 4.3.2.2.15. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Administrative controls do not normally meet the SARUP TSR selection criteria for an LCO.
2.5.3.13	UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSR LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO.
2.5.4.1	UF ₆ Cylinder Lifting Fixtures (Design Feature)	These design feature requirements and SRs are addressed in SARUP TSR Section 2.3.4.2.
2.5.4.2	UF ₆ Cylinders (Design Feature)	Design feature requirements are included in SARUP TSR 2.3.4.1. Existing SR 2.5.4.2.2 that requires cylinder inspections prior to filling or heating is not included in SARUP TSR 2.3.4.1. Instead, a statement was added to the Basis that requires cylinders containing liquid UF ₆ to meet the ANSI N14.1 requirements described in SAR Chapter 1, Appendix A. This addition to the Basis is more accurate and broader in scope. Cylinder design requirements are described in SARUP Section $3.8.6.1$.

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.5.4.3	UF ₆ Cylinder Pigtails (Design Feature)	This requirement is a passive design feature with no ongoing surveillance requirement. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a DF in the TSR if there was no accompanying surveillance requirement). Therefore, this TSR is not included as a SARUP TSR LCO or design feature. The requirement for initial pigtail inspections is addressed in SARUP Sections 4.3.2.2.10 and 4.3.2.2.11, as an administrative control. SARUP TSR 3.9.1.b (revised from the existing TSR 3.9.1.b) requires implementation of SAR Chapter 4 administrative controls through written procedures. Pigtail design requirements are described in SARUP Section 3.8.5.4.
2.5.4.4	Scale Pit Raschig Rings (Design Feature)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.5.4.5	Overhead Crane Capacity	The requirement to test cranes that carry liquid UF ₆ cylinders at 100% rated load is included in SARUP TSR 2.3.4.2. Other than this test, this existing TSR is a passive design feature. Passive design features were only included in the TSRs if a specific surveillance requirement was applicable (i.e., it was not considered appropriate to include a DF in the TSR if there was no accompanying surveillance requirement). Therefore, this existing design feature was not included as a "stand-alone" design feature in the SARUP TSRs.
2.6	Specific TSRs for X-705 Facility	Not included in SARUP TSRs. See below.

Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.6.1	X-705 Operational Modes	As discussed below, the were no controls specifically involving X-705 (except CAAS) that satisfied the TSR LCO selection criteria. Therefore, these operating modes were not considered necessary for the SARUP TSRs.
2.6.2.1	Calciner Internal Temperature (Safety Limit)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.2.2	Microfiltration Effluent (Safety Limit)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.2.3	Microfiltration Effluent Bag Filter Pressure Differential (Safety Limit)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlhed by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.6.3.1	Calciner High High Temperature Shutoff System	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.2	Calciner Discharge Collector Probe Detection	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.3	Calciner Can Level Probe Detection	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.4	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.4.3.3.

Table 2. "	'Map" Between	Existing	PORTS	TSRs	and	SARUP T	SRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.6.3.5	Microfiltration pH Shutdown System	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.6	Microfiltration Permeate Effluent Bag Filter System	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.7	Calciner Tube Rotation Interlock	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.8	Truck Alley Oil and Grease Removal Unit (OGRU)	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.

Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.6.3.9	Microfiltration Effluent Filter Press Operation	LCOs are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR LCO.
2.6.3.10	Moderation Control	LCO and SRs addressed in SARUP TSRs, Section 2.4.3.4.
2.6.4.1	Handtable Overflows (Design Feature)	LCOs and Design Features are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR Design Feature.
2.6.4.2	Air Gaps (Design Feature)	LCOs and Design Features are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR Design Feature.

Table 2.	"Map"	Between	Existing	PORTS	TSRs a	and SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.6.4.3	Diked Areas (Design Feature)	LCOs and Design Features are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR Design Feature.
2.6.4.4	Tank Covers (Design Feature)	LCOs and Design Features are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specific Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR Design Feature.
2.7	Specific TSRs for X-326 Cascade Facility	Addressed in SARUP TSR Section 2.1.
2.7.1	X-326 Cascade Operational Modes	Addressed in SARUP TSR Section 2.1.1.
2.7.2.1	Cell Coolant Pressure (Safety Limit)	SARUP Section 4.3.2.1.6 analyzed the accident addressed by this TSR. If left unmitigated, this event does not exceed offsite EGs. Therefore, the coolant system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.7.2.2	Cascade Pressure (Safety Limit)	SARUP Section 4.3.2.1 analyzed cascade facility accidents. In no scenario was cascade pressure determined to be a control necessary to prevent an EBE which could exceed the offsite EGs. Therefore, the cascade system pressure requirements are not identified as essential controls and do not satisfy the criteria for a SARUP TSR safety limit (reference SARUP Section 4.3.1.1.4, fourth paragraph, last sentence: Only controls selected to prevent an EBE, which could exceed the off-site EGs were considered for establishing a Safety Limit or Limiting Control Setting).
2.7.3.1	Coolant High Pressure Relief System	SARUP Section 4.3.2.1.6 analyzed the accident addressed by this TSR. The coolant high pressure relief system is not identified as an essential control for this accident. Additionally, this system (a rupture disk) is not an active SSC. For these reasons, this system does not satisfy the SARUP TSR LCO selection criteria. This system is described in SARUP Section 3.8.3.4.
2.7.3.2	Criticality Accident Alarm System	LCO and SRs are addressed in SARUP TSR Section 2.1.3.3.

Table 2. "Map" Between Existing J	PORTS TSRs and SARUP TSRs
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Table 2.	"Map"	Between	Existing	PORTS	TSRs	and	SARUP	TSRs
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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.7.3.3	High Pressure Fire Water System	 LCO and SRs are addressed in SARUP TSRs 2.1.3.5 (Sprinklers), 2.4.3.1 (Fire Water Pumps), and 2.4.3.2 (Fire Water Storage Tanks). SARUP TSR SRs were revised from the existing TSR SRs. SRs were added from the existing TSRs style several SRs were deleted as follows: (a) The annual verification of supervisory alarms (USEC-02 TSR 2.7.3.3.7) was replaced with the monthly verification of control and sectionalizing valve alignment (SARUP TSR 2.1.3.5-1) because the monthly check is considered more reliable than the annual check of the supervisory alarm system. (b) The annual automatic start test of the electric high pressure fire wr pumps was deleted and replaced with a monthly requirement to manually start the high pressure fire water pumps locally and from the X-300. The automatic start feature does not exist for diesel fire pumps and this pump feature is not relied upon in the accident analysis. Furthermore, the addition of a monthly start test from the X-300 building provides added assurance that if the fire water storage tank level falls to the point where fire pumps are needed, a PCF operator action can start the operable pumps. (c) A SR was added to verify on a monthly basis that the water supply tanks for the pumps contain sufficient inventory.
2.7.3.4	Coolant Removal	Explosive concentration limits and operating restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.7.3.5	Cell Treatment Monitoring	Explosive concentration limits and operating restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.7.3.6	Cell Inverse Recycle Treatment	Explosive concentration limits and operating restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.7.3.7	Oxidant Control	Explosive concentration limits and operating restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SS(The SARUP TSR selection criteria (SARUP Section 4.2.3,cm 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.7.3.8	Freon Degrader	Explosive concentration limits and operating restrictions for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive mate-ials. Therefore, this TSR was not included as a SARUP TSR LCO.

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USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.7.3.9	Freon Degrader Fluorine Flow	Explosive concentration limits for preventing coolant/oxidant exothermic reactions are administrative controls and not active SSCs. The SARUP TSR selection criteria (SARUP Section 4.2.3, item 3) requires an LCO for active SSCs that prevent or mitigate an event that could result in life threatening or serious health effects to onsite personnel from the release of radioactive materials. Therefore, this TSR was not included as a SARUP TSR LCO.
2.7.3.10	Side Feed Cylinders	As discussed in SARUP Section 3.8.6, small cylinders (those with capacities of less than or equal to 500 lb) do not have the capacity to cause significant offsite effects in the event of a release of UF_6 from the cylinder. The cylinders addressed by this existing TSR have capacities of less than 500 lb. Furthermore, this TSR is an administrative control and does not meet the SARUP TSR LCO selection criteria. For these reasons, this TSR is not included as a SARUP TSR LCO.
2.7.3.11	UF ₆ Plugs	This TSR is an administrative control that was not identified as an essential control in the SARUP analyses and does not meet the SARUP TSP. LCO selection criteria. Therefore, this TSR was not included as a SARUP TSR LCO.
2.7.3.12	Cascade Pressure Limitation	SARUP Section 4.3.2.1 analyzed cascade facility accidents. In no scenario was cascade pressure determined to be an essential control or an operating restriction that meets any of the SARUP TSR LCO selection criteria. Therefore, the cascade system pressure requirements were not included as a SARUP TSR LCO.
2.7.3.13	Cascade DC Control Power	LCO and SRs are addressed in SARUP TSR Section 2.1.3.1.
2.7.3.14	Moderation Control	LCO and SRs are addressed in SARUP TSR Section 2.1.3.6.
2.7.3.15	Removed Equipment with Deposits	J CO and SRs are addressed in SARUP TSR Section 2.1.3.7.

USEC-02 TSR Section	Subject	Location of TSR in SARUP or Basis for Not Including System/Control in SARUP TSRs
2.7.4.1	Seal Exhaust Pump Overflows (Design Feature)	LCOs and Design Features are provided in the SARUP TSRs for those fissile material operations where double contingency could not be met (consistent with current TSR 3.11.5). Where double contingency exists, respective NCS controls are described in the specif.: Nuclear Criticality Safety Approval (NCSA) and not in individual TSRs. The NCSAs are controlled by TSR 3.11. This is consistent with the SARUP TSR selection criteria (SARUP Section 4.2.3, item 4). For these reasons, this TSR was not included as a SARUP TSR Design Feature.
2.8	Specific TSRs for X-710 Laboratory	Not included in SARUP TSRs. See below.
2.8.1	X-710 Laboratory Operational Modes	There were no controls specifically involving X-710 (except CAAS) that satisfied the ISR LCO selection criteria. Therefore, these operating modes were not considered necessary for the SARUP TSRs.
2.8.3.1	Criticality Accident Alarm System	LCO and SRs addressed in SARUP TSR Section 2.4.3.3.
3.0	Administrative Controls	Addressed in SARUP TSR Section 3.0. Cold recovery was deleted from current TSR Table 3.2.2-1 because cold recovery is not addressed in the SARUP TSRs.