

## MATERIALS LICENSE

Amendment No. 04

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

## Licensee

1. Central Illinois Light Company
2. 300 Liberty Street  
Peoria, IL 61602

In accordance with application received  
April 29, 1985

3. License number 12-18787-01 is amended in  
its entirety to read as follows:

4. Expiration date June 30, 1990

5. Docket or  
Reference No. 030-14170

6. Byproduct, source, and/or  
special nuclear material

A. Cesium-137

B. Cesium-137

C. Cesium-137

D. Cesium-137

E. Americium-241

7. Chemical and/or physical  
form

A. Sealed sources  
(New England Nuclear  
Model NER 570; Gamma  
Industries Model VD;  
General Radioisotope  
Products Model 850233;  
3M Company Model 4P6M;  
or Amersham Models X.8.,  
X.9., or X.19.)

B. Sealed source  
(Texas Nuclear Model  
No. 570-57157C)

C. Sealed source  
(Texas Nuclear Model  
No. 570-57157C)

D. Sealed source  
(Troxler Dwg. Number  
A-102112)

E. Sealed source  
(Troxler Dwg. Number  
A-102451)

8. Maximum amount that licensee  
may possess at any one time  
under this license

A. No single source  
to exceed 100  
millicuries

B. No single source  
to exceed 100  
millicuries

C. No single source  
to exceed 4,000  
millicuries

D. No single source  
to exceed 10  
millicuries

E. No single source  
to exceed 50  
millicuries

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REG3 LIC30  
12-18787-01 PDR

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2  
ml 30  
885/8/85

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**9. Authorized Use**

- A. To be used in Kay-Ray, Incorporated Models 7080 and 7062P source holders for level measurement.
- B. To be used in Texas Nuclear Model 5197 source holder for level measurement.
- C. For use in Texas Nuclear Models 5190 and 5176 source holders for flow measurement.
- D. and E. To be used in Troxler Model 3411B moisture density gauges.

CONDITIONS

- 10. Licensed material shall be used only at E.D. Edwards Station, Bartonville, Illinois (2½ miles south of Bartonville on U.S. Route 20) and Duck Creek Station, R.R. #5, Canton, Illinois. Licensed material in Subitems 6.D. and 6.E. may also be stored at the licensee's Pioneer Park Service Center, Peoria, Illinois.
- 11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
- 12. A. Licensed material listed in Subitems 6.D. and 6.E. shall be used by, or under the supervision and in the physical presence of, individuals who have satisfactorily completed the device manufacturers training program for gauge users and have been designated by the licensee's radiation protection officer. The licensee shall maintain records of the individuals who have been designated as authorized users.
  - B. Licensed material listed in Subitems 6.A., 6.B., and 6.C. shall be used by, or under the supervision of, Gary Tuttle or David Tomlinson.
- 13. A. (1) Each sealed source containing licensed material, other than hydrogen-3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months; except those sealed sources as specified by the manufacturer and specifically authorized by the Commission or an Agreement State may be leak tested at intervals not to exceed three years. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.
  - (2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
  - (3) 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 months prior to the date of use or transfer.

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- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. 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 contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee using a leak test kit or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
14. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
15. Installation, relocation, removal from service, maintenance, repair, and initial radiation survey of devices containing licensed material in Subitems 6.A., 6.B., and 6.C. and installation, replacement, and disposal of sealed sources containing licensed material used in these devices shall be performed only by Kay-Ray, Inc. or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
16. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."
17. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of licensed material, location of the sealed sources and the date of the inventory.

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18. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in applications dated August 15, 1979, October 22, 1980 and April 29, 1982; and letters dated June 4, 1982 and April 22, 1985. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.



For the U.S. Nuclear Regulatory Commission

Original Signed

By Bruce S. Mallett

Materials Licensing Section, Region III

Date May 31, 1985

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