



United States
Enrichment Corporation

GEORGE P. RIFAKES
EXECUTIVE VICE PRESIDENT, OPERATIONS

70-7001
United States
Enrichment Corporation

2 Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817

Tel: (301) 564-3200
Fax: (301) 564-3201

Dir: (301) 564-3301
Fax: (301) 564-3208

February 25, 1997

Dr. Carl J. Paperiello
Director, Office of Nuclear Material
Safety and Safeguards
Attention: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

SERIAL: GDP 97-0025

Paducah Gaseous Diffusion Plant (PGDP)

Docket No. 70-7001

Resubmittal of Certificate Amendment Request-Feed Facilities Crane Design Features

Dear Dr. Paperiello:

In accordance with 10 CFR 76.45, the United States Enrichment Corporation (USEC) hereby submits a request for amendment to the Certificate of Compliance for the Paducah Gaseous Diffusion Plant (GDP). This certificate amendment revises Technical Safety Requirement (TSR) 2.2.5.2, Crane Design, to correct a discrepancy between the actual plant configuration and the design features specified in the TSR.

USEC has identified a discrepancy between our actual plant configuration and TSR 2.2.5.2. This TSR Design Feature credits the Feed Facility Cranes with having two DC rectified shoe brakes. However, two facility cranes utilize a variety of brake designs, including shoe brakes, eddy current brakes and ratchet and pawl mechanisms. The C-337A North Crane has one DC rectified and one ratchet and pawl brake. The C-333A West Crane has one DC rectified and one eddy current brake. Each crane has two independent brake systems that meet the requirements of ANSI B30.2.0-1967.

The two cranes affected by this TSR change are required to lift solid cylinders into autoclaves to provide feed material for PGDP. The cranes are currently operating in accordance with enforcement discretion granted by the Department of Energy. Should this TSR change not be approved, or enforcement discretion not be extended by NRC prior to transition of regulation on March 3, 1997, PGDP will be required to declare the cranes inoperable - unnecessarily shutting down the feed facilities and forcing PGDP to place the cascade into recycle.

9703060075 970225
PDR ADOCK 07007001
C PDR



Offices in Paducah, Kentucky; Portsmouth, Ohio; Washington, DC

NFOH/1

Dr. Carl J. Paperiello
February 25, 1997
GDP 97-0025 Page 2

Operation of PGDP in recycle is an undesirable condition in that it could increase the likelihood of criticality over normal operations. Issuance of the TSR change or enforcement discretion before March 3 will minimize potential safety consequences and operational risks associated with placing PGDP into recycle to comply with the TSR. As time is not available to allow for the publishing of a notice in the Federal Register allowing 15 days for prior public comment before March 3, USEC requests that the TSR change be treated as exigent.

This condition was discovered on February 12. NRC and DOE were promptly notified of the discrepancy and DOE verbally authorized enforcement discretion at 10:07 pm Central on 2/12/97. Documentation was prepared and submitted to DOE on February 13 and then forwarded to NRC in this letter.

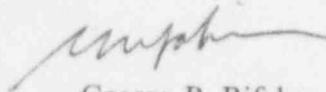
Should a TSR change be impossible in the time frame available, USEC requests enforcement discretion from PGDP TSR 2.2.5.2. The justification for this discretion request is contained in Enclosure 1.

Enclosure 2 to this letter provides a detailed description and justification for the proposed change. Enclosure 3 is a copy of the revised TSR and SAR pages associated with this change. Enclosure 4 contains the basis for USEC's determination that the proposed change associated with this certificate amendment request is not significant. The amendment should become effective upon issuance.

Please note that the information contained in this letter was previously submitted by USEC letter GDP 97-0018 dated February 14, 1997. It was discovered after the letter was issued that the notary public's commission had expired prior to the date the Oath and Affirmation was executed. Therefore, this information is being resubmitted by this letter with a new Oath and Affirmation. There is no change to the technical content of the submitted information.

Any questions related to this subject should be directed to Mark Smith at (301) 564-3244.

Sincerely,



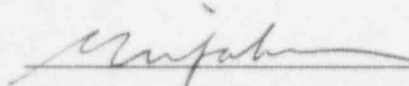
George P. Rifakes
Executive Vice President

Enclosures: As Stated

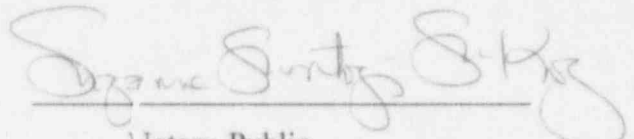
cc: NRC Region III Office
NRC Resident Inspector - PCDP
NRC Resident Inspector - PORTS
Mr. Randall M. DeVault (DOE)

OATH AND AFFIRMATION

I, George P. Rifakes, swear and affirm that I am Executive Vice President, Operations, of the United States Enrichment Corporation (USEC), that I am authorized by USEC to sign and file with the Nuclear Regulatory Commission this Certificate Amendment Request for the Paducah Gaseous Diffusion Plant, that I am familiar with the contents thereof, and that the statements made and matters set forth therein are true and correct to the best of my knowledge, information, and belief.


George P. Rifakes

Subscribed to before me on this 25th day of Feb., 1997.


Notary Public
SUZANNE MONTOYA MCKOY
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires 9-1-99

Enclosure 1
Justification For Enforcement Discretion

JUSTIFICATION FOR ENFORCEMENT DISCRETION

1. *The TSR that will be violated.*

TSR 2.2.5.2 Crane Design, DF 2.2.5.2: Two DC rectified brakes.

2. *The circumstances surrounding the situation, including root causes, the need for prompt action and identification of any relevant historical events.*

There are two feed facility cranes that do not have two DC rectified hoist brakes, as described in the design feature. However, each has at least two brakes with at least one of them being DC rectified. The C-337A North Crane has one DC rectified and one ratchet and pawl brake. The C-333A West Crane has one DC rectified and one eddy current brake.

During the course of creating and reviewing the TSRs, we failed to identify the actual as-built condition in the field and ensure the TSR incorporated the approved design. The field configuration is the DOE approved design, which meets the requirements of ANSI B30.2.0-1967. The as-found condition is due to less than adequate review during the Application Process.

Prompt approval of our request is needed to continue feeding cylinders. Without approval of our request, the plant would have to reduce power and take further actions to place the cascade in the recycle mode.

There are no relevant historical events.

3. *The safety basis for the request, including an evaluation of the safety significance and potential consequences of the proposed course of action, including any qualitative risk assessment.*

Allowing continued operation under the TSR with the conflict between the Design Feature description and actual configuration will not reduce the margin of safety. The C-337A North Crane still has two redundant brake systems. The ratchet and pawl brake is equivalent to the DC rectified brake.

The C-333A West Crane has two brake systems. The eddy current brake does not provide a stopping capability but will provide sufficient control to prevent rupturing a cylinder. The eddy current brake is a back-up to the shoe brake. The eddy current brake meets the ANSI specifications. It is part of the approved design. The safety significance is minor in that two independent brake systems are used. These systems are tested in accordance with the TSR Surveillance Requirements and, therefore, have been verified to operate in accordance with design function expectations. The configuration is the DOE approved design and it meets the ANSI standard requirements.

The consequences of the proposed course of action are insignificant. Brake protection is comparable to that described in the Design Feature. The consequences are the same as the DOE approved design.

There is no significant increase in risk associated with our request. The DOE approved design is maintained. The condition is due to an error in the TSR creation. The error resulted in a requirement beyond that required by the FSAR and SAR. Therefore, the TSR change we are requesting is administrative in nature.

4. *The basis for the certificate holder's conclusion that the noncompliance will not be of potential detriment to the public health and safety and that neither an USQ nor a determination of significance is involved.*

The original and approved crane brake design is not being changed. The original design was found acceptable to public health and safety by DOE. The noncompliance will be only administrative in nature. There will be no reduction in the protection afforded to the public.

There is no increase in the dose or exposure to plant personnel or members of the off-site public as a result of our request.

As a result of this administrative change and noncompliance: There is no increase in exposure to hazardous or toxic chemicals. There is no increase in radiological or chemical releases. There are no new or unusual sources of hazardous substances, waste, or any mixed waste that could be generated. There are also no new or unusual sources of radioactive waste that could exceed specified limits. Finally, there is no significant decrease in the effectiveness of the Emergency Plan. We have reviewed the potential for an unreviewed safety question and have concluded that one does not exist.

It is important to note that this condition is temporary and nonrecurring. Our period of noncompliance will only exist until the NRC approves and issues a TSR change.

As part of the TSR revision process, we have performed a Significance Determination which is provided in Enclosure 4.

5. *The basis of the conclusion that the noncompliance will not involve adverse consequences to the environment.*

Operations will continue in accordance with the approved plant design. No new consequences will be introduced during this period of DOE noncompliance. There are no new wastes releases to be introduced above that already accounted for in the original design.

6. *Any proposed compensatory measures.*

There is no need for compensatory actions. The brakes have been tested in accordance with the TSR Surveillance Requirements. They have also been inspected by site personnel and an outside third party. The brakes are in good condition.

7. *The justification for the duration of noncompliance.*

The duration of the noncompliance will last until the TSR change request is approved and issued by the NRC. No new or additional risk is being introduced by this period of noncompliance. The consequences of any current, approved accident will not be increased or changed since no physical change has or will be made.

8. *A statement that the request has been approved by the Plant Operations Review Committee (PORC).*

The information used in this request for Enforcement Discretion was reviewed and recommended for approval by our plant's PORC on February 13, 1997.

9. *The request must address how the criteria for requesting enforcement discretion is met.*

This request for enforcement discretion is intended to avoid undesirable transients as a result of forcing compliance with the certificate condition and, thus, minimize potential safety consequences and operational risks. Without the enforcement discretion, the plant would be forced to enter the recycle mode. This transient would introduce the additional risk associated with abnormal operating conditions. The potential for exceeding plant enrichment levels is increased. Therefore, this enforcement discretion would prevent the introduction of additional risk.

10. *Marked-up TSR pages showing the proposed TSR changes should be attached.*

The proposed TSR change is attached as an additional package. This proposal was processed, reviewed and approved in accordance with our approved plant procedures.

11. *Statement that prior adoption of approved line-item improvements to the Tech Specs would have obviated the need for enforcement discretion.*

N/A

12. *Any other information the NRC staff deems necessary before making a decision to exercise enforcement discretion.*

No other information has been requested by the Staff at this time.

**United States Enrichment Corporation (USEC)
Proposed Certificate Amendment Request
Revised Description for TSR DF 2.2.5.2
"Crane Design"
Detailed Description of Change**

Technical Safety Requirement (TSR) Design Feature 2.2.5.2 credits the Feed Facility Cranes with the following design feature:

"Two DC rectified shoe brakes"

USEC proposes to change the description of this design feature to read:

"Two hoist brakes."

The TSR description is correct for the C-337-A North crane. However, other cranes in the feed facilities (both C-333-A and C-337-A) utilize a variety of brake designs, including shoe brakes, eddy current brakes, and ratchet and pawl mechanisms. The safety function for any type of brake (i.e., to stop and hold or control the load) is the same and is unaffected by the design of the brake. Each brake credited for safety in SAR Section 4.3 is acceptable, regardless of its design, as long as it meets the load rating requirements of ANSI B30.2-1967. Therefore, the TSR description is proposed to be changed to a more appropriate description that is applicable to each of the brake mechanisms used on the cranes in the feed facilities that are credited for safety.

**Proposed Certificate Amendment Request
Paducah Gaseous Diffusion Plant
GDP97-0025
Removal/Insertion Instructions**

Remove Page	Insert Page
Volume 3	
Section 3.2	Section 3.2
Page 3.2-10a	3.2-10a
Section 3.6	Section 3.6
Page 3.6-12a	Page 3.6-12a
Section 3.7	Section 3.7
Page 3.7-4a and 3.7-5	Page 3.7-4a and 3.7-5
Section 3.15	Section 3.15
Page 3.15-1 and 3.15-7	Page 3.15-1 and 3.15-7
Volume 4	
Section 2.2	Section 2.2
Page 2.2-31	Page 2.2-31

PROPOSED

SAR-PGDP

February 14, 1997

RAC 96C224(R0)/96C151(R0)

on the feed line, pressure element PE-507, pressure transmitter PT-507, pressure switches PSH-507 and PSL-507, steam supply isolation valves PV-520, XV-524, and thermovent line block valve XV-565, and associated relays, solenoids, and switches. The pressure between the rupture discs is maintained between 9.5 and 19.5 psia.

- The autoclave opening prevention system is used to prevent the opening of an autoclave when the pressure exceeds 1.25 psig and ~~the autoclave~~ gives a visual indication. System components are the pressure elements PE-514 and PE-515, pressure transmitters PT-514 and PT-515, pressure switches PSL-514 and PSL-515, and associated relays and switches.

3.2.6 UF₆ Cylinder Handling

UF₆ feed is delivered to the feed facilities and stored in an interim storage yard until a particular cylinder assay is needed for feed. Cylinders are weighed and checked against fill limits. Each cylinder is inspected externally for any damage prior to storing in the yard or placing in an autoclave for feed. All feed cylinders handled are normally empty or contain solid UF₆ and administrative controls prohibit the handling of liquid UF₆ in these areas except in emergency conditions

3.2.6.1 Cranes

The C-333-A and C-337-A overhead bridge cranes handle only cylinders that are empty or contain solid UF₆. The two cranes in C-333-A and the north crane in C-337-A are 20-ton single-hook, pendant-controlled cranes. The C-333-A west crane hoist has a direct current (dc) rectified shoe brake that is spring actuated in the event of a power loss and an eddy current brake. The C-337-A south crane hoist utilizes two shoe brakes and an eddy current brake. The C-337-A north crane hoist utilizes a shoe brake with a ratchet and pawl backup in case of shoe brake failure. A geared up/down limit switch is connected to the cable drum to prevent exceeding limits for lowering or hoisting the load. When activated, it will stop the motor and activate the shoe brake. To prevent the lifting hook from colliding with the upper crane structure, each crane uses a swivel bar attached to a wire hanging from a paddle-type limit switch on the crane trolley. Like the paddle-type limit switches described above, when the lifting hook comes in contact with the swivel bar, the tension in the wire is released and the crane hoist motor is de-energized. Each of these cranes uses an H-frame-type sling to lift the cylinders with its single hook.

The south crane at C-337-A is a double-block crane equipped with a special lifting beam that is specifically designed for lifting liquid UF₆ filled cylinders. While the crane is not currently used for handling liquid UF₆ filled cylinders, the structural design is similar to the liquid UF₆ handling crane at C-310.

3.2.6.2 Short-Term Storage

Both facilities contain cylinder yards for the short-term storage of both full and empty cylinders. The yards are equipped with saddles that prevent the rolling of cylinders and subsequent damage that could result from improper spacing of cylinders. Storage yards are discussed in Section 3.7.

PROPOSED

SAF-PGDP
RAC 96C224

February 13, 1997

A hydraulic elevator is provided to move UF_6 cylinders between the ground level and the basement level for filling at the transfer scale position. An empty cylinder is placed on a scale cart and moved on the 40,000-lb net lifting capacity elevator car platform and secured by manual rail chocks. The elevator is lowered to the basement level and the scale cart is rolled into position on the transfer scale. After filling, the cylinder is disconnected from the drain manifold, the scale cart air motor is again connected to an air hose, and the cart is moved back on the elevator. Two interlocks prevent moving the scale cart with the pigtail connected. A key on a ring is placed over the pigtail prior to connecting the cylinder. This key must be removed and placed in a switch to unlock it before air can be supplied to the cart drive motor. The pigtail manifold pressure must also be within 3 psi of atmospheric pressure before the switch will operate. The scale cart interlock to prevent scale cart movement is identified as a system required to be included in the TSR.

The elevator is raised to the ground level and the liquid-filled cylinder is removed from the scale cart, using the 20-ton crane, and moved to a storage rack in the cylinder storage yard.

3.6.9.2 Cranes

The Toll and Transfer Facility at C-360 has two identical 20-ton overhead bridge cranes. One crane serves the high bay work area over the autoclaves; the other crane serves the cylinder storage area on the east side of the building. By opening the building crane door, both cranes could enter or exit the building for use if needed. Each bridge crane is equipped with one 20-ton capacity polar trolley each. The pushbutton pendant control and the radio-operated controls can be switched to allow operation of trolleys and hoists individually or simultaneously as needed for lifting liquid UF_6 filled cylinders.

Each crane hoist has one dc rectified shoe brake and one electro-mechanical hydraulic caliber brake that are spring actuated in the event of a power loss. One of the shoe brakes is used as a holding brake, and the other detects brake slip, mechanical discontinuity and overspeed, and acts as an emergency brake should the holding brake fail. A geared up/down limit switch is connected to the cable drum to prevent lowering or hoisting the load too far. When activated, it will stop the motor and activate the brakes. Paddle-type limit switches prevent blocking. The limit switch assembly has a weight that hangs on a wire from the crane trolley. If the lifting block comes in contact with this weight, the tension in the wire is released and the crane hoist motor is deenergized. Mechanical rail stops are located at the end of the bridge and trolley rails to prevent the crane from running off the end of its tracks.

3.6.9.3 Short-Term Storage

A cylinder storage area of approximately 17,366 ft^2 is provided east of C-360. A nominal cylinder space allowance of 5 ft wide and 15 ft long reduces the possibility of cylinder damage during storage operations. Storage spaces are designated as areas for cool-down of cylinders containing liquid UF_6 . Cylinders containing liquid are not to be lifted over the top of other cylinders and are located safe distances from obstructions or protrusions.

Guard rails are positioned at strategic locations to prevent damage by vehicles entering the storage yard. Cylinder saddles for the cylinder yard are fabricated from high energy absorbing metal with shock

PROPOSED

SAR-PGDP
Rev. 3

May 31, 1996

The carts in C-360 are equipped with safety legs under each corner of the platform, which prevents the platform from falling in excess of 2 in. if a wheel or cart axle should fail. This would prevent a cylinder from rolling off the cart and mitigates the possibility of cylinder damage during transport within the facility.

PROPOSED

SAR-PGDP
RAC96 C224

February 13, 1997

Each bridge crane was designed with several safety features. The crane hoist has two brakes. One of the brakes is used as a holding brake, and the other is on a timer which acts within one second as an emergency brake should the holding brake fail. These brakes are spring actuated in the event of a power loss. A geared up/down limit switch is connected to the cable drum for use in lowering or hoisting the load. When activated, it will stop the motor and activate the brakes. This switch will reset automatically once the motor is reversed. Two paddle-type limit switches prevent a collision between the lifting beam and the upper crane structure. Each has a weight that hangs on a wire from the crane trolley. If the lifting beam comes in contact with one of these weights, the tension in the wire is released and the crane hoist motor is de-energized. Once activated, the paddle-type limit switches require a manual reset to resume crane operation. Also, proximity sensors and mechanical rail stops are located at the end of the bridge and trolley rails to prevent the crane from running off the end of its tracks.

The product withdrawal facility crane has been installed with a zone control to prevent the crane from carrying a load into the piping associated with the C-310-A burp station.

The Toll Transfer and Sampling Facility at C-360 has two identical 20-ton overhead bridge cranes. One crane can serve the high-bay work area over the autoclaves; the other crane can serve the cylinder storage area on the east side of the building. By opening the building crane door, both cranes could enter or exit the building for use if needed due to maintenance requiring downtime on either crane. During normal operations, however, the two cranes are not used together to lift the same load. Each bridge crane is equipped with one 20-ton capacity polar trolley. The pushbutton pendant control and the radio-operated controls can be switched to allow operation of trolleys and hoists individually or simultaneously as needed for lifting liquid UF_6 filled cylinders. The east crane is currently out of service and scheduled for replacement.

Each C-360 crane hoist has one dc rectified shoe brake and one electro-mechanical caliber brake that are spring actuated in the event of a power loss. One of the brakes is used as a holding brake, and the other detects brake slippage, mechanical discontinuity and overspeed, and acts within one second as an emergency brake should the holding brake fail. A geared up/down limit switch is connected to the cable drum for use in lowering or hoisting the load. When activated, it will stop the motor and activate the brakes. A paddle-type limit switch prevents a collision between the hook block and the upper crane structure. The limit switch assembly has a weight that hangs on a wire from the crane trolley. If the lifting block comes in contact with this weight, the tension in the wire is released and the crane hoist motor is de-energized. Mechanical rail stops are located at the end of the bridge and trolley rails to prevent the crane from running off the end of its tracks.

The C-333-A and C-337-A overhead bridge cranes handle only cylinders that are empty or contain solid UF_6 . The two cranes in C-333-A and the north crane in C-337-A are 20-ton single-hook, pendant-controlled cranes. The C-333A west crane hoist has a direct current (dc) rectified shoe brake that is spring actuated in the event of a power loss and an eddy current brake. The C-337-A south crane hoist utilizes two shoe brakes and an eddy current brake. The C-337-A north crane hoist utilizes a shoe brake with a ratchet and pawl backup in case of shoe brake failure. A geared up/down limit switch is connected to the cable drum for use in lowering or hoisting the load. When activated, it will stop the motor and activate the shoe brake. To prevent the lifting hook from colliding with the upper crane structure, each crane uses a swivel bar attached to a wire hanging from a paddle-type limit switch on the crane trolley. Like the paddle-type limit switches described above, when the lifting hook comes in

PROPOSED

SAR-PGDP
RAC 96C224

February 13, 1997

Boundary

The system boundaries for the portable CAAS unit include:

1. Gamma detector channel
2. Cluster logic module
3. Cluster housing
4. Associated circuitry
5. Local electric horn
6. Backup battery for the cluster and horn
7. Connecting cable to connect to the building system

3.15.1.1.7 C-333-A and C-337-A Overhead Bridge Cranes

Q Function

The function of these cranes is to safely handle UF_6 cylinders over/near the autoclaves. These cranes handle only cylinders which are empty or contain solid UF_6 .

See Section 3.2.6.1 and 3.7.3.1.2 for a description of this system.

Boundary

The system boundary includes:

1. Crane structure and structural supports, the crane rails, the bridge, the mechanical rail stops at the end of the bridge, the trolley rails, the trolley, the ree . ing, the cable, lifting fixture (C-337A South) and the hooks (C-333A and C-337A North).
2. Hoist brakes
3. Emergency stop button
4. Geared up/down limit switch
5. Swivel bar/paddle-type limit switch
6. Relays for hoist brake control

PROPOSED

SAR-PGDP
RAC 96C224

February 13, 1997

3.15 Q AND AQ STRUCTURES, SYSTEMS AND COMPONENTS

This section contains a listing of the Q and AQ systems and the associated boundary definitions. As stated in Section 2.2.2 of the Quality Assurance Program (QAP), the Q and AQ SSCs described in this section form the basis and identify the SSCs to which the QAP is applied. The information in this section has been developed to be current as of the date of this revision, therefore, SSCs will be treated in accordance with their categorization as designated in this section, regardless of information that may be contained in other sections of the SAR.

An initial determination has been made regarding which systems are required to support the parent system's Q or AQ function(s) (e.g., circuitry to carry an isolation signal to an isolation valve). As discussed in Section 3.16, the support systems (including electrical power, plant air, and control and instrumentation power) will continue to be evaluated, and included in the boundary definitions if appropriate. This section will be revised accordingly as this work is completed. Only those items that perform support functions that have been evaluated and determined to be Q or AQ are designated as such in this section. Where it has been determined that no support functions are necessary to perform the subject function it is noted as such.

The term "fail safe" as used in this section means that the subject system will perform the intended function or allow the intended function to be performed upon entering the faulted condition. The thermovent block valves do not isolate upon receipt of an isolation signal (reference Sections 3.15.1.1.1, 3.15.1.1.2, 3.15.1.4.1 and 3.15.1.4.2). The need for proximity switches (reference Section 3.15.1.4.10) will be evaluated to determine if they are necessary for the crane to perform its intended function. The proximity switches and rail stops (reference Section 3.15.1.3.9) are being evaluated for capacity and ability to perform their intended function. As part of the SAR Upgrade activity, an engineering evaluation will be performed to assess these issues to determine if modifications are necessary to place the plant in a fail safe configuration. If modifications are necessary, they will be initiated.

There are areas of process buildings where the CAAS horns (see Sections 3.15.1.1.6, 3.15.1.2.5, 3.15.1.3.7, 3.15.1.4.9, 3.15.1.5.1, 3.15.1.6.1, 3.15.1.7.1, and 3.15.1.8.1) are not audible due to high ambient noise levels. Modifications will be initiated to ensure that the CAAS alarm horns are capable of being heard throughout the affected areas of the process buildings.

3.15.1 Q Boundary Definitions

3.15.1.1 Feed Facilities

Q systems in the C-333-A and C-337-A Feed Facilities are listed.

SECTION 2.2 SPECIFIC TSRS FOR UF₆ FEED FACILITIES (C-333-A AND C-337-A)

2.2.5.1 UF₆ CYLINDER SLINGS AND LIFTING FIXTURES

DF 2.2.5.1: UF₆ cylinder slings and lifting fixtures are designed with a structural factor of safety of 5 to 1 based upon the material's ultimate tensile strength.

SURVEILLANCE REQUIREMENTS:

Surveillance	Frequency
SR 2.2.5.1-1 Visual inspection for defects	Prior to first use of shift
SR 2.2.5.1-2 Hands-on Inspection (no disassembly required)	Monthly
SR 2.2.5.1-3 Load test at a minimum of 100% of rated capacity.	Biennially

BASIS:

Slings, H-frames, etc used to handle liquid filled UF₆ cylinders are credited for prevention of the liquid cylinder drop and rupture accident scenario. Visual inspection will detect obvious defects which could cause the cylinder drop accident scenario. Surveillance requirements 1 and 2 are performed to meet the requirements of OSHA 1910.184. [SAR Section 4.3.1.1.2]

2.2.5.2 CRANE DESIGN

DF 2.2.5.2: The following aspects of the feed facility cranes are credited for safety:

- 20-ton overhead bridge crane
- Two hoist brakes
- Geared up/down limit switch on cable drum
- Paddle-type limit switch to prevent blocking
- Crane travel limit switch protecting C-337-A Jet Station

**United States Enrichment Corporation (USEC)
Proposed Certificate Amendment Request
Revised Description for TSR DF 2.2.5.2
"Crane Design"
Significance Determination**

The United States Enrichment Corporation (USEC) has reviewed the proposed changes associated with this certificate amendment request and provides the following Significance Determination for consideration.

1. No Overall Decrease in the Effectiveness of the Plant's Safety, Safeguards or Security Programs

The proposed TSR change does not decrease the effectiveness of the plant's safety, safeguards or security program since it is implementing the existing SAR accident analysis.

2. No Significant Change to Any Conditions to the Certificate of Compliance

Enclosure 1 provides the basis for concluding that the changes to the TSR are not significant changes. Thus, the proposed changes have no significant impact on any of the Conditions to the Certificate of Compliance.

3. No Significant Change to Any Condition of the Approved Compliance Plan

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities, which is not addressed in the Compliance Plan. The proposed change does not involve any commitment contained in the Compliance Plan and does not affect any Justification for Continued Operation contained in the Compliance Plan.

4. No Significant Increase in the Probability of Occurrence or Consequences of Previously Evaluated Accidents

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities. These TSR changes are required to reflect the crane's configuration. The brake designs for the cranes comply with the requirements of ANSI B30.2-1967 and will continue to perform their safety function. As such, the SAR Accident Analysis is not affected by this change. This does not increase the probability or consequences of an evaluated accident.

**United States Enrichment Corporation (USEC)
Proposed Certificate Amendment Request
Revised Description for TSR DF 2.2.5.2
"Crane Design"
Significance Determination**

5. No New or Different Type of Accident

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities. These TSR changes are required to reflect the crane's configuration. The brake designs for the cranes comply with the requirements of ANSI B30.2-1967 and will continue to perform their safety function. As such, the SAR Accident Analysis is not affected by this change. This does not create the possibility for a new or different type of accident.

6. No Significant Reduction in Margins of Safety

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities. These TSR changes are required to reflect the crane's configuration. The brake designs for the cranes comply with the requirements of ANSI B30.2-1967 and will continue to perform their safety function. As such, the SAR Accident Analysis is not affected by this change. This does not reduce the margin of safety.

7. No Significant Decrease in the Effectiveness of any Program or Plan Contained in the Certificate Application

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities, which are not addressed in any program or plan contained in the Certificate Application. Therefore, this does not reduce the effectiveness of any program or plan contained in the Certificate Application.

8. The proposed changes do not result in undue risk to 1) public health and safety, 2) common defense and security, and 3) the environment.

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities. These TSR changes are required to reflect the crane's configuration. The brake designs for the cranes comply with the requirements of ANSI B30.2-1967 and will continue to perform their safety function. As such, the SAR Accident Analysis is not affected by this change. This does not result in undue risk to public health and safety, the common defense and security, or the environment.

**United States Enrichment Corporation (USEC)
Proposed Certificate Amendment Request
Revised Description for TSR DF 2.2.5.2
"Crane Design"
Significance Determination**

9. No Change in the Types or Significant Increase in the Amounts of Any Effluents that May be Released Offsite

The proposed TSR change involves a change in the description of the safety features of the cranes located in the feed facilities and has no effect on the generation or disposition of effluents. There are no effluent releases associated with this change.

10. No Significant Increase in Individual or Cumulative Occupational Radiation Exposure

The proposed TSR change involves a change in the description of the safety features of the cranes located in the feed facilities and will not effect individual or cumulative occupational radiation exposures.

11. No Significant Construction Impact

This TSR change does not involve a plant modification. Therefore, there is no significant construction impact.

12. No Significant Increase in the Potential for, or Radiological or Chemical Consequences from, Previously Analyzed Accidents

The proposed TSR change involves a change to the description of the safety features on the cranes located in the feed facilities. These TSR changes are required to reflect the crane's configuration. The brake design for the cranes complies with the requirements of ANSI B30.2-1967 and will continue to perform their safety function. As such, the SAR Accident Analysis is not affected by this change.