



Commonwealth Edison
Braidwood Nuclear Power Station
Route #1, Box 84
Braceville, Illinois 60407
Telephone 815/458-2801

February 10, 1992
BW/92-0080

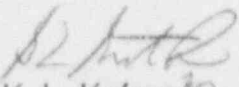
Director, Office of Resource Management
United States Nuclear Regulatory Commission
Washington, D.C. 20555

ATTN: Document Control Desk

Gentlemen:

Enclosed for your information is the Monthly Performance Report covering
Braidwood Nuclear Power Station for the period January 1 through January 31, 1992.

Very truly yours,


K. L. Kofron
Station Manager
Braidwood Nuclear Station

KLK/JL/dla
(227/ZD85G)

Attachments

cc: A. B. Davis, NRC, Region III
NRC Resident Inspector Braidwood
III. 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

9202120244 920131
PDR ADCK 05000456
R PDR

TE24

BRAIDWOOD NUCLEAR POWER STATION

UNIT 1 AND UNIT 2

MONTHLY PERFORMANCE REPORT

COMMONWEALTH EDISON COMPANY

NRC DOCKET NO. 650-456, 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 January, 1992, at approximately 94% reactor power. The unit operated routinely during the month with no significant outages or power reductions.

B. OPERATING DATA REPORT

DOCKET NO.: 50-456
 UNIT: Braidwood 1
 DATE: 02/10/92
 COMPILED BY: C. E. Pershey
 TELEPHONE: (815)458-2801
 ext. 2173

OPERATING STATUS

1. Reporting Period: January, 1992 Gross Hours: 744
2. 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

	<u>THIS MONTH</u>	<u>YR TO DATE</u>	<u>CUMULATIVE</u>
5. Report period Hours:	744.0	744.0	30753
6. Hours Reactor Critical:	744.0	744.0	23024.2
7. RX Reserve Shutdown Hours:	0.0	0.0	0.0
8. Hours Generator on Line:	744.0	744.0	22576.0
9. Unit Reserve Shutdown Hours:	0.0	0.0	0.0
10. Gross Thermal Energy (MWH):	2442760	2442760	67427276
11. Gross Elec. Energy (MWH):	839770	839770	23161962
12. Net Elec. Energy (MWH):	809197	809197	22111121
13. Reactor Service Factor:	100.0	100.0	74.9
14. Reactor Availability Factor:	100.0	100.0	74.9
15. Unit Service Factor:	100.0	100.0	73.4
16. Unit Availability Factor:	100.0	100.0	73.4
17. Unit Capacity Factor (MDC net):	97.1	97.1	64.2
18. Unit Capacity Factor (DER net):	97.1	97.1	64.2
19. Unit Forced Outage Rate:	0.0	0.0	12.3
20. Unit Forced Outage Hours:	0.0	0.0	3151.8
21. Shutdowns Scheduled Over Next 6 Months:	None		
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: 02/10/92
 COMPILED BY: C. E. Pershey
 TELEPHONE: (815)458-2801
 ext. 2173

MONTH: January, 1992

1. _____	1010	_____	17. _____	1117	_____
2. _____	1062	_____	18. _____	1088	_____
3. _____	1088	_____	19. _____	1091	_____
4. _____	1102	_____	20. _____	1074	_____
5. _____	1029	_____	21. _____	1102	_____
6. _____	1079	_____	22. _____	1107	_____
7. _____	1112	_____	23. _____	1045	_____
8. _____	1101	_____	24. _____	1096	_____
9. _____	1112	_____	25. _____	1075	_____
10. _____	1103	_____	26. _____	1088	_____
11. _____	1094	_____	27. _____	1060	_____
12. _____	1078	_____	28. _____	1085	_____
13. _____	1096	_____	29. _____	1109	_____
14. _____	1107	_____	30. _____	1098	_____
15. _____	1107	_____	31. _____	1063	_____
16. _____	1120	_____			

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.

* Due to condenser efficiency.

D. UNIT SHUTDOWNS/REDUCTIONS

DOCKET NO.: 50-456
 UNIT: Braidwood 1
 DATE: 02/10/92
 COMPILED BY: C. E. Pershey
 TELEPHONE: (815)458-2801
 ext. 2173

REPORT PERIOD: January, 1992

<u>No</u>	<u>DATE</u>	<u>TYPE</u>	<u>HOURS</u>	<u>REASON</u>	<u>METHOD</u>	<u>LER NUMBER</u>	<u>SYSTEM</u>	<u>COMPONENT</u>	<u>CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE</u>
-----------	-------------	-------------	--------------	---------------	---------------	-------------------	---------------	------------------	--

None

 * SUMMARY *

<u>TYPE</u>	<u>REASON</u>	<u>METHOD</u>	<u>SYSTEM & COMPONENT</u>
F-Forced	A-Equipment Failure	1 - Manual	Exhibit F & H
S-Scheduled	B-Maint or Test	2 - Manual Scram	Instructions for Preparation of
	C-Refueling	3 - Auto Scram	Data Entry Sheet
	D-Regulatory Restriction	4 - Continued	Licensee Event Report
	E-Operator Training & License Examination	5 - Reduced Load	(LER) File (NUREG-0161)
	F-Administration	9 - Other	
	G-Oper Error		
	H-Other		

(227/2D85G)6

E. UNIQUE REPORTING REQUIREMENTS - Unit 1

1. Safety/Relief valve operations.

<u>DATE</u>	<u>VALVES ACTUATED</u>	<u>NO & TYPE ACTUATION</u>	<u>PLANT CONDITION</u>	<u>DESCRIPTION OF EVENT</u>
	None			

2. Licensee generated changes to ODCM.

See attached.

(227/ZD85G)7

F. LICENSEE EVENT REPORTS - UNIT 1

The following is a tabular summary of all Licensee Event Reports submitted during the reporting period, January 1 through January 31, 1992. This information is provided pursuant to the reportable occurrence reporting requirements as set forth in 10 CFR 50.73.

<u>Licensee Event Report Number</u>	<u>Report Date</u>	<u>Title of Occurrence</u>
---	------------------------	----------------------------

None

I. Monthly Report for Braidwood Unit 2

A. Summary of Operating Experience

Braidwood Unit 2 entered the month of January, 1992, at approximately 96% reactor power. The unit operated routinely during the month until January 26, 1992, when load was reduced to perform scheduled maintenance on the Heater Drains system. The unit operated routinely through the end of the month following this maintenance.

B. OPERATING DATA REPORT

DOCKET NO.: 50-457
 UNIT: Braidwood 2
 DATE: 02/10/92
 COMPILED BY: C. E. Pershey
 TELEPHONE: (815)458-2801
 ext. 2173

OPERATING STATUS

1. Reporting Period: January, 1992 Gross Hours: 744
 2. 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
- | | <u>THIS MONTH</u> | <u>YR TO DATE</u> | <u>CUMULATIVE</u> |
|-------------------------------------|-------------------|-------------------|-------------------|
| 5. Report period Hours: | 744 | 744 | 28835 |
| 6. Hours Reactor Critical: | 744 | 744 | 23510.6 |
| 7. RX Reserve Shutdown Hours: | 0.0 | 0.0 | 0.0 |
| 8. Hours Generator on Line: | 744 | 744 | 23284.0 |
| 9. Unit Reserve Shutdown Hours: | 0.0 | 0.0 | 0.0 |
| 10. Gross Thermal Energy (MWH): | 2422273 | 2422273 | 67777824 |
| 11. Gross Elec. Energy (MWH): | 836260 | 836260 | 23193700 |
| 12. Net Elec. Energy (MWH): | 805962 | 805962 | 22168857 |
| 13. Reactor Service Factor: | 100 | 100 | 81.5 |
| 14. Reactor Availability Factor: | 100 | 100 | 81.5 |
| 15. Unit Service Factor: | 100 | 100 | 80.7 |
| 16. Unit Availability Factor: | 100 | 100 | 80.7 |
| 17. Unit Capacity Factor (MDC net): | 96.7 | 96.7 | 68.6 |
| 18. Unit Capacity Factor (DER net): | 96.7 | 96.7 | 68.6 |
| 19. Unit Forced Outage Rate: | 0.0 | 0.0 | 3.9 |
| 20. Unit Forced Outage Hours: | 0.0 | 0.0 | 947.8 |
21. Shutdowns Scheduled Over Next 6 Months: None
 22. If Shutdown at End of Report Period,
 Estimated Date of Startup: _____

C. AVERAGE DAILY UNIT NET POWER LEVEL LOG

DOCKET NO.: 50-457
 UNIT: Braidwood 2
 DATE: 02/10/92
 COMPILED BY: C. E. Pershey
 TELEPHONE: (815)458-2801
 ext. 2173

MONTH: January, 1992

1. _____	1065	_____	17. _____	1047	_____
2. _____	1069	_____	18. _____	1097	_____
3. _____	1078	_____	19. _____	1089	_____
4. _____	1103	_____	20. _____	1098	_____
5. _____	1099	_____	21. _____	1103	_____
6. _____	1095	_____	22. _____	1105	_____
7. _____	1115	_____	23. _____	1087	_____
8. _____	1118	_____	24. _____	1092	_____
9. _____	*1127	_____	25. _____	1068	_____
10. _____	1119	_____	26. _____	683	_____
11. _____	1095	_____	27. _____	1087	_____
12. _____	1075	_____	28. _____	1120	_____
13. _____	1093	_____	29. _____	1111	_____
14. _____	1109	_____	30. _____	1098	_____
15. _____	1114	_____	31. _____	1089	_____
16. _____	1120	_____			

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.

* Due to condenser efficiency.

D. UNIT SHUTDOWNS/REDUCTIONS

DOCKET NO.: 50-457
 UNIT: Braidwood 2
 DATE: 02/10/92
 COMPILED BY: C. E. Pershey
 TELEPHONE: (815)458-2801
 ext. 2173

REPORT PERIOD: January, 1992

<u>No</u>	<u>DATE</u>	<u>TYPE</u>	<u>HOURS</u>	<u>REASON</u>	<u>METHOD</u>	<u>LER NUMBER</u>	<u>SYSTEM</u>	<u>COMPONENT</u>	<u>CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE</u>
1	920126	S	19.3	B	5	N/A	SI	STR	Load reduction taken to perform a scheduled Heater Drain pump strainer flush. Pump was returned to service prior to power ascension.

 * S U M M A R Y *

<u>TYPE</u>	<u>REASON</u>	<u>METHOD</u>	<u>SYSTEM & COMPONENT</u>
F-Forced	A-Equipment Failure	1 - Manual	Exhibit F & H
S-Scheduled	B-Maint or Test	2 - Manual Scram	Instructions for Preparation of
	C-Refueling	3 - Auto Scram	Data Entry Sheet
	D-Regulatory Restriction	4 - Continued	Licensee Event Report
	E-Operator Training & License Examination	5 - Reduced Load	(LER) File (NUREG-0161)
	F-Administration	9 - Other	
	G-Oper Error		
	H-Other		

E. UNIQUE REPORTING REQUIREMENTS - UNIT 2

1. Safety/Relief valve operations.

<u>DATE</u>	<u>VALVES ACTUATED</u>	<u>NO & TYPE ACTUATION</u>	<u>PLANT CONDITION</u>	<u>DESCRIPTION OF EVENT</u>
	None			

2. Licensee generated changes to ODCM.

See attached.

F. LICENSEE EVENT REPORTS - UNIT 2

The following is a tabular summary of all Licensee Event Reports submitted during the reporting period, January 1 through January 31, 1992. This information is provided pursuant to the reportable occurrence reporting requirements as set forth in 10 CFR 50.73.

<u>Licensee Event Report Number</u>	<u>Report Date</u>	<u>Title of Occurrence</u>
91-006	01-13-92	Generator trip caused by spurious actuation of neutral ground relay.

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.

Part I of Revision O.F. to the Braidwood Annex identifies a new dairy for milk sampling, BD-26, Gaddis Farm, replacing BD-18, Biros Dairy Farm.

This revision does not reduce the accuracy or reliability of dose calculations 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: 92-007 Date: 1-23-92

Subject Review: Offsite Dose Calculation Manual (ODCM), Rev 2 of Rev O.F.,
pages 11-7 and 11-9 of Chapter 11, Braidwood Annex

Requested by: Kim Aleshire

- Disciplines Required:
- A Nuclear Power Plant Technology
 - B Reactor Operations
 - C Reactor Engineering
 - D Chemistry
 - E Radiation Protection
 - F Instrumentation and Control
 - G Mechanical and Electrical Systems

Participants: RP Supervisor OE
TSS
EP coord.

OSR Membership Approved Miked J. Proge 1/23/92
Technical Staff Supervisor / Date

10CFR50.59 Screening and/or Safety Evaluation is Required? - - - Y/ N
If yes, attach completed documentation in accordance with BWAP 1205-6.

Concurrence Required by Offsite Review? (per Section C.6) - - - Y/ N

Findings and Recommendations:

updated to identify a new duty for milk sampling in
accordance with Technical Specifications Recommend
approval.

On-Site Review Committee: Signature indicates concurrence with Findings and Recommendations and 10CFR50.59 Safety Evaluation.

Signatures	Discipline(s)	Date
<u>Miked J. Proge</u>	<u>A B G</u>	<u>1/23/92</u>
<u>Kim Aleshire</u>	<u></u>	<u>1-23-92</u>
<u>Ellen M. Stark</u>	<u></u>	<u>1-23-92</u>
<u>J. Hall</u>	<u>ABG</u>	<u>1-27-92</u>

APPROVED

JUL 09 1991

BRAIDWOOD
ON-SITE REVIEW

Approved by: [Signature] 1-31-92
STATION MANAGER / DATE

BRAIDWOOD ON-SITE REVIEW AND INVESTIGATION REPORT

OSR No. _____

* NOTE *
* This checklist is provided as guidance for OSR *
* preparation and review. Items should be *
* completed as appropriate. *

Preparer
APP. N/A

I. SYNOPSIS FORMAT

- Purpose New dairy farm fw milk samples
- Executive Summary of Findings and Recommendations
- References
- Bases of Findings and Recommendations
- Contingency Actions Recommended

II. DOCUMENTATION REVIEWED: (List Applicable Sections in Synopsis)

- UFSAR
- Tech Specs. 3rd 12 Environmental Monitoring
- Admin Tech Requirements
- Safety Evaluation Report
- Fire Protection Report
- Prior 10CFR50.59 Safety Evals
- NRC Commitments
- Vendor Documentation
- Special Permits/Licenses
- Station Procedures
- Environmental Qualification
- Design Basis Documentation
- Drawings
- Maint. History (TJM)
- NPRDS
- PRA Info.
- Prior NED QE 40.1 Operability Evaluations

III. PLANT CONDITIONS: (Discuss Applicable Items in Synopsis)

- Applicable Modes
- Work In-Progress/Planned
- Temporary Alteration Installed
- Out-of-Service
- Degraded Equipment Log
- Abnormal Valve Lineups
- Effect on Opposite Train
- Effect on Other Unit
- Effect on Other Station
- Training Required

IV. OTHER CONSIDERATIONS: (Discuss Applicable Items in Synopsis)

- Consistency (dates, document no.s, values, EID's etc.)
- Grammar (Continuity, spelling, flow, etc.)
- Engineering Review of A/E Calculations and Assumptions Adequately Documented
- Reportability (10CFR21, 10CFR72, etc)

Prepared by: Kim Alshari 12392

APPROVED

JUL 09 1991

BRAIDWOOD
BRAIDWOOD ANNEX INDEX

REVISION 0.F
DECEMBER 1991

PAGE REVISION

CHAPTER 11

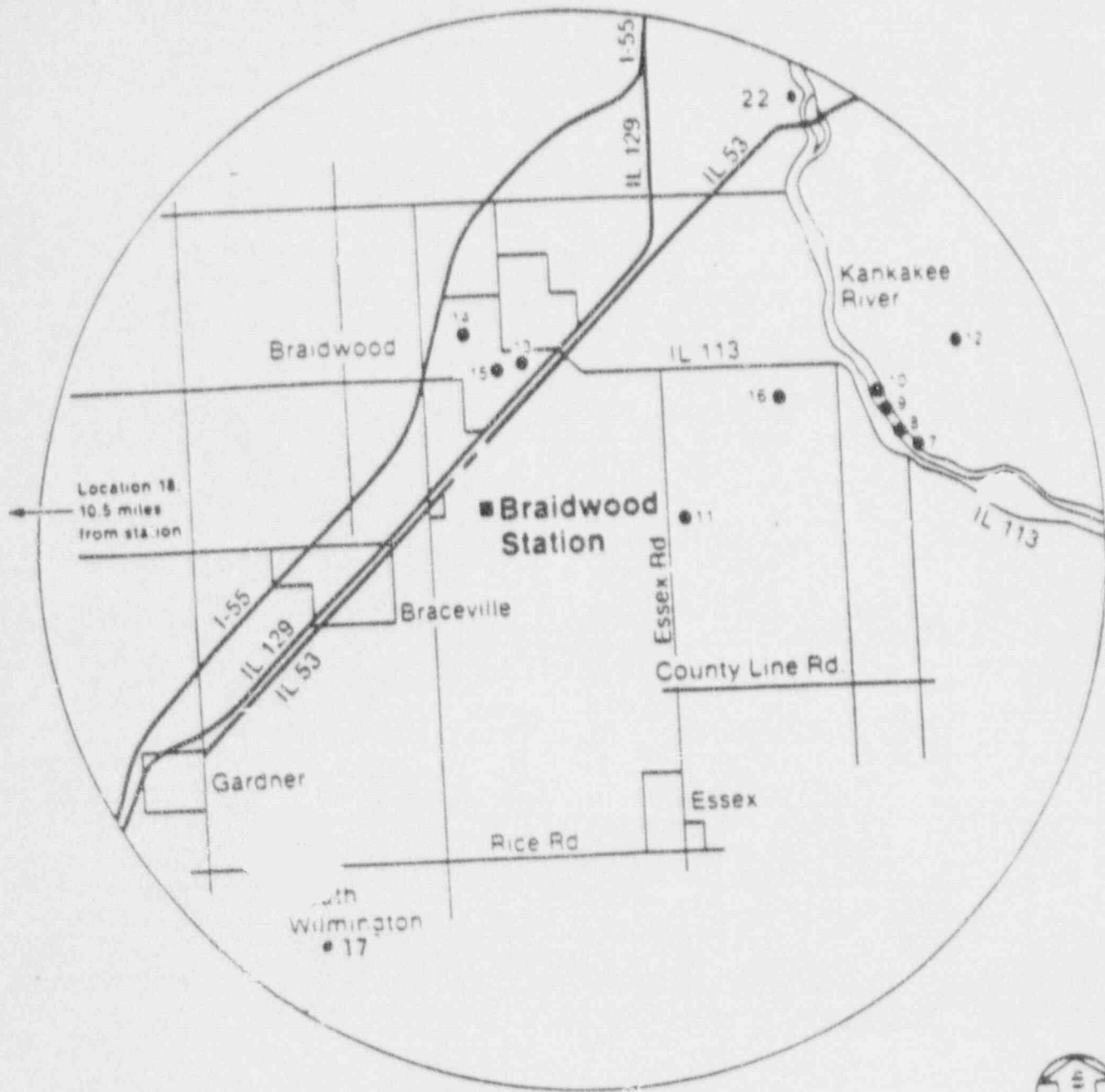
11-i	0.F
11-ii	0.A
11-iii	0.A
11-iv	0.A
11-1	0
11-2	0
11-3	0
11-4	0
11-5	0
11-6	0.D
11-7	0.F
11-8	0
11-9	0.A
11-10	0.A
11-11	0
11-12	0.A
11-13	0
11-14	0
11-15	0
11-'6	0
11-7	0.F

3. Waterborne^e
(Cont'd)

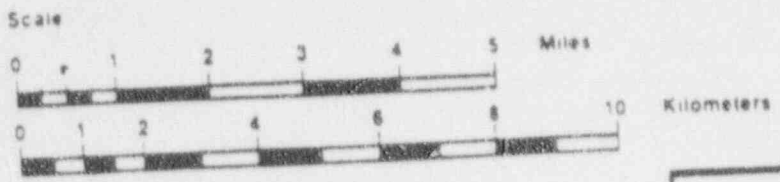
- d. Cooling Water BD-08, Intake Pipe No. 3, 5.0 mi E (8.0 km E) Weekly Gross beta analysis
BD-09, Discharge Pipe No. 4, 5.0 mi E
(8.0 km E)
- e. Shoreline Sediments BD-10, Kankakee River downstream of discharge, 5.0 mi ENE (8.0 km D) Semiannually Gamma isotopic analysis on each sample.

4. Ingestion^e

- a. Milk Indicators Semimonthly: May to October
Monthly: November to April Gamma isotopic and I-131 analysis on each sample.
BD-11, Morris/Mack Farm, 2.4 mi E (3.9 km E)
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)
- 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, Kankakee River downstream of discharge, 5.0 mi ENE (8.0 km D)
- c. Vegetables BD-14, Pinnick Farm, 1.8 mi N (2.9 km A) Annually Gamma isotopic analysis on edible portions.
BD-15, Girot Farm, 1.4 mi N (2.2 km A)
BD-16, Clark Farm, 3.3 mi ENE (5.5 km D)



DD-26 •



OFFSITE DOSE CALCULATION MANUAL
BRAIDWOOD STATION

FIGURE 11-3
INGESTION AND WATERBORNE EXPOSURE
PATHWAY SAMPLE LOCATIONS