

BAILLY SITE DESCRIPTION

March 23, 1981

- SITE ACQUIRED IN 1932
- 350 ACRES IN PORTER COUNTY, INDIANA

- BOUNDED

NORTH	LAKE MICHIGAN
EAST	NATIONAL LAKESHORE
SOUTH	INDUSTRIAL
WEST	INDUSTRIAL

- FOUR COMMUNITIES WITHIN FIVE MILES
- GARY IS 12 MILES DISTANT
- CHICAGO IS 30 MILES DISTANT
- EXCLUSION BOUNDARY IS 188 METERS
- LPZ BOUNDARY IS 1.5 MILES
- TWO FOSSIL PLANTS (1962 & 1968)
- ADJACENT TO VERY HEAVY INDUSTRY

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BAILLY PLANT DESCRIPTION

- BAR 5 (GE)
- 1931 MWt (652 MWe)
- NATURAL DRAFT COOLING TOWER
- CONTAINMENT MARK II DESIGN
 - PRIMARY STEEL LINER, PRESTRESSED CONCRETE
 - SECONDARY REINFORCED CONCRETE
- FOUNDATION DESIGN IS HIGH CAPACITY PILES
- LAKE MICHIGAN IS ULTIMATE HEAT SINK

SELECTED RAILLY CHRONOLOGY

CP APPLICATION TENDERED	8/70
SER ISSUANCE	2/72
FIRST CP HEARING	10/72
FES	2/73
SECOND CP HEARING (START)	4/73
(FINISH)	11/73
CP ISSUANCE	5/74
STAY OF CONSTRUCTION (U.S. COURT OF APPEALS)	9/74
RELEASE OF STAY	11/76
PILE PLACEMENT PROPOSAL (JETTING)	9/77
STAFF DENIAL OF JETTING	2/78
SHORTER PILE PROPOSAL	3/78
CP EXTENSION REQUEST	2/79
CP EXPIRATION	9/79
CP EXTENSION HEARING OFFERED	11/79
CP EXTENSION PREHEARING CONFERENCE	3/80
BOARD ORDER FOLLOWING CONFERENCE	8/80

1970 POPULATION DISTRIBUTION

<u>RADIAL DISTANCE</u> <u>(MILES)</u>	<u>POPULATION</u>	<u>POPULATION</u> <u>DENSITY</u>
1	0	0
2	404	64
3	2,975	105
4	11,384	227
5	20,152	257
10	84,000	268
50	6,700,000	855

COMPARISON OF BAILLY IN 2000 AD
WITH OTHER FACILITIES

FACILITY	POPULATION (0-10 MILES)	DENSITY (/SQ. MI.)
1 INDIAN POINT	290,000	925
2 ZION	290,000	925
3 FERMI	240,000	765
4 TURKEY POINT	240,000	765
5 LIMERICK	220,000	700
6 TUL	210,000	670
7 MILLSTONE	150,000	480
8 BEAVER VALLEY	130,000*	414
9 BAILLY	130,000*	414
10 SEABROOK	130,000*	414

*RANKED IN ORDER OF PRESENT POPULATION WHICH IS 110, 84 AND 79
THOUSAND, RESPECTIVELY.

COMPARISON OF BAILLY IN 2000 AD

WITH

OTHER FACILITIES

	<u>FACILITY</u>	<u>POPULATION</u> <u>(0-50 MILES)</u>	<u>DENSITY</u> <u>(#/SQ. MI.)</u>
1	INDIAN POINT	24.0×10^5	3060
2	DRESDEN	13.0	1660
3	ZION	11.0	1400
4	LIVERICK	10.0	1270
5	BAILLY	10.0	1270
6	FERMI	9.6	1220
7	SHOREHAM	7.5	950
8	SALEM	6.8	870
9	HADDAM	6.7	850
10	PEACH BOTTOM	6.4	810

COMPARISON OF BAILLY WITH
OTHER SITES HAVING HIGH SECTOR POPULATIONS

A. BASED ON 1970 CENSUS DATA AT 10 MILES

1. ZION	(2)*	55,000; 43,000; 41,000
2. MILLSTONE	(7)	39,000
3. DYANE ARNOLD	-	38,000
4. THREE MILE ISLAND	(6)	35,000
5. INDIAN POINT	(1)	32,000
6. TROJAN	-	32,000
7. BEAVER VALLEY	(8)	31,000; 31,000
8. INDIAN POINT	(1)	30,000; 30,000

B. BASED ON 1970 CENSUS DATA AT 30 MILES

1. INDIAN POINT		1,570,000; 900,000
2. LIVERICK		1,370,000; 650,000
3. BAILLY		900,000
4. FERM		800,000; 770,000
5. WATERFORD		700,000

C. BASED ON 1970 CENSUS DATA AT 50 MILES

1. INDIAN POINT	(1)**	8,000,000; 2,900,000; 2,300,000
2. DRESDEN	(2)	3,500,000
3. BAILLY	(5)	3,200,000
4. ZION	(3)	3,200,000
5. SALEM	(8)	2,700,000
6. SHIPERAN	(7)	2,100,000
7. FERM	(5)	2,100,000

*RANKING BASED ON TOTAL POPULATION AT 10 MILES

COMPARISON OF BAILLY WITH
OTHER SITES HAVING HIGH SITE POPULATION FACTORS (SPF)
 (SPF DEFINED AS IN WASH-1235)

A. BASED ON HIGH SPF AT 10 MILES FOR 1970 CENSUS DATA

		<u>SPF</u>	<u>SPF X POWER LEVEL</u>
1.	INDIAN POINT 2/5 (1)*	.327	929.2
2.	LIMERICK 1/2 (2)	.288	848.4
3.	ZION (3)	.286	929.5
4.	MILLSTONE 2 (5)	.206	527.4
5.	THREE MILE ISLAND 2 (6)	.175	487.0
6.	FERMI 2 (4)	.171	553.1
7.	BEAVER VALLEY (8)	.151	427
9.	SEABROOK (7)	.137	457.3

B. BASED ON HIGH SPF AT 50 MILES FOR 1970 CENSUS DATA

		<u>SPF</u>	<u>SPF X POWER LEVEL</u>
1.	INDIAN POINT (2)*	.543	1542.3
2.	LIMERICK 1/2 (1)	.507	1660.5
3.	FERMI 2 (3)	.316	1040.6
4.	ZION (4)	.281	913
5.	BAILLY (9)	.251	503.9
5.	BEAVER VALLEY (5)	.251	365.7
7.	SHOREHAM (8)	.222	342.6
8.	THREE MILE ISLAND 2 (7)	.205	553.5
9.	HADDAM NECK (11)	.219	339.7
10.	SEABROOK (6)	.171	504.3
11.	MILLSTONE 2 (10)	.155	402.4

*RANKING BASED ON SPF X POWER LEVEL

C. BASED ON HIGH SPF AT 50 MILES FOR 1970 CENSUS DATA

		SPF	SPF x POWER LEVEL
1. INDIAN POINT	(1)*	.899	2719.5
2. LIMERICK	(2)	.515	1695.9
3. ZION	(3)	.403	1374.7
4. BAILY	(8)	.355	705.8
5. FERMI 2	(4)	.358	1182.2
6. SHOREHAM	(9)	.278	677.2
7. BEAVER VALLEY	(7)	.276	713.9
8. DRESDEN 2/3	(10)	.251	634.3
9. SEABROOK	(5)	.224	765.4
10. SALEM	(6)	.219	731
11. HADDEN NECK	(14)	.219	393.7
12. PILGRIM 1	(15)	.205	409.6
13. MILLSTONE 2	(12)	.197	509.4
14. THREE MILE ISLAND 2	(11)	.109	525.9

*RANKING BASED ON SPF x POWER LEVEL

COMPARISON OF BAILLY WITH
OTHER SITES HAVING HIGH SPE'S

BASED ON HIGH SPE X POWER LEVEL

<u>10 MILES</u>		<u>50 MILES</u>	<u>50 MILES</u>
(BAILLY	1	LIMERICK	2
DOES	2	INDIAN POINT	1
NOT	3	FERMI	4
APPEAR	4	ZION	3
ON	5	BEAVER VALLEY	7
LIST)	6	SEABROOK	5
	7	TMI	11
	8	SHOREHAM	9
	9	BAILLY	8

SUMMARY OF BALDWIN'S RANKING

FOR

FOUR POPULATION CRITERIA

<u>TOTAL POPULATION</u>	<u>RANKING</u>
0-10 MILES IN 2000 AD	9
0-50 MILES IN 2000 AD	5
<u>HIGH SECTOR POPULATION*</u>	
10 MILES	-
30 MILES	3
50 MILES	3
<u>HIGH SFP*</u>	
10 MILES	-
30 MILES	5
50 MILES	4
<u>HIGH SFP x POWER LEVEL*</u>	
10 MILES	-
30 MILES	9
50 MILES	3
<u>MAXIMUM EVACUATION TIME</u>	
WINTER	5
SUMMER	3

*BASED ON 1970 CENSUS

COMPARISON OF BAILLY'S EVACUATION TIME
WITH THOSE OF OTHER FACILITIES

	<u>FACILITY</u>	<u>MAX. EVACUATION</u> <u>TIME (MINUTES)</u>	<u>CONDITION</u>
1	MAINE YANKEE	355	BAD WEATHER
2	HILLSTONE	316	SUNNY
3	BAILLY	294*	SUNNY
4	BEAVER VALLEY	250	BAD WEATHER
5	TMI	200	BAD WEATHER
6	LIMERICK	190	SUNNY, BAD WEATHER
7	SHOREHAM	176	SUNNY
8	MIDLAND	175	BAD WEATHER
9	FERMI	125	BAD WEATHER

COMPARISON OF BAILLY EVACUATION TIMES
WITH THOSE OF OTHER FACILITIES

	<u>FACILITY</u>	<u>MINUTES</u>		<u>MAXIMUM SECTOR POPULATION</u>
				<u>AT 10 MILES</u>
1.	BEAVER VALLEY	245	(7)*	31,000; 31,000
2.	LIVERICK	190	-	N/A
3.	MILLSTONE	185	(2)	39,000
4.	TNI	180	(4)	35,000
5.	BAILLY	180	-	N/A
6.	SHOREHAM	155	-	N/A
7.	MIDLAND	145	-	N/A

SUMMARY OF STAFF REVIEW

OF THE

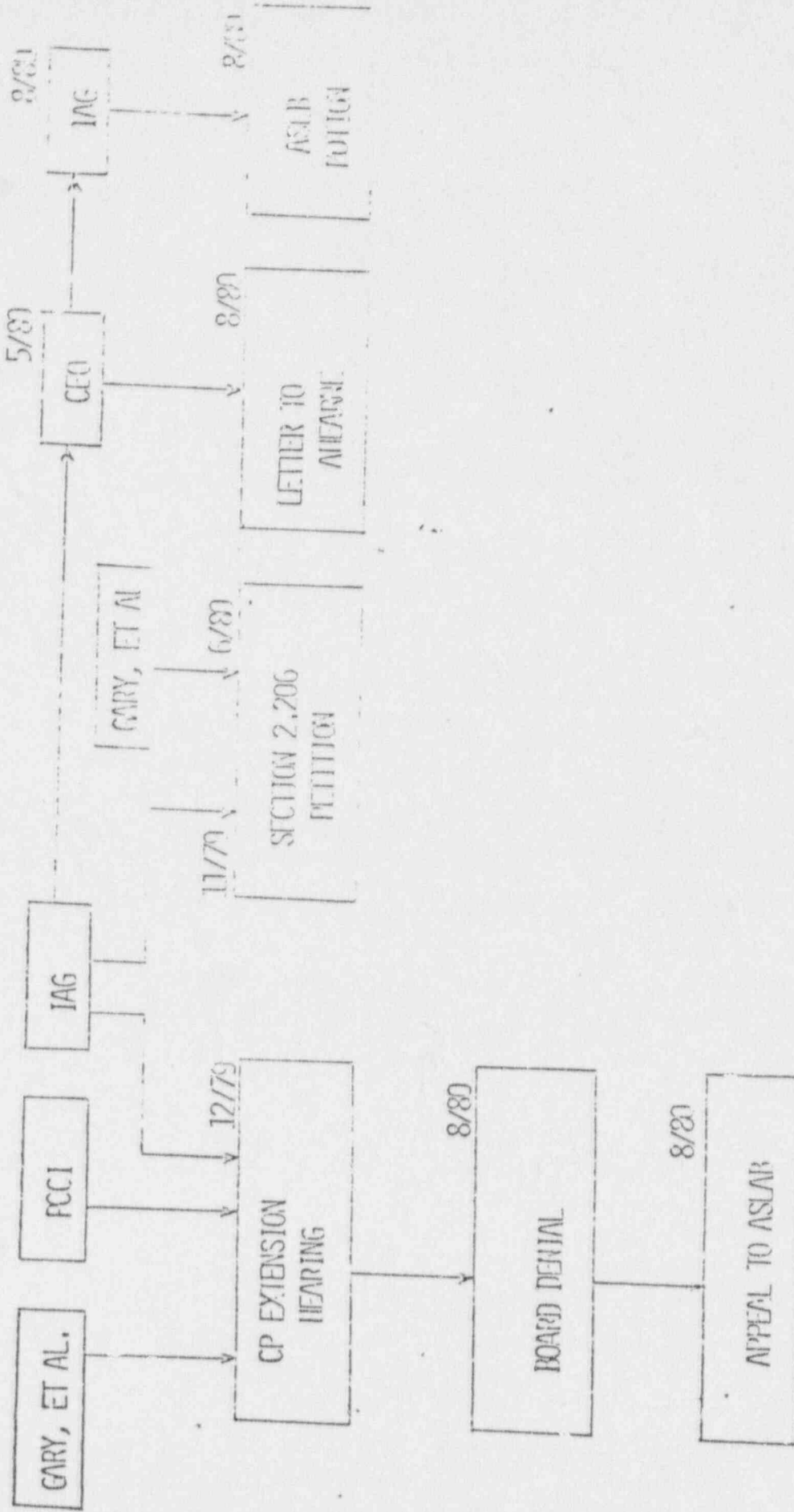
BAILY SHORTER PILE PROPOSAL

<u>EVENT</u>	<u>DATE</u>
NIPSCO PROPOSES JETTING	9/77
STAFF VIEW JETTING APPLICATION	9/77
STAFF LETTER REJECTING JETTING	2/78
NIPSCO PROPOSAL FOR SHORTER PILES	3/78
NIPSCO REPORT ON INDICATOR PILES	9/78
INDICATOR PILE PROGRAM STARTED	10/78
NIPSCO FINAL REPORT ON PROPOSAL	12/78
ACRS REVIEW OF PILE PROPOSAL	7/79
STAFF DECISION TO RETAIN USCOE	8/79
USCOE STARTS	10/79
STAFF ISSUES EVALUATION	9/80

SECTION 7.216 PETITIONS

<u>ISSUE</u>	<u>SUBMITTED</u>	<u>STAFF ACTION</u>	<u>COMMISSION REVIEW</u>	<u>COURT ACTION</u>
PK 11 LOADS, NEED FOR POWER, FINANCIAL CAPABILITY, ETC.	11/76	DENIED 4/77	DENIED 4/78	DENIED 9/79
SHORT PILE PROPOSAL	11/78	-	DENIED 12/79	PENDING
SITE SUITABILITY	11/79	PENDING	-	-

REQUEST FOR HEARINGS ON THE
SITE SUSTAINABILITY ISSUE



REQUEST FOR HEARINGS
FOLLOWING THE PACH 1978
SIDRA PILL IN LOCAL

