



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

830113

FCUP:BLS
70-2946

EUTLAP

Louisiana Power and Light
ATTN: Mr. L. V. Maurin
Assistant Vice President, Nuclear Operations
142 Delaronde Street
New Orleans, Louisiana 70014

Gentlemen:

We have reviewed your application and supplements for receipt and storage of fresh fuel assemblies and neutron sources and find that additional information is required to allow us to complete our safety evaluation. The required information is identified in Enclosure 1.

We will continue our review upon receipt of the information requested.

Sincerely,

Barry L. Serini

Barry L. Serini
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety, NRCSS

NDMCEUFE

Enclosures:

1. Additional Information
2. Standard Leak Testing Condition
3. Guidelines for Decontamination

Additional Information Required for Application
to Receive, Possess, and Store Special Nuclear Materials

1. Please send a clear copy of Pages 22 and 23 from your March 4, 1982 supplement, it should have materials and their dimensions clearly legible.
2. Please send a diagram and a description of a canned poison element, as referenced on Page 9.1-6 of your FSAR; what is an inner can? The FSAR mentions two sheets of boraflex, but the March 4 supplement shows only one layer. Please reconcile this discrepancy.
- RWK 3. Confirm that the individual who is responsible for radiation safety under this license shall be one who has a B.S. degree in Science and at least two years of working experience in a radiation protection field. He should have the authority to suspend any licensed activity which he believes threatens the health and safety of the employees or the public.
4. The content of the application should indicate that all individuals working with licensed materials shall finish a formal training program in radiation protection prior to working with the licensed material.
5. Louisiana Power and Light's training program should include the method used for evaluating its effectiveness and a statement of annual frequency for refresher training. SSL
6. Confirm that safety related records, unless specified in the 10 CFR 20, shall be kept at least two years.
7. Describe the procedure followed for disposing of rad waste which was produced as a result of licensed activity. SSL
8. Describe the personnel dosimeter system including:
MHB
a. A neutron dosimetry shall be conducted in accordance with guidance in Reg. Guide 8.14.
b. Frequency for reading the dosimeter and evaluating individual's exposure trend. SSL/RTM
9. Describe the surface survey and an airborne concentration monitoring program in the facility. If they are not applicable, please state so.
10. Confirm that all the licensed activity shall be conducted in accordance with an approved operating procedure.

Annex _____

LICENSE CONDITION FOR LEAK TESTING

SEALED PLUTONIUM SOURCES

November 1979

- A. Each plutonium source shall be tested for leakage at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcuries of alpha contamination on the test sample. The test sample shall be taken from the source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable alpha contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired by a person appropriate licensed to make such repairs or to be disposed of in accordance with the Commission regulations. Within five (5) days after determining that any source has leaked, the licensee shall file a report with the Division of Fuel Cycle and Material Safety, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, describing the source, the test results, the extent of contamination, the apparent or suspected cause of source failure, and the corrective action taken. A copy of the report shall be sent to the Director of the nearest NRC Inspection and Enforcement Office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
- D. The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six (6) months prior to the date of use or transfer.

GUIDELINES FOR DECONTAMINATION OF FACILITIES AND EQUIPMENT
PRIOR TO RELEASE FOR UNRESTRICTED USE
OR TERMINATION OF LICENSES FOR BYPRODUCT, SOURCE,
OR SPECIAL NUCLEAR MATERIAL

U. S. Nuclear Regulatory Commission
Division of Fuel Cycle and Material Safety
Washington, D.C. 20555

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July 1982

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DO NOT KEY IN

The instructions in this guide, in conjunction with Table 1, specify the radionuclides and radiation exposure rate limits which should be used in decontamination and survey of surfaces or premises and equipment prior to abandonment or release for unrestricted use. The limits in Table 1 do not apply to premises, equipment, or scrap containing induced radioactivity for which the radiological considerations pertinent to their use may be different. The release of such facilities or items from regulatory control is considered on a case-by-case basis.

1. The licensee shall make a reasonable effort to eliminate residual contamination.
2. Radioactivity on equipment or surfaces shall not be covered by paint, plating, or other covering material unless contamination levels, as determined by a survey and documented, are below the limits specified in Table 1 prior to the application of the covering. A reasonable effort must be made to minimize the contamination prior to use of any covering.
3. The radioactivity on the interior surfaces of pipes, drain lines, or ductwork shall be determined by making measurements at all traps, and other appropriate access points, provided that contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines, or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated but are of such size, construction, or location as to make the surface inaccessible for purposes of measurement shall be presumed to be contaminated in excess of the limits.
4. Upon request, the Commission may authorize a licensee to relinquish possession or control of premises, equipment, or scrap having surfaces contaminated with materials in excess of the limits specified. This may include, but would not be limited to, special circumstances such as razing of buildings, transfer of premises to another organization continuing work with radioactive materials, or conversion of facilities to a long-term storage or standby status. Such requests must:
 - a. Provide detailed, specific information describing the premises, equipment or scrap, radioactive contaminants, and the nature, extent, and degree of residual surface contamination.
 - b. Provide a detailed health and safety analysis which reflects that the residual amounts of materials on surface areas, together with other considerations such as prospective use of the premises, equipment or scrap, are unlikely to result in an unreasonable risk to the health and safety of the public.

5. Prior to release of premises for unrestricted use, the licensee shall make a comprehensive radiation survey which establishes that contamination is within the limits specified in Table 1. A copy of the survey report shall be filed with the Division of Fuel Cycle and Material Safety, USRRC, Washington, D.C. 20555, and also the Administrator of the NRC Regional Office having jurisdiction. The report should be filed at least 30 days prior to the planned date of abandonment. The survey report shall:

- a. Identify the premises.
- b. Show that reasonable effort has been made to eliminate residual contamination.
- c. Describe the scope of the survey and general procedures followed.
- d. State the findings of the survey in units specified in the instruction.

Following review of the report, the NRC will consider visiting the facilities to confirm the survey.

TABLE 1
ACCEPTABLE SURFACE CONTAMINATION LEVELS

| NUCLIDES ^a | AVERAGE ^{b c f} | MAXIMUM ^{b d f} | REMOVABLE ^{b e f} |
|---|---------------------------------|-----------------------------------|---------------------------------|
| nat, U-235, U-238, and associated decay products | 5,000 dpm α/100 cm ² | 15,000 dpm α/100 cm ² | 1,000 dpm α/100 cm ² |
| actinuramics, Ra-226, Ra-228, -230, Th-228, Pa-231, -227, I-125, I-129 | 100 dpm/100 cm ² | 300 dpm/100 cm ² | 20 dpm/100 cm ² |
| nat, Th-232, Sr-90, -223, Ra-224, U-232, I-126, -131, I-133 | 1000 dpm/100 cm ² | 3000 dpm/100 cm ² | 200 dpm/100 cm ² |
| beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above. | 5000 dpm βγ/100 cm ² | 15,000 dpm βγ/100 cm ² | 1000 dpm βγ/100 cm ² |

Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides should apply independently.

As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

Measurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.

The maximum contamination level applies to an area of not more than 100 cm².

The amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.

The average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.

TASK REVIEW AND CERTIFICATION (TRAC) FORM

FORM # _____

TO: L. V. Maurin

REFERENCES: W3P82-3949

DATE: December 20, 1982

TASK DESCRIPTION: Review attached information pertaining to Special Nuclear Materials License for completeness and accuracy.

DESCRIPTION BY: Jerry B. Holman (originator) DATE: 12/21/82

RESPONSE REQUIRED: YES NO DATE RESPONSE DUE: _____

Top Section filled out by Originator

VERIFICATION

I certify that I have performed a review of the task described, and as a result of this review I further certify that: (Choose one or both.)

- the present material status/conditions described above presently exist and that verification was made by direct observation on my part.
- the report, analysis, information, or action taken described above is in fact true and valid to the best of my knowledge and belief.

Signature: Robert M. Welton Date: 12-21-82

- Note: (1) Verification shall be performed by a First Line Supervisor, Engineer, Section or Department Head, or Manager.
 (2) The review is in accordance with LP&L procedures and is not a part of the Quality Assurance Program.

The actions taken to accomplish the task were as follows:
 (Provide specific details, use attachments as necessary). Referenced letter responded to questions by NRC. Responses were checked with responsible organizations in NRC, Training, & Plant Staff and verbally reviewed with NRC.

Upon completion of the VERIFICATION STATEMENT this form is to accompany correspondence through the approval process. Once correspondence is approved, as applicable, distribution of this form shall be as follows: original to originator, copy to verifier, copy to file, other copies as necessary.