May 10, 1992 BW/92-0259

Diractor, Office of Resource Management United States Nuclear Regulatory Commission Washington, D.C. 20555

ATTN: Document Control Desk

Gentlemen:

Enclosed for your information is the Monthly Performance Report covering Braidwood Nuclear Power Station for the period April 1 through April 30, 1992.

K. L. Kofron Station Manager Braidwood Nuclear Station

KLK/JL/dla (560/ZD85G)

Attachments

A. B. Davis, NRC, Region III

NRC Resident Inspector Braidwood

Ill. Dept. of Nuclear Safety

M. J. Wallace
E. D. Eenigenburg

T. J. Kovach

Nuclear Fuel Services, PWR Plant Support

INPO Records Center

Performance Monitoring Group, Tech Staff Braidwood Station

Nuclear Group, Tech Staff Braidwood Station

R. Pulsifer - USNRC

T. W. Simpkin

D. R. Eggett - Nuclear Engineering Department

(JE24)

### BRAIDWOOD NUCLEAR POWER STATION

UNIT 1 AND UNIT 2

MONTHLY PERFORMANCE REPORT

COMMONWEALTH EDISON COMPANY

NRC DOCKET NO. 050-456, LICENSE NO. NPF-72

NRC DOCKET NO. 050-457, LICENSE NO. NPF-77

- I. Monthly Report for Braidwood Unit 1
  - A. Summary of Operating Experience

Braidwood Unit 1 entered the month of April, 1992 at approximately 99% power. The Unit operated routinely with no significant power reductions through the end of the month.

### B. OPERATING DATA REPORT

DOCKET NO.: 50-456

UNIT: Braidwood 1

DATE: 05/10/92

COMPILED BY: C. E. Pershey TELEPHONE: (815)458-2801

ext. 2173

### OPERATING STATUS

1. Reporting Period: April, 1992 Gross Hours: 719

Currently Authorized Power Level (MWt): 3411
 Design Electrical Rating (MWe-gross): 1175
 Design Electrical Rating (MWe-net): 1120
 Max Dependable Capacity (MWe-gross): 1175
 Max Dependable Capacity (MWe-net): 1120

- 3. Power level to which restricted (If Any); None
- 4 Reasons for restriction (If Any): None

		THIS MONTH	YR TO DATE	CUMULATIVE
5.	Report period Hours:	719.0	2903.0	32912.0
6.	Hours Reactor Critical:	719.0	2837.7	25117.9
7.	RX Reserve Shutdown Hours:	0.0	0.0	0.0
8.	Hours Generator on Line:	719.0	2818.5	24650.5
9.	Unit Reserve Shutdown Hours:	0.0	0.0	0.0
10.	Gross Thermal Energy (MWH):	2412147	9229651	74214167
11:	Gross Elec. Energy (MWH):	818356	3144926	25467118
12.	Net Elec. Energy (MWH):	788867	3026576	24328500
13.	Reactor Service Factor:	100.0	97.8	76.3
14.	Reactor Availability Factor:	100.0	97.8	76.3
15.	Unit Service Factor:	100.0	97.1	74.9
16.	Unit Availability Factor:	100.0	97.1	74.9
17.	Unit Capacity Factor (MDC net):	98.0	93.1	66.0
18.	Unit Capacity Factor (DER net):	98.0	93.1	66.0
19.	Unit Forced Outage Rate:	0.0	2.9	11.6
20.	Unit Forced Outage Hours:	0.0	84.5	3236.3
0.1	Chutdown Cohodulad Over			

21. Shutdowns Scheduled Over

Next 6 Months:

Refueling Outags - September, 1992

22. If Shutdown at End of Report Period, Estimated Date of Startup:

### C. AVERAGE DAILY UNIT NET POWER LEVEL LOG

DOCKET NO.: 50-456

UNIT: Braidwood 1 DATE: 05/10/92

COMPILED BY: C. E. Pershey

TELEPHONE: (815)458-2801

ext. 2173

STATE OF THE PARTY	K X X	4 4 4	LOW M.
MONTH:	Arsn 1	1.0	1512
3 4 5 5 5 5 5 7 5 7 5 7 5	TROCK TO S	4 4 4	25.00

MUNIH: A	pr11, 1992			
1	1117	17.	1111	
2.	1115	18.	1110	
3.	1114	19.	1019	
4.	1114	20.	1050	
5.	1113	21.	1049	
6.	1110	22.	1052	
7.	1110	23.	1051	
8.	1111	24.	1107	
9.	1110	25.	1115	
10.	1108	26.	1115	
11	1107	27.	1098	
12.	1108	28.	1112	
13.	1108	29.	1107	
14.	1107	30.	1047	
15	1103	31.		
16.	1105			

#### INSTRUCTIONS

On this form list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt. These figures will be used to plot a graph for each reporting month. Note that when maximum dependable capacity is used for the net electrical rating of the unit there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

# F. LICENSEE EVENT REPORTS - UNIT 1

The following is a tabular summary of all Licensee Event Reports submitted during the reporting period, April 1 through April 30, 1992. This information is provided pursuant to the reportable occurrence reporting requirements as set forth in 10 CFR 50.73.

Licensee Event Report Number	Report Date	Title of Occurrence
92-004	04/22/92	Containment Isolation Valve Closure Caused by Jumper Installation on Wrong Terminal Points.
92-005	04/30/92	Entry into Technical Specification 3.0.3 due to Pressure Channel Failure.

- T. Monthly Report for Braidwood Unit 2
  - A. Summary of Operating Experience

Braidwood Unit 2 entered the month of April, 1992 at approximately 99% power. The Unit operated routinely with no significant power reductions through the end of the month.

### B. OPERATING DATA REPORT

DOCKET NO.: 50-457

UNIT. Braidwood 2 DATE: 05/10/92

COMPILED BY: C. E. Pershey TELEPHONE: (815)458-2801

ext. 2173

#### OPERATING STATUS

1. Reporting Period: April, 1992 Gross Hours: 719

Currently Authorized Power Level (MWt): 3411
 Design Electrical Rating (MWe-gross): 1175
 Design Electrical Rating (MWe-net): 1120
 Max Dependable Capacity (MWe-gross): 1175
 Max Dependable Capacity (MWe-net): 1120

- 3. Power level to which restricted (If Any): None
- 4. Reasons for restriction (If Any): None

		THIS MONTH	YR TO DATE	CUMULATIVE
5.	Report period Hours:	719.0	2903.0	30994.0
6.	Hours Reactor Critical:	719.0	2789.3	25555.9
7.	RX Reserve Shutdown Hours:	0.0	0.0	0.0
8.	Hours Generator on Line:	719.0	2776.9	25316.9
9.	Unit Reserve Shutdown Hours:	0.0	0.0	0.0
10.	Gross Thermal Energy (MWH):	2356176	9003842	74359393
11.	Gross Elec. Energy (MWH):	813020	3104018	25461458
12.	Net Elec. Energy (MWH):	783870	2988062	24350957
13.	Reactor Service Factor:	100.0	96.1	82.5
14.	Reactor Availability Factor:	100.0	96.1	82.5
15.	Unit Service Factor:	100.0	95.7	81.7
16.	Unit Availability Factor:	100.0	95.7	81.7
17.	Unit Capacity Factor (MDC net):	97.3	91.9	70.1
18.	Unit Capacity Factor (DER net):	97.3	91.9	70.1
19.	Unit Forced Outage Rate:	0.0	4.3	4.1
20.	Unit Forced Outage Hours:	0.0	126.1	1073.9
21.	Shutdowns Scheduled Over			
	Next 6 Months:	None		
22.	If Shutdown at End of Report Per	iod,		
	Estimated Date of Startup:			

### C. AVERAGE DAILY UNIT NET POWER LEVEL LOG

DOCKET NO.: 50-457 UNIT: Braidwood 2

DATE: 05/10/92

COMPILED BY: C. E. Pershey TELEPHONE: (815)458-2801

ext. 2173

MONTH:	A	1 1000
MI 10/ I 14	DOM: NO	1 1992
T-15-2717 T-171 A	275 827 2 1 3	1 4 1 2 2 2 5

MONTH: A	pril, 1992		
1	* 1121	17.	* 1130
2	* 1122	18.	* 1130
3	1120	19.	* 1127
4.	1120	20.	1119
5	912	21.	* 1126
6.	745	22,	* 1128
7	812	23	* 1129
8	1074	24.	* 1127
9.	1103	25.	* 1129
10.	1100	26.	* 1130
11.	* 1124	27.	* 1129
12.	1034	28.	* 1129
13	* 1126	29.	* 1127
14.	* 1127	30.	* 1128
15	* 1128	31	
16.	* 1130		

#### INSTRUCTIONS

On this form list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt. These figures will be used to plan a graph for each reporting month. Note that when maximum dependant capacity is used for the net electrical rating of the unit there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

<sup>\*</sup> Due to Condenser Efficiency.

# F. LICENSEE EVENT REPORTS - UNIT 2

The following is a tabular summary of all Licensee Event Reports submitted during the reporting period, April 1 through April 30, 1992. This information is provided pursuant to the reportable occurrence reporting requirements as set forth in 10 CFR 50.73.

Licensee Event Report Number

rt

Title of Occurrence

92-002

04/13/92

Main Feedwater Isolation Caused by Personnel Error D. UNIT SHUTDOWNS/REDUCTIONS

DOCKET NO .: 50-456

UNIT: Braidwood 1

DATE: 05/10/92

COMPILED BY: C. E. Pershey TELEPHONE: (815)458-2801

ext. 2173

REPORT PERIOD: April, 1992

NO DATE TYPE HOURS REASON METHOD LER NUMBER SYSTEM COMPONENT CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE

\* S U M M A R Y \*

F-Forced A-Equipment Failure Maint or Test
S-Scheduled C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administration
G-Oper Error
H-Other

METHOD

1 - Method 2 - Manual Scram 3 - Auto Scram 4 - Continued 5 - Reduced Load

9 - Other

Cubibit E & H

Exhibit F & H
Instructions for Preparation of
Data Entry Sheet
Licensee Event Report
(LER) File (NUREG-0161)

SYSTEM & COMPONENT

(560/ZD85G)11

# E. UNIQUE REPORTING REQUIREMENTS

Safety/Relief valve operations.

DATE

VALYES ACTUATED NO & TYPE ACTUATION PLANT CONDITION PESCRIPTION OF EVENT

None

Licensee generated changes to ODCM.
 See attached.

D. UNIT SHUTDOW'S/REDUCTIONS

97 NO.: 457 UNIT. and dwocd 2

DATE: 05/. 32

PILED BY: C. E. arshey TELEPHONE: (815)458-2801

ext. 2173

REPORT PERIOD: April, 1992

NO DATE TYPE HOURS REASON METHOD LER NUMBER SYSTEM COMPONENT CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE

None

\* S U M M A R Y \*

TYPE

REASON

METHOD

SYSTEM & COMPONENT

F-Forced S-Scheduled A-Equipment Failure Maint or Test

C-Refueling

D-Regulatory Restriction

E-Operator Training & License Examination

F-Administration

G-Oper Error

..-Other

1 - Method

2 - Manual Scram

3 - Auto Scram

4 - Continued

5 - Reduced Load

9 - Other

Exhibit F & H

Instructions for Preparation of

Data Entry Sheet

Licensee Event Report (LER) File (NUREG-0161)

(227/ZD85G)13

## E. UNIQUE REPORTING REQUIREMENTS - UNIT 2

1. Safety/Relief valve operations.

DATE VALVES ACTUATED

NO & TYPE ACTUATION PLANT CONDITION DESCRIPTION OF EVENT

None

2. Licensee generated changes to ODCM.

Sur attached.

### CHANGES TO THE OFFSITE DOSE CALCULATION MANUAL

Changes to the Offsite Dose Calculation Manual (ODCM) are reportable to the Nuclear Regulatory Commission (NRC) in accordance with station Technical Specifications.

Revision 0.G to the Braidwood Annex identia. a new dairy for milk sampling, BD-27, Prussner Farm, replacing BD-11, Mack/Morris Dairy.

This revision does not reduce the accuracy or reliability of dose alculations or setpoint determinations, and has been reviewed and found acceptable by the Onsite Review and Investigative Function.

# Braidwood On-site Review and Investigation Report

OSR Number:	92-037			Date: _	12392
subject Review: Revision O. G of the Offsite Dose Calculat			culation Ho	inual	
		Braidwood Station			
					Anni managa yang
Requested by:	Kim Ale	shire			
Disciplines Requ	uired: MA	Reactor Operati			
		Chemistry	rang		
		Radiation Prote			
		Instrumentation Mechanical and	Electrical System	NS.	
Participants:			EP Coordinate		
	TSS				
	ØF.				
		mild 1 Pro	pervisor	4/29/92	
out nomes and	Tec	hnical Staff Sup	ervisor	Date	
If yes, att with BWAP 1	ach complet 205-6.	ed documentation			
			er Section C.6)	1/0/	2
Findings and Re					
Updata t	o identity o	x new durry to	mult semple	y in here	6066
lastle Ter	housel Spe	estimation Kean	onmend applies	1	
					-
**************************************	********** Committee:	Signature indic Recommendations	cates concurrence and 10CFR50.59	with Finding Safet" Evalua	s and tion.
Signatures		Discipline(s)	Date		
Ven Olak	August	6	4-29-92		
miled 1 Po	-ogu	ABG	4/29/92	APPR	LOVED
TU12-16		E	4-30-92	.1111 (	9 1991
Con Jungh		ABFG	4.30.92	DO A IPS	WOOD
7/		-		ON-SITE	REVIEW
Approved by:	1/14	~		4/30/92	
	STATION	MANAGER		DATE	

130(070991) ZWBWAP

BRAIDWOOD ON-SITE REVIEW

## BRAIDWOOD CM-SITE REVIEW AND INVESTIGATION REPORT

		OSR No.	
	***	**************************************	***
		NOTE	*
	* Th	is checklist is provided as guidance for	OSR *
		paration and review. Items should be	*
	* 00	mpleted as appropriate.	*
	***	***********	****
	Preparer		
	App. N/A		
I.	SYNOPSIS	FORMAT	
- [	x}	- Purpose No dain form for mile Sun - Executive Summary of Findings and Reco	ples
	X]	- Executive Summary of Findings and Reco - References	mmendations
1	1 11	- Bases of Findings one Recommendations	
t	1 (1)	- Contingency Actions Recommended	
II.	DOCUMENT	ATION REVIEWED: (List Applicable Sections	in Synopsis)
	1 10	- HERAR	
1	1 11	- UFSAR - Tech Specs 3 4/12 For some the Ada Admin Tech Requirements	In 100g
ſ	1 11	- Admin Tech Requirements - Safety Evaluation Report - Fire Protection Report - Prior 10CFR50.59 Safety Evals	
1	1 1	- Fire Protection Report	
1	1 [1	- Prior 10CFR50.59 Safety Evals	AND THE RESIDENCE AND DESCRIPTION OF THE PROPERTY OF THE PROPE
1	1 []	- NRC Commitments - Vendor Documentation	
	1 1/1	- Special Permits/Licenses	The second secon
		- Station Procedures - Environmental Qualification	
1	1 [1]	- Design Basis Documentation	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT
h		- Drawings	
	1 1/1	- Drawings - Maint. History (TJM)	
1	1 13	- NPRDS	
1	1 19	- PRA Info. - Prior NED QE 40.1 Operability Evaluati	ons
	1 11		
1	1 1/1		
III.	PLANT CO	NDITIONS: (Discuss Applicable Items in S	ynopsis)
- 1	1 1	- Applicable Modes	
1	1 11	- Work In-Progress/Planted	
1	1 17	- Temporary Alteration Installed	
1	1 11	- Degraded Equipment Log	
- [	1 1	- Abnormal Valve Lineups - Effect on Opposite Train	
1	1 12	- Effect on Other Unit	
	1 1	- Effect on Other Station	
	1 1-1	- Training Required	
	1 11		
IV.	OTHER CO	NSIDERATIONS: (Discuss Applicable Items	in Synopsis)
		Contained (dates decompost no c wa)	ues EID's atc.)
	X X	- Grammar (Continuity, spelling, flow,	tc.)
1	" U	- Grammar (Continuity, spelling, flow, e - Engineering Review of A/E Calculations	and Assumptions
	2 6 2	Adequately Documented - Reportability (10CFR21, 10CFR72, etc)	
	1 1	- rebotcentrick (rocture) rocture, ecc.	
1	1 11		
	nand bus	Kon abole	APPROVED
Prep	ared Dy:		
130/	070991)	(Final) 2 of 2	JUL 0 9 1391
ZHBW			BEAIDWACA

# 10CFR50.59 SCREENING FOR PROCEDURE CHANGES, TESTS, EXPERIMENTS AND EDITORIAL UFSAR CHANGES

Scr	eeni	ng N	(Assigned by Regulatory Assurance)
Pro	cedu	re N	umber
Tit.	le o	f Pr	Colore tion Henrial Braidwood States Annex
Des	crip	tion	of Change (s) Updated to identify a new daily for milk sumpling
Uni	t	elev	Applicable Modes
		**	的自我也有我们我就会们我的我们的我们的我们的的我们的我们的我们的我们的我们的我们的我们的我们的
		-	CAUTION *
		*	THE IMPACT OF ALL CHANGES MUST BE CONSIDERED *
			IN THIS REVIEW. *
		**	的我也你我我我我我我我我我我我我我我我我我我的我我我我我我我我我我我我我我我我
		**	的方面的我们我们我们的我们的我们的我们的我们的我们的我们的我们的我们的我们我们我们的我们我们我们的我们我们
		rt	NOTE *
			Where the preparer is confident that a *
		*	10CFR50.59 Screening will indicate that a *
			Safety Evaluation is required, it is
			permissible to proceed directly to the Safety *
			Evaluation per BwAP 1205-6T1.
		**	的女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女
1.	Is inc	this lude	change an editorial change to an EXISTING procedure? This s but is not limited to the following:
	YES	NO	
	П	图.	Rewording without changing actions to be accomplished:
	0	D	Addition of clarifying information, such as:
			a. Location of components,
			b. Lists of required tools
		X	Changes to personnel proper names or phone numbers
	D	25.	Spelling, grammar, or punctuation changes
	0	B	Format changes (changes to form but not action)
	Said		

APPROVED

MAR 1 1 1991

BRAIDW JD

		① Other. Provide justification as to way this change is an administrative change:
		Is the full scope of this change encompassed by one or more of the above?
		D YES - Proceed to Step 7.
		NO - Proceed to Step 2.
	2.	List the applicable SAR and Technical Specification Sections reviewed for this 10CFR50.59 Screening: Sec. 3/4.12, Form 13
	3,	Does the affected procedure do any of the following?
		a. Establish administrative controls described in the SAR b. Control plant operating conditions described in the SAR c. Implement specific SAR commitments
		O THE - STOP and perform a Safety Localuation per BwAP 1205-6T1. This form may be discarded.
		NO - Proceed to Step 4.
	4.	Is the affected procedure or procedural activity outlined, summarized, or completely described in the SAR or Technical Specifications?
		□ YES - STOP and perform a Safety Evaluation per BwAP 1205-6T1. This form may b* discarded.
		NO - Proceed to Step 5.
	5.	Does the procedure perform tests or experiments not described in the SAR or change the procedure for performing tests/experiments previously approved in accordance with 100°R50.597
~	00	YES - STOP and perform a Safety Evaluation per BwAP 1205-6T1. This form may be discarded.
MAR 25 199	CORRECTED	NO - Proceed to Step 6.
5 199	0	
ments.	E	

APPROVED

MAR 1 1 1991

- 6. Is a revision to BwAP 1205-6A2 needed to add or delete procedures, systems or equipment exempt from 10CFR50.59 review, including changes to the title of a procedure?
  - U YES Fill out BwAP 1205-6T10 to request the change:
  - NO Proceed to Step 7.
- 7. Get Screening Number from Regulatory Assurance and write on Page 1 of this Screening or complete BwAF, 1205-678.
- 8. Proceed with changes based on this evaluation, the proposed change:
  - a. Will not change procedures described in the SAR
  - b. Will not result in a t st/experiment not described in the SAR
  - c. Will not change the techni al content of the UFSAR

Preparer Signature

4-27-92 Date

- Review the reviewer ensures the following:
  - a. All applicable questions are properly completed
  - b. No Safety Evaluation is required

Sign below and send a copy to Regulatory Assurance to be entered into the tracking system.

Cateen M. Joche

Reviewer Signature

4-28-92 Date

(Final)

APPROVED MAR 1 1 1991

BRAIDWOOD ON-SITE REVIEW

# BRAIDHOOD ANNEA INDEX

PACE	REVISION
CHAPTER	11
11-1 11-11 11-11 11-12 11-3 11-4 11-5 11-6 11-7 11-8 11-9 11-10 11-11 11-12 11-13 11-14 11-15	O.A.A. G.G.G. A.A. A.
11-17	0.G

## Table 11-1 (Cont'd)

Exposure Pathway and/or Sample	Sampling or Monitoring Location	Sampling or Sampling or Collection Frequency	Type and Frequency of Analysis
2. <u>Direct Radiation</u> (Cont'd)	BD-209-1, 4.8 mi S (7.7 km s) BD-209-2, 4.8 mi S (7.7 km s) BD-210-1, 4.9 mi SSW (7.9 km s) BD-210-2, 4.9 mi SSW (7.9 km s) BD-211-1, 4.8 mi SW (7.7 km s) BD-211-2, 4.8 mi SW (7.7 km s) BD-212-1, 4.7 mi WSW (7.6 km s) BD-212-2, 4.7 mi WSW (7.6 km s) BD-213-1, 5 mi W (7.2 km s) BD-213-2, 4.5 mi W (7.2 km s) BD-214-1, 4.3 mi WNW (6.9 km s) BD-214-2, 4.3 mi WNW (6.9 km s) BD-215-1, 4.5 mi NW (7.2 km s) BD-215-2, 4.5 mi NW (7.2 km s) BD-215-2, 4.5 mi NW (7.2 km s) BD-216-1, 4.4 mi NNW (7.1 km s) BD-216-2, 4.4 mi NNW (7.1 km s) Lake - 1, 1.0 ni E (1.6 km s) Lake - 2, 1.4 mi S (2.2 km s)	() () () () () () () () () () () () () (	
	c. <u>Special Interest</u> Indicators	Quarterly	Gamma dose quarterly on each TLD.
	Two TLDs at each of the airborne pathway indicator locations specifin Part 1 of this table.	fled	

# Table 11-1 (Cont'd)

	oosure Pathway nd/or Sample	Sampling or Monitoring Locations	Sampling or Collection Frequency	Type and Frequency of Analysis
	Direct Radiation (Cont'd)	Controls		
		Two TLDs at each of the airborne pathway control locations specified in Part 1 of this table.		Gamma dose quarterly on each TLD.
3.	Materborne <sup>e</sup>			
	a. <u>Public Water</u>	BD-22, Wilmington, 5.0 mi NNE (8.0 km B)	Week1y	Gross beta and gamma isotopic analyses monthly composite. Tritium analysis on quarterly composite.
	b. <u>Surface</u>	BD-07, Kankakee River upstream of discharge, 5.4 mi E (8.4 km E)	Weekly	Gamma isotopic analysis on monthly composite from each location. Tritium analysis on quarterly
		BD-10, Kankakee River downstream of discharge, 5.0 mi ENE (8.0 km D)		
		BD-25, Kankakee River upstream of discharge, 9.6 mi E (15.4 km E)		composite from each location.
	c. <u>Ground/Well</u>	BD-13, Braidwood City Hall Well, 1.7 ml NNE (2.7 km B)	Biweekly <sup>f</sup>	Gross beta and gamma isotopic analysis on monthly composite. Tritium analysis on quarterly composite. I-131 analysis biweekly when the dose calculated for consumption is greater than 1 mrem/yr.

- 3. Waterborne<sup>e</sup>
  - d. Cooling Water BD-08, Intake Pipe No. 3, 5.0 mi E (8.0 km E) Heekly BD-09, Discharge Pipe No. 4, 5.0 mi E (8.0 km E)

Gross beta analysis

e. <u>Shoreline</u> <u>Sediments</u> BD-10, Kankakee River downstream of discharge, 5.0 mi ENE (8.0 km D)

Semianaually

Gamma isotopic analysis on each sample.

- 4. Ingestion<sup>e</sup>
  - a. Milk Indicators

    BD-17, Halpin's Dairy, 5.5 mi SSW (8.8 km K)
    BD-26, Gaddis Farm, 11.0 mi ESE (17.6 km F)
    BD-27, Prussner Fare, 11.0 mi S, (17.7 km J)

Semimonthly: May to October Monthly: November to Aprii

Gamma isotopic and I-131 analysis on each sample.

# Controls

BD-18, Biros Farm, 10.5 mi W (16.9 km N)

b. Fish BD-07, Kankakee River upstream of discharge, 5.4 mi E (8.7 km E)

Three times a year (spring, summer, and fall)

Gamma isotopic analysis on edible portions.

- BD-10, Xankakee River downstream of discharge, 5.0 ml ENE (8.0 km D)
- c. <u>Vegetables</u>
  BD-14, Pinnick Farm, 1.8 mi N (2.9 km A)
  BD-15, Girot Farm, 1.4 mi N (2.2 km A)
  BD-16, Clark Farm, 3.3 mi ENE (5.5 km D)

Annually

Gamma isotopic analysis on adible portions.

This page is reserved for Figure 11-3

22 0)

11 113

= Braidwood

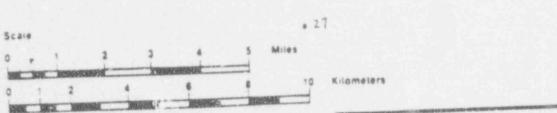
Station

Braceville

16 @

County Line Rd

Essex



Rice Rd

Braidwood

Gardner

South

Wilmington • 17

Location 18.

10.5 miles

OFFSITE DOSE CALCULATION MANUAL BRAIDWOOD STATION

FIGURE 11-3

INGESTION AND WATERBORNE EXPOSURE PATHWAY SAMPLE LOCATIONS