

May 27, 1994

Mr. William Russell, Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attn: Document Control Desk

Subject: Dresden Nuclear Power Station Unit 1

Environmental Evaluation of Dresden 1 Fuel Pool Integrity

NRC Docket Number 50-10

References: (1) Special Inspection of Potential Loss of Water from the

Dresden Unit 1 Spent Fuel Storage Pool and of the Plant's

Compliance to the SAFSTOR Decommissioning Plan

(Inspection Report No. 50-010/94001)

Dear Mr. Russell:

Following the January 1994 freezing event at Dresden Unit 1, a need was identified to establish an environmental sampling plan around the Unit 1 Spent Fuel Storage Building to support the assessment of the integrity of the pool. Commonwealth Edison has now completed the initial phase of this environmental assessment and is communicating the results of that assessment in Attachment 1 to this letter.

The evaluation of the sample results indicates that very limited transport appears to exist between the Unit 1 fuel pool and its connected fuel transfer tube, and the environmental water table. The finding of low concentrations of tritium, combined with the absence of gamma emitters, indicates the transfer is minor in nature and likely the result of diffusion of water through the concrete and/or transfer through microscopic cracks which act as a filter for all entrained radionuclides. This conclusion is consistent with the station calculations regarding make-up and evaporation rates for the water in the Unit 1 fuel pool. The quantities of tritium that have been found in the environment are well within all applicable regulatory limits.

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Attachment 1 also provides:

- The long term sampling plan which Commonwealth Edison will maintain around Dresden Unit 1 until the fuel has been transferred and the source term has been eliminated.
- The long term communication plan which Commonwealth Edison will maintain with respect to informing the Nuclear Regulatory Commission and the Illinois Department of Nuclear Safety of the results of this special sampling program.

Please direct any questions that you may have concerning this response to Martin Vonk at (708) 663-7292 or John Golden at (708) 663-6535.

Sincerely

D. L. Farrar

Nuclear Regulatory Services Manager

Attachments: (1) Dresden Unit 1, Environmental Evaluation of Fuel Pool Integrity

- cc: J.B. Martin, Regional Administrator RIII
 - J. Zwolinski, Assistant Director for Region III Reactors, NRR
 - J. Dyer, Project Director III-2 NRR
 - J. Stang, Dresden Project Manager NRR
 - S. Weiss, Director of Non-Power and Decommissioning Project Directorate, NRR
 - R. Dudley, Section Chief, Decommissioning Section, NRR
 - P. Erickson, Dresden Unit 1 Project Manager, NRR
 - M. Leach, Dresden Senior Resident Inspector
 - R. Wight, Illinois Department of Nuclear Safety

Dresden Unit 1 Environmental Evaluation of Fuel Pool Integrity

1. Introduction

Following the Dresden Unit 1 Freezing Event of January 1994, Commonwealth Edison began an effort to further resolve fuel pool integrity concerns. Two independent paths were chosen for this evaluation.

First, the station initiated measures to more closely monitor fuel pool level within the facility. An evaluation of evaporation rate around the pool indicates the rate of evaporation is consistent with the measured make-up rates. This would indicate that leakage, if any, is minor. The station is evaluating further actions to more closely define pool make-up and internal loss rates.

Secondly, a program was begun to expand environmental monitoring around the U-1 Fuel Building. This program was designed to meet the dual purposes of evaluating fuel pool integrity and ensuring any impact on the environment is fully understood. Four additional wells were drilled in the immediate vicinity of the U-1 Fuel Building to support this evaluation. No significant amount of water was encountered until approximately the 20-30 ft. level. The remaining wells for the initial phase were chosen from existing sampling points currently used in the Radiological Environmental Monitoring Program (REMP) or from existing station sources.

This report will concentrate on the initial results of that environmental assessment and will identify the components of the ongoing special sampling program for the area around the Dresden Unit 1 Fuel Building.

II. Executive Summary

The well samples located in the immediate proximity of the U-1 Fuel Building indicated the presence of tritium in concentrations ranging from 5,000 pCi/l to 51,500 pCi/l. Gamma scans, looking for the presence of other fuel pool related radionuclides, were negative. Sample analyses of the station deep well drinking water supply and other local wells in the routine Radiological Environmental Monitoring Program (REMP) showed that all samples were at or near the Lower Limit of Detection (LLD) for tritium and well within EPA Drinking Water Standards.

The environmental results around the U-1 fuel pool show that very slight transport appears to exist between the pool and its connected fuel transfer tube, and the environmental water table. The absence of gamma emitters indicates the transfer is minor in nature and most likely the result of the diffusion of water through the concrete and/or transfer through microscopic cracks which act as a filter for all entrained nuclides. This conclusion is consistent with the station findings regarding make-up and evaporation rates.

The impact on the environment of the tritium released by Dresden Station is negligible. Tritium is a normally released radionuclide for all light water reactors but generally higher for Pressurized Water Reactors (PWRs). All environmental samples resulting from the Dresden Unit 1 analysis are well below normal releases from typical PWR facilities. Public well water samples taken in the immediate vicinity of the station are at or below minimum levels of detection and in all cases several orders of magnitude below the EPA Standards for tritium in drinking water. Results that are about a factor of 20 below EPA Drinking Water Standards have been detected in the U-1 intake canal, a largely stagnant finger inlet off the Kankakee River. A down stream sample of the Illinois River was taken at Morris to verify river concentrations. This value was similar to historical values seen at that location and well below EPA Standards for Drinking Water.

The results of the initial phase show that some additional sampling is of value for the long term program. A second series of three wells located south, southeast, and northeast of the fuel building will be used to evaluate the distribution of tritiated water on site. These wells will also have the additional benefit of providing anticipatory information concerning offsite environmental effects for the public located in these directions. Wells to the northwest (Dresden Lock & Dam) and southwest (GE Morris) are already in the REMP.

III Environmental Analysis

Following the Dresden U-1 Freezing Event in January 1994, an expanded environmental analysis program was initiated around the U-1 Fuel Building to assist in evaluating the structural integrity of the pool and to determine the environmental effects of any radionuclides that might have been released.

Dresden Aquatic Environment

Dresden Station is located just south of the junction of the Kankakee and DesPlaines Rivers as they become the Illinois River. The Unit 1 Intake Canal is located on the Kankakee while station discharge is into the Illinois River. Ground water sources around the station exist in three distinct, independent layers.

- a) The first surface aquifer drains north and east into the U-1 intake canal and eventually the Illinois River basin. It lays on the bedrock which varies from a few feet to approximately 70 feet deep. Some local wells rely on this aquifer for potable water supplies. The first public drinking water source located downstream of Dresden that relies on water from the Illinois River is in Peoria approximately 100 miles away.
- b) The second aquifer varies from a depth of approximately 50 feet to several hundred. It is the primary source of drinking water for many individual residential wells.
- c) The third aquifer varies in depth of 700 feet to several thousand feet and is the primary source of drinking water for Dresden Station and the larger communities' water supplies.

Dresden Unit 1 Environmental Sampling Program

The initial phase of this study added the construction and sampling of four wells in the immediate vicinity of the U-1 Fuel Building and Sphere. Attachment 1 provides a site map designating the position of these original wells (Points labeled Wells 1 through 4). In addition, the plans for drilling cathodic protection wells at the station were reviewed and samples from sites labeled Well #5 and 6 (Attachment 1) were taken as beneficial to the program. Water samples if available, will be taken during the drilling of other cathodic protection wells. These wells, once completed for the purpose of cathodic protection, will not be available for addition to the long term program. Finally, sample results from sources already existing in the REMP were reevaluated with respect to their value to the Unit 1 study. The sample points in the REMP used in this program are located on Attachment 2. Specific sample results from the environmental contractor are included as Attachment 3. Sample results of the initial program are summarized in Table 1. Results of the expanded sampling following the initial findings are summarized in Table 2. All numerical results are reported in picocuries per liter. (pCi/l) The environmental Lower Limit of Detection for tritium is approximately 200 pCi/l and results below this have a large level of uncertainty. Negative results can occur when actual sample counts are below the previously established background adjustment. Non-detectable results will be designated as ND.

The sample points used for the initial test program are:

- 1) U-1 Monitoring Wells Attachment 1 Well #'s 1 through 4
- 2) Cathodic Protection Well Attachment 1 Well #' s 5 and 6. These are one time sample results. Cathodic protection wells are not available for the long term program. Additional numbered wells on Attachment 1 are planned cathodic protection wells and will be sampled if possible.
- Three wells at a depth up to 10 ft., located near the south end of the contractor parking lot, north of cottage area.
- 4) D-23 110 ft well at Cottages south of plant Attachment 2; Sector J *23

Releases reported as a percentage of the appropriate regulatory limit will be evaluated as a function of station release limits from 10 CFR 20 Appendix B for all sources not used as drinking water. Drinking water sources will be evaluated against the criteria of 40 CFR 141. Refer to the subsequent section on reportability analysis for a detailed discussion of these limits.

Table 1 Initial Results

SAMPLE	DATE	GAMMA SCAN	TRITIUM RESULT	LIMIT	% LIMIT
Well #1	5/10/94	ND	5200	Station Release	0.5%
	5/17/94	ND	2200	26	0.2%
Well #2	5/10/94	ND	18000		1.8%
	5/17/94	ND	9600	11	1.0%
Well #3	5/10/94	ND	26000	п	2.6%
당 목모난 Black	5/17/94	ND	16500	11	1.7%
Well #4	5/10/94	ND	42000	.85	4.2%
	5/17/94	ND	51500	и	5.2%
Cathodic Well #5	5/13/94	ND	14000	n	1.4%
Cathodic Well #6	5/16/94	ND	2200	и	0.2%
Shallow Well #1	March 94	Not Taken	50	#	0.01%
Shallow Well #2	March 94	Not Taken	110		0.01%
Shallow Well #3	March 94	Not Taken	0	11	0.0%
D-23	March 94	Not Taken	127	Public Drinking Water	0.6%
D-23	April 94	ND	136	н	0.7%
D-23	May 94	ND	240	н	1.2%

Because of the positive tritium results in Wells 1 through 4 the initial program was expanded to include several additional points. Those points are described below and summarized in Table 2.

- 1) Station Potable Water Mixing Tank for Station Wells 1 and 2. Wells are drilled into the third (deepest) aquifer. Attachment 2, Station Wells 1 and 2
- 2) D-05 Farm Potable Water Source Northeast of Plant. Attachment 2 labeled D-05
- 3) Illinois River Sample at Morris
- 4) U-1 Intake Canal Surface Water supply on site north of U-1
- 5) Historical Review of: (Last Quarterly Results are provided)
 - a) Dresden Lock & Dam Potable Water Source northwest of plant.

 Attachment 2: Sector Q*23
 - b) GE Well 84 Ft. Well Southeast of Station. Attachment 2; Sector K*32

Table 2
Results of Expanded Test Program

SAMPLE	DATE	GAMMA SCAN	TRITIUM RESULT	LIMIT	% LIMIT
Station Potable Water	5/3/94	Not Taken	ND	Public Drinking Water	0.0%
	5/12/94	ND	0	18	0.0%
D-05	5/14/94	Not Taken	0	н	0.0%
Illinois River at Morris	5/14/94	Not Taken	500	н	2.5%
U-1 Intake Canal	5/14/94	Not Taken	1250	Station Release	0.1%
Dresden Lock & Dam	1st Quarter 94	Not Taken	0	Public Drinking Water	0.0%
General Electric Facility (Morris)	1st Quarter 94	Not Taken	50	8	0.02%

Reportability Evaluation

The data described above were reviewed for reportability. No reporting criteria has been exceeded. However, because the program was initiated to evaluate the integrity of the Fuel Pool, NRC Region III, NRR, and the Illinois Department of Nuclear Safety (IDNS) have been kept informed of the sample results from the initial phases of the sampling program. Now that baseline values have been established, Commonwealth Edison intends to maintain communications with appropriate levels of the staffs of these organizations as the program continues.

The following review of the specific reporting criteria is included for completeness.

1) 10 CFR 20 Appendix B

Regulatory

Nuclide Limit

Tritium 1.0E6 pCi/l (1 million pCi/l)

Cesium 1.0E3 pCi/l

The maximum tritium concentration resulting from the Dresden 1 evaluation is 51,500 pCi/l in an on site well. The last tritium concentration measured in the D1 spent fuel pool was 2.3E6 pCi/l so it would require pumping virtually undiluted U1 Fuel Pool Water to the release point to reach this reporting value.

No Cesium has been detected in this special monitoring program. Spent fuel pool concentrations of Cesium have varied since clean-up activities were initiated and are now between 1E5 and 1E6 pCi/l, or slightly less than the pool tritium concentration. If the ratio of tritium to cesium in the environment were to increase to the ratio seen in the pool this reporting criteria would be exceeded.

2) Emergency Action Levels:

	Unusual Event	ALERT
Nuclide	Initiating Conditions	Initiating Conditions
Tritium	2.0E6 pCi/l	1.0E7 pCi/l
Cesium	2.0E3 pCi/l	1.0E4 pCi/l

With current spent fuel pool tritium concentrations the Unusual Event Initiating Condition is nearly unreachable for tritium and reachable for Cesium only for significant leakage as described above.

ODCM Reportability - 30 day written report

- A special report to NRC Region III would be required by the Offsite Dose Calculation Manual (ODCM) if tritium concentration in a public drinking water source exceeds 20,000 pCi/l. 40 CFR 141 describes a public drinking water source as any source with greater than 15 connections. For this special test plan, however, Commonwealth Edison will treat any drinking water source, regardless of the number of connections, as falling within the requirements of this provision and will report any results exceeding 10,000 pCi/l from these sources. No sample of any single individual's well has approached the 40 CFR 141 limits.
- b) Because tritium is generally perceived as an environmental nuclide of concern in PWR's, the PWR ODCM's have an additional reporting criteria if non-drinking water sources are detected exceeding 30,000 pCi/l.

 Again, for this special test plan, Commonwealth Edison proposes to report any results that exceed 15,000 pCi/l.

Dresden onsite Wells 2, 3, and 4 exceeded this value in the samples counted of May 13th or May 17th(Attachment 3). This report constitutes the 30 day report for those results.

- 4) Technical Specifications Tritium reportability in the Technical Specifications (Section 3.8.e) is similar to that described in ODCM 3a above for tritium concentrations exceeding 20,000 pCi/l in a public drinking water source. The special reporting described above for this special test plan does not apply to Technical Specification reporting.
- 5) Courtesy Notifications

Because of the unique nature of this test plan additional reporting is beneficial for all concerned parties. Those organizations involved in the discussions of the initial results are expected to remain interested as the sampling program continues. Commonwealth Edison intends to communicate to NRR, Region III Staff, and IDNS staff if any of the following conditions are met:

- (1) Exceeding the current tritium concentration in the onsite wells by a factor of 5.
- (2) Anytime a potable water source exceeds 10,000 pCi/l.
- (3) The first time a non-potable water source exceeds 15,000 pCi/l.

(4) Any indication above the Lower Limit of Detection of Cesium in an environmental sample used in the special test program.

IV. Conclusions

Fuel Pool Integrity

The environmental results around the U-1 fuel pool show that very limited transport appears to exist between the pool and the environmental water table. The absence of gamma emitting radionuclides indicates that the transfer is minor in nature and likely the result of diffusion of water through the concrete and/or transfer through microscopic cracks which act as a filter for entrained radionuclides. This conclusion is consistent with the station findings regarding make-up and evaporation rates of water in the spent fuel pool.

The special environmental program will continue to be used to monitor pool integrity. Specific indicators from this program which would lead to a conclusion that the integrity is being reduced include a significant change in the numerical value of the tritium concentration seen in the special wells and detection of Cesium in well samples that currently contain only tritium.

Current Impact of Dresden 1 Releases on the Environment

The impact on the environment of the tritium currently released by Dresden Station is negligible. Tritium is a normally released radionuclide for all light water reactors but generally higher for Pressurized Water Reactors (PWRs). The environmental sample results from this special Dresden Unit 1 sampling program are below the values of tritium regularly released from typical Pressurized Water Reactors. Public well water sample results taken in the immediate vicinity of the station are at or below minimum levels of detection and in all cases several orders of magnitude below the EPA Standards for tritium in drinking water. Slightly higher values, about a factor of 20 below EPA Drinking Water Standards, have been detected in the U-1 intake canal, a largely stagnant finger inlet off the Kankakee River. A down stream sample of the Illinois River was taken at Morris to verify river concentrations of tritium. This sample result was similar to that seen in the public wells immediately around the station.

Long Term Sample Plan

The results of the initial phase show that some additional sampling is of value for the long term program. The following changes are being made to the existing sampling program.

- 1) Unit 1 Wells (Attachment 1 Wells labeled 1 through 4) Sampling will be accomplished on a monthly basis for Tritium and Gamma Scan. This will provide initial indication of any change in fuel pool integrity and indication of any additional radioactive material introduced into the environment. A more frequent sample is not necessary based on the additional surveillances of the spent fuel pool water level which are being performed by the station staff to identify significant water loss.
- 2) Station Potable Water Supply (Attachment 2 labeled Station Wells 1 and 2) Tritium sampling will be added at a monthly frequency. This will verify that no contamination of the station drinking water supply is occurring.
- Unit 1 Intake Canal (Attachment 1 labeled Unit 1 Intake) Sampling for tritium will be added to the existing sampling schedule for this point on a monthly basis. Existing hydrological studies indicate the surface water flow at Dresden around Unit 1 is toward the intake canal. This sample point will monitor the surface aquifer and assess any percolating effect from the second aquifer.
- 4) 10 ft Wells (Located south of the station in the vicinity of the contractor parking lot) These wells will be sampled on a quarterly basis for Tritium. This will ensure surface flows are as expected. This change was a previously planned addition to REMP.
- Additional Wells Three additional site wells will be drilled for the long term assessment of Unit 1 radionuclide releases. These wells will be useful for measuring the flow dispersion around Unit 1 and will also serve as interdiction wells to identify any potential flow offsite. Samples from these locations will only be analyzed for tritium as part of this sampling program. The wells will be drilled to the second aquifer (approximately 50 to 100 feet) and they will be positioned (approximately):
 - Along the south edge of the contractor parking lot.
 - b) Southeast of the U-1 Fuel Building near the plant security fence.
 - c) Northeast of the sphere between the U-1 Canal and the river.

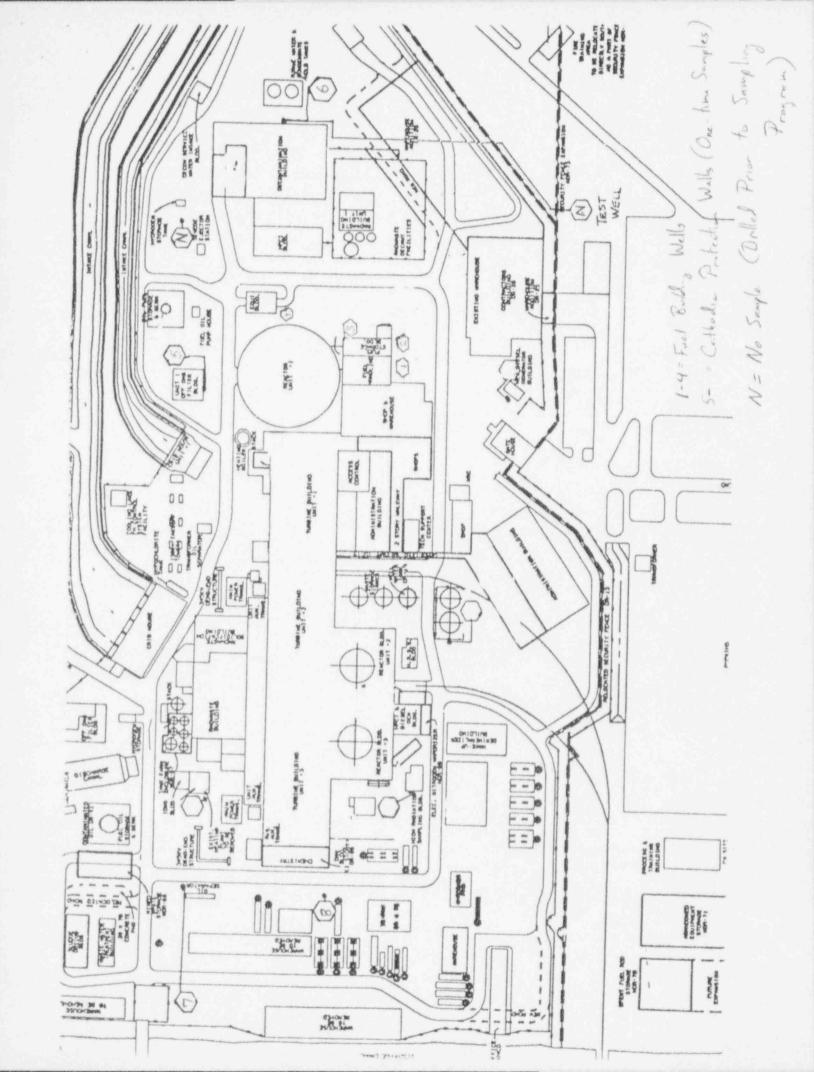
- Farm Well Attachment 2 Sample Identifier D-05. This is currently designated as an air sampling point for REMP. The weil located at this farm was sampled following initial results and found to be at typical background concentrations. This well will be sampled on a quarterly basis for tritium for the remainder of the calendar year.
- Existing REMP Sampling Points useful to D1 Program: (Tritium and Gross 7) Beta) No changes in the existing program are necessary.
 - Home Well Attachment 2; Sample Identifier D-23 110 ft deep well a) approximately 800 meters south of the station. Sampled Monthly
 - Dresden Lock and Dam Approximately 225 ft deep well about 1 mile b) northwest of station. Sampled Quarterly
 - GE Well Approximately 85 ft deep well located about 1 mile southwest C) of station. Sampled Quarterly

This report completes the initial environmental assessment of the Unit 1 Fuel Pool. Environmental sampling has confirmed that some communication appears to exist between the U-1 Fuel Pool Water and the environment. The results of the samples that have been taken indicate that the likely mechanism of communication is very limited diffusion through the concrete or transfer through microscopic cracks which effectively filter all radionuclides except tritium. The impact on the environment of the tritium released from the U-1 pool is negligible. The adoption of the long term sampling program described above will ensure the program continues to support effective monitoring of fuel pool integrity and the overall goals of the REMP program.

- Attachments: (1) Dresden Unit 1 Site Area
 - (2) Dresden Near Site REMP Sampling Map
 - (3) Laboratory Sample Results

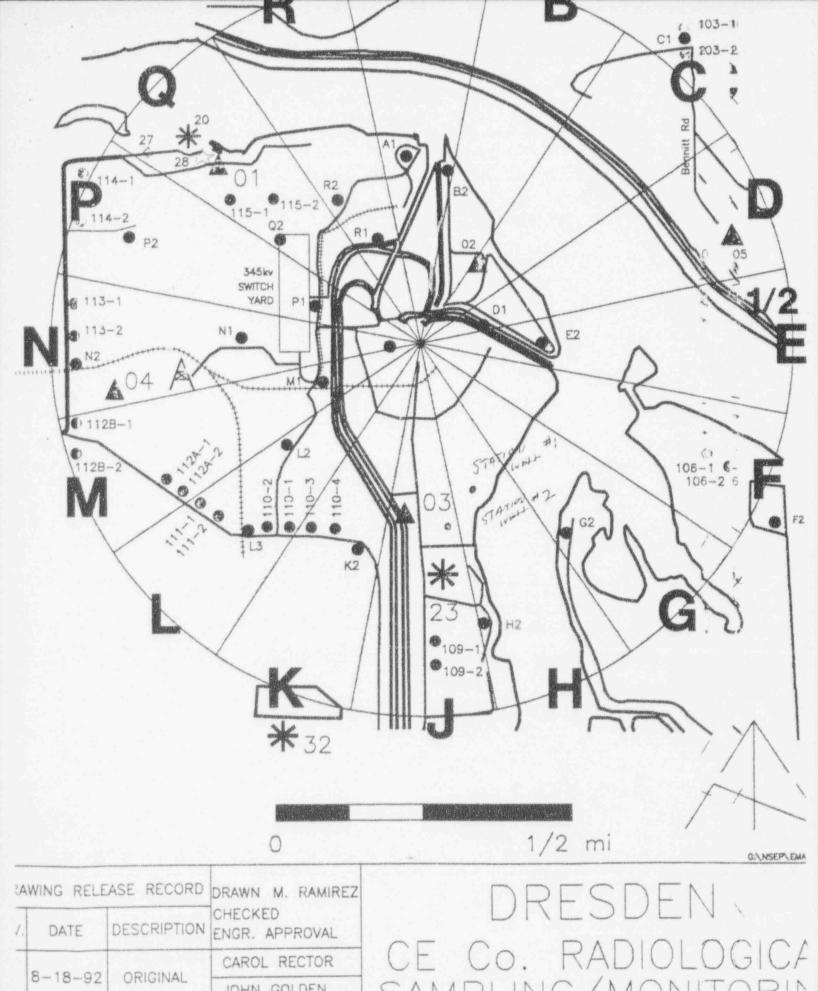
Attachment 1

Dresden Unit 1 Site Area



Attachment 2

Dresden Near Site REMP Sampling Map



JOHN GOLDEN Additional TLDs KRISTEN SCHWAB phonetic alphabet 6-16-93 editorial improvements JOHN GOLDEN sompling point verification

Attachment 3

Laboratory Sample Results

Environmental Services Midwest Laboratory 700 Landwehr Road * Northbrook, IL 60062-2310 Phone (708) 564-0700 * Fax (708) 564-4517

Mr. John C. Golden		
Emergency Preparedness	LABORATORY REPORT NO.:	8004-100-538R
Commonwealth Edison Company	DATE:	05-13-94
Executive Towers III, 5th Floor	SAMPLES RECEIVED:	
1400 Opus Place	TYPE OF REPORT:	
Downers Grove, IL 60515	PURCHASE ORDER NO.:	

Dear Mr. Golden:

Below are the results of the analyses for tritum performed on well water samples collected from locations surrounding the Dresden Unit 1 Fuel Pool.

Sample Description	Collection Date	Lab Code	Concentration (pCi/L) H-3
Well #1	05-10-94	CDWW-0987	5,219±223;744
Well #2	05-10-94	CDW17-0988	18,164±387;2,500
Well #3	05-10-94	CDW V1063	26,214±464;3,595
Well #4	05-10-94	CDWW-1062	41,626±578;5,691
Site Deep Well	05-12-94	CDWW-1064	-8±112;112
D-23	04-09-94	CDWW-0267	136±101;102
D-23	05-07-94	CDWW-0923	258±102;108

Sincerely,

C. Farlow

C. Farlow

Program Coordinator

cc: R. Raguse, Dresden

APPROVED BY

L.G. Huebner, M. S. Manager

Environmental Services Midwest Laboratory 700 Landwehr Road • Northbrook, IL 60062-2310 Phone (708) 564-0700 • Fax (708) 564-4517

Mr. John C. Golden Emergency Preparedness Commonwealth Edison Company Executive Towers III, 5th Floor 1400 Opus Place Downers Grove, IL 60515

LABORATORY REPORT NO.: 8004-100-539

DATE: 05-13-94

SAMPLES RECEIVED: TYPE OF REPORT: PURCHASE ORDER NO.:

Dear Mr. Golden:

Below are the results of the analyses for Cs-137 performed on well water samples collected from locations surrounding the Dresden Unit 1 Fuel Pool.

Sample Description	Collection Date	Lab Code	Concentration (pCi/L) Cs-137
Well #1	05-10-94	CDWW-0987	<5.8
Well #2	05-10-94	CDWW-0988	< 5.1
Well #3	05-10-94	CDWW-1063	<16.4a
Well #4	05-10-94	CDWW-1062	<10.7a
Site Deep Well	05-12-94	CDWW-1064	<6.6
D-23	04-09-94	CDWW-0267	<4.8
D-23	05-07-94	CDWW-0923	<8.0

^a Higher LLD due to low sample volume (0.44 liters).

Sincerely,

C Farlow

C. Farlow

Program Coordinator

cc: R. Raguse, Dresden

APPROVED BY

L. G. Huebner, M. S. Manager

Environmental Services Midwest Laboratory 700 Landwehr Road • Northbrook, IL 60062-2310 Phone (708) 564-0700 • Fax (708) 564-4517

Mr. John C. Golden Emergency Preparedness Commonwealth Edison Company Executive Towers III, 5th Floor 1400 Opus Place Downers Grove, IL 60515

LABORATORY REPORT NO.: 8004-100-540

DATE: 05-16-94

SAMPLES RECEIVED: TYPE OF REPORT: PURCHASE ORDER NO.:

Dear Mr. Golden:

Below are the results of the Gross Alpha and Gross Beta analyses performed on well water samples collected from locations surrounding the Dresden Unit 1 Fuel Pool.

Sample Description	Collection Date	Lab Code	Gross Alpha	ion (pCi/L) Gross Beta
Well #1	05-10-94	CDWW-0987	26.6±4.6;5.6	23.1±3.1;4.7
Well #2	05-10-94	CDWW-0988	117.1±10.4;17.7	84.9±4.1;13.7
Well #3	05-10-94	CDWW-1063	13.0±2.7;3.2	10.5±2.4;2.9
Well #4	05-10-94	CDWW-1062	5.8±2.5;2.6	10.8±2.5;3.0
Site Deep Well	05-12-94	CDWW-1064	23.5±3.4;4.4	21.0±2.8;4.3
D-23	04-09-94	CDWW-0267	1.7±1.6;1.6	4.4±1.0;1.2
D-23	05-07-94	CDWW-0923	1.7±1.2;1.2	3.8±0.7;0.9

Sincerely,

C. Farlows

C. Farlow

Program Coordinator

cc: R. Raguse, Dresden

APPROVED BY

L. G. Huebner, M. S. Manager

Environmental Services Midwest Laboratory 700 Landwehr Road • Northbrook, IL 60062-2310 Phone (708) 564-0700 • Fax (708) 564-4517

Mr. John C. Golden Emergency Preparedness Commonwealth Edison Company Executive Towers III, 5th Floor 1400 Opus Place Downers Grove, IL 60515

LABORATORY REPORT NO.: 8004-100-541R
DATE: 05-17-94
SAMPLES RECEIVED:
TYPE OF REPORT:
PURCHASE ORDER NO.:

Dear Mr. Golden:

Below are the results of the analyses for tritium performed on water samples collected from locations D-05, D-18, D-22, and one location near the Dresden Unit 1 Fuel Pool.

Sample Description	Collection Date	Lab Code	Concentration (pCi/L) H-3
Well #5	05-13-94	CDWW-1160	14,109±349;1,950
D-05	05-14-94	CDWW-1159	-15±113;113
D-18	05-13-94	CDCW-1157	1,251±150;227
D-22	05-14-94	CDSW-1158	503±129;146

Sincerely,

(Farlos

C. Farlow

Program Coordinator

cc: R. Raguse, Dresden

APPROVED BY

L. G. Huebner, M. S. Manager