

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
PLANT PROCEDURES MANUAL

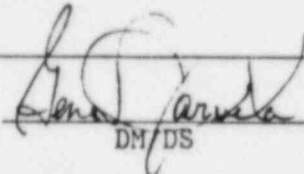
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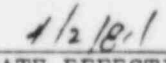
Use of Thermoluminescent  
Dosimeters (TLD)

PRP2-ZX-11  
Rev. 0  
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APPROVED:

  
DM/DS

  
DATE APPROVED

  
DATE EFFECTIVE

This procedure is not described in the FSAR.  
Field changes to this procedure must be approved by Radiological Services.

1.0 Purpose and Scope

- 1.1 This procedure provides instructions on how thermoluminescent dosimeters (TLDs) are issued, worn, and returned.
- 1.2 This procedure applies to all personnel who will require access to any radiologically controlled area under the jurisdiction of HL&P and all TLD designated areas at the South Texas Project Electric Generating Station.

2.0 Prerequisites

- 2.1 In order for an individual to be issued a TLD at any HL&P facility, they must first meet the prerequisite requirements as outlined in PRP2-ZX-01 (External Dosimetry Program).
- 2.2 The individual should be instructed at the time of initial issue where and how to wear the TLD, why it is required, and what its limitations are.

3.0 Precautions

- 3.1 TLDs shall be protected from excessive heat (temperatures above 120 °F) and excessive moisture.
- 3.2 Care must be taken to protect the TLD from damage or loss, and any such occurrence shall be reported at once.
- 3.3 Each individual is responsible for the TLD issued to them and shall be held accountable for its care.

#### 4.0 Procedure

##### 4.1 Initial Issue of TLD Devices

- 4.1.1 The initial issue of a TLD by serial number to an individual shall be made at the Radiological Services Dosimetry Issue Point, or place designated by the Radiological Protection Supervisor in special cases.
- 4.1.2 Individuals shall meet all prerequisites outlined in PRP2-ZX-01 (External Dosimetry Program) prior to being issued a TLD.
- 4.1.3 Once issued a TLD, the individual shall wear that TLD on his body as instructed at all times while performing duties at the assigned HL&P facility.

##### 4.2 Daily Use of TLD Devices

- 4.2.1 Each person who has been issued a TLD as described in Section 4.1 above shall pick up the TLD from the designated TLD storage rack upon reporting for work at the start of the shift.
- 4.2.2 The TLD shall be worn as instructed on the body at all times while the worker is at the HL&P facility.
- 4.2.3 When the shift is completed, the TLD shall be returned to the designated storage rack as the individual leaves the facility.
- 4.2.4 Radiological Services personnel shall exchange all TLDs from the designated storage rack during a selected 24 hour period once each calendar month.
- 4.2.5 Radiological Services shall read all TLDs after the monthly exchange in accordance with PRP5-ZO-40 (Operation of Panasonic UD-710A Automatic TLD Reader), and submit a report of exposure by name to the Radiological Protection Supervisor and the Radiological Services Division Manager.

##### 4.3 Termination of Use of TLDs

- 4.3.1 All terminating HL&P employees, visitors, and contract and vendor personnel shall report to the Dosimetry Issue Point at the end of the last shift they will work at the South Texas Project Electric Generating Station to turn in dosimetry issued them.

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5.0 Acceptance Criteria

None

6.0 Documentation

- 6.1 All radiation exposure shall be reported in accordance with PRP1-ZA-13 (Man-Rem and Dose Reporting).

7.0 References

- 7.1 PRP2-ZX-01 (External Dosimetry Program)  
7.2 PRP5-ZO-40 (Operation of Panasonic UD-710A Automatic TLD Reader)  
7.3 PRP1-ZA-13 (Man-Rem and Dose Reporting)

8.0 Support Documents

- 8.1 TLD Badge Issue Report (-01)

TLD BADGE ISSUE REPORT  
PRP2-ZX-11-01  
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NAME \_\_\_\_\_ DATE \_\_\_\_\_

DATE OF BIRTH \_\_\_\_\_ SSN \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_  
Street City State Zip Code

EMPLOYED BY \_\_\_\_\_

EMPLOYER'S ADDRESS \_\_\_\_\_  
Street City State Zip Code

PHONE \_\_\_\_\_  
Home Work

SEX:

Male \_\_\_\_\_

Female \_\_\_\_\_ (Read information provided in Appendix to Regulatory Guide 8.13)

DEPARTMENT NAME \_\_\_\_\_ WORK GROUP \_\_\_\_\_

Have you ever worn personnel dosimetry at this job or any other job prior to today? Yes \_\_\_\_\_ No \_\_\_\_\_

Method being used to enter my current quarter dose (check one)

\_\_\_\_\_ Completed Form NRC-4  
\_\_\_\_\_ Written Estimate(s)  
\_\_\_\_\_ Personal Estimate(s)

My current quarter dose is:

Whole Body Dose \_\_\_\_\_ mREM  
Skin Dose \_\_\_\_\_ mREM  
Extremity Dose \_\_\_\_\_ mREM

The information I have provided above is correct to the best of my knowledge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
DOSIMETRY OFFICE USE ONLY

TLD# \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

POCKET DOSIMETER# \_\_\_\_\_

COMMENTS \_\_\_\_\_

PLANT BADGE# \_\_\_\_\_

This form when completed shall be retained for the life of the plant.