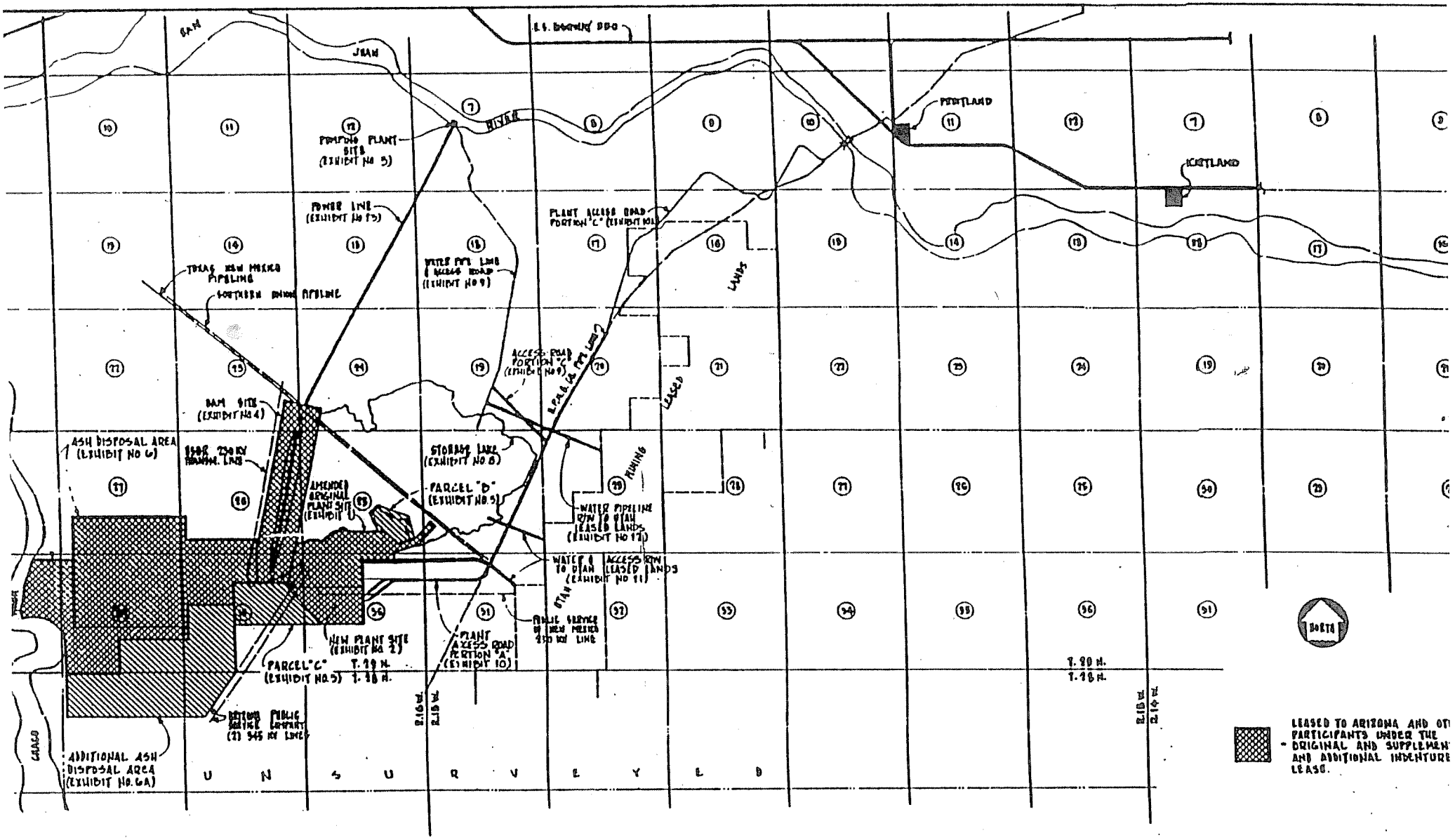
Section 6

Map of Four Corners Power Plant Lease Boundary


SAN
JUAN
RIVER
PORTLAND
KIRTLAND
POWER PLANT SITE (EXHIBIT NO 3)
POWER LINE (EXHIBIT NO 13)
PLANT ACCESS ROAD PORTION "C" (EXHIBIT NO 11)
WATER PIPE LINE & ACCESS ROAD (EXHIBIT NO 9)
TEXAS NEW MEXICO PIPELINE
SOUTHERN UNION PIPELINE
ACCESS ROAD PORTION "C" (EXHIBIT NO 9)
L.P.G.A. PIPE LINE
LANDS
LEASED
DAM SITE (EXHIBIT NO 4)
ASH DISPOSAL AREA (EXHIBIT NO 6)
STORAGE LAKE (EXHIBIT NO 8)
PARCEL "D" (EXHIBIT NO 5)
AMENDED ORIGINAL PLANT SITE (EXHIBIT 1)
MINING
WATER PIPELINE R/W TO UTAH LEASED LANDS (EXHIBIT NO 12)
WATER & ACCESS R/W TO UTAH LEASED LANDS (EXHIBIT NO 11)
UTAH
PUBLIC SERVICE OF NEW MEXICO 345 KV LINE
NEW PLANT SITE (EXHIBIT NO 2)
PLANT ACCESS ROAD PORTION "A" (EXHIBIT 10)
PARCEL "C" (EXHIBIT NO 5)
T. 29 N.
T. 28 N.
R. 16 W.
R. 15 W.
R. 13 W.
R. 14 W.
NORTHERN PUBLIC SERVICE COMPANY (2) 345 KV LINES
ADDITIONAL ASH DISPOSAL AREA (EXHIBIT NO. 6A)
U N S U R V E Y E D
NORTH
LEASED TO ARIZONA AND OTHER PARTICIPANTS UNDER THE ORIGINAL AND SUPPLEMENTAL AND ADDITIONAL INDENTURE LEASE.

Section 7

Four Corners NPDES Analysis Performed by Contract Laboratories

NPDES APPLICATION ANALYSIS PERFORMED
By Contract Laboratories

1. Green Analytical Laboratories, Inc.
   75 Suttle Street
   Durango, CO 81303
   (970) 247-4220

   Parameters Analyzed:
   - Part A Except temperatures, pH and flow
   - Part B Except Chlorine
   - Part C Metals, cyanide and total phenols

2. Test America
   4625 East Cotton Center Blvd
   Ste 189
   Phoenix, AZ 85040
   (602) 437-3340

   Parameters Analyzed:

   - All metals
   - Organics
   - Inorganics

3. OMI, Inc.
   615 South Carlton Ave.
   Farmington, NM 87401
   (505) 325-6953

   Parameters Analyzed:

   - Microbiological
   - Fecal Coliform

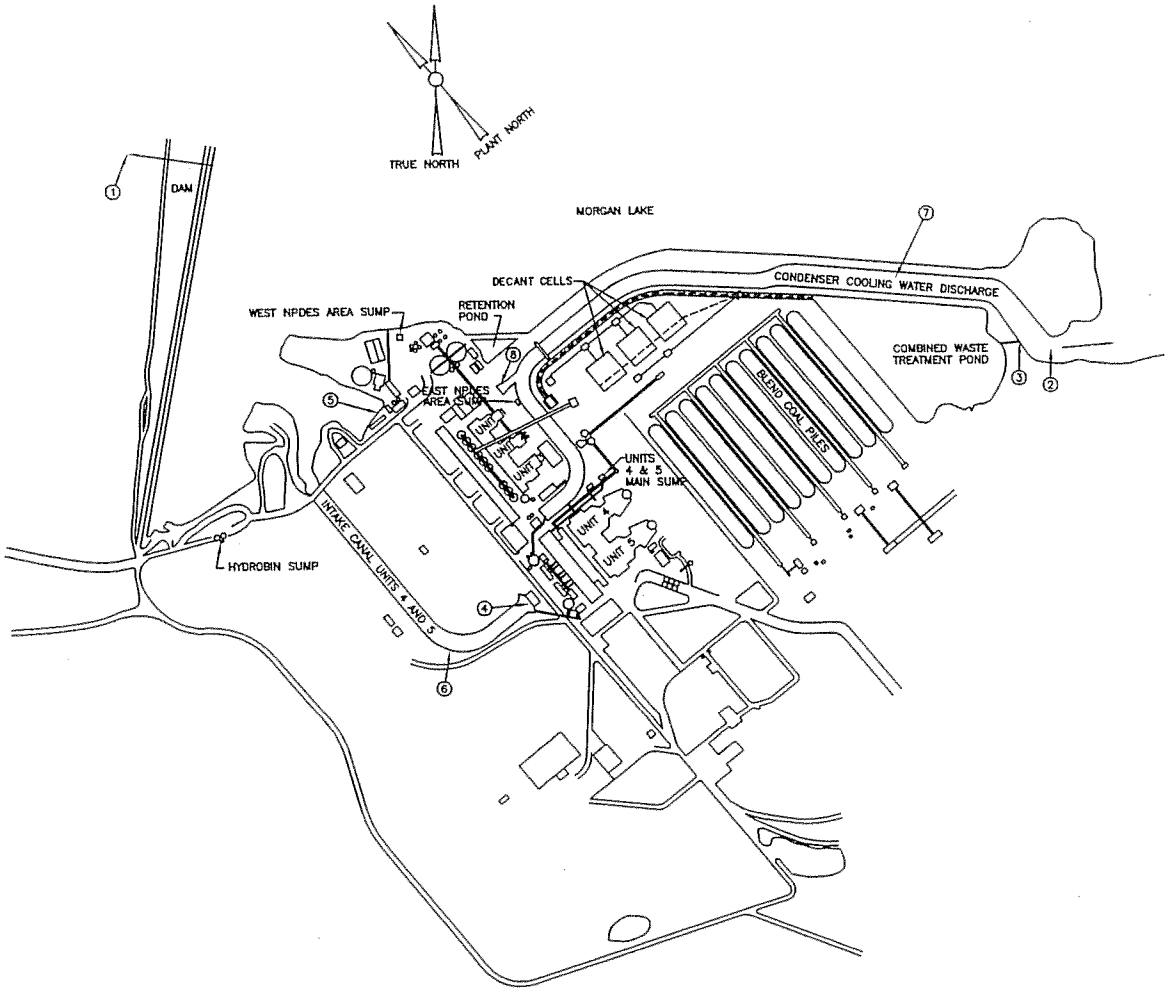
4. Aquatic Consulting and Testing
   1525 W. University Drive
   Suite 106
   Tempe, AZ 85281
   (480) 921-8044

   Parameters Analyzed:

   - Chronic Toxicity Testing

Section 8

Four Corners NPDES Schematic of Existing Permit Sample Points



NPDES PERMITTED OUTFALLS

1. OUTFALL 001 – COOLING POND DISCHARGE
2. OUTFALL 01A – CONDENSER COOLING WATER DISCHARGE
3. OUTFALL 01E – COMBINED WASTE TREATMENT POND DISCHARGE

STORMWATER DISCHARGE POINTS

4. SW1 – UNITS 4 & 5 CIRCULATING COOLING INTAKE AREA
5. SW2 – UNITS 1, 2 & 3 CIRCULATING COOLING INTAKE AREA
6. SW3 – UNITS 4 & 5 CIRCULATING COOLING INTAKE AREA

OIL SPILL PREVENTION

7. OIL BOOM/ABSORBENT INSTALLATION
8. OIL ABSORBENT INSTALLATION

NO.	DATE	REVISION	DWN	CHD	EXD	RVWD	APVD	W.A.
3	08-27-09	ADDED DECANT CELLS	MDC		CM	CM	BS	
2	08-23-04	ADDED/REVISED DRAWING	MDC			RBI	BS	
1	03-08-88	GENERAL REVISION	MDC			RBI	BS	

FOUR CORNERS
COMMON
N.P.D.E.S. PERMITTED OUTFALLS AND STORMWATER DISCHARGE POINTS

APS

SCALE NONE DATE 09-16-95

DWN MDC
CHD WB
EXD RDB
RVWD

APPROVED
DAVID C. BLOOMFIELD
ENGINEERING SUPERVISOR

W.A.

UNIT	DISC	TYPE	SYS	NUMBER	SHEET
FC	C	16	CEM	114090	1

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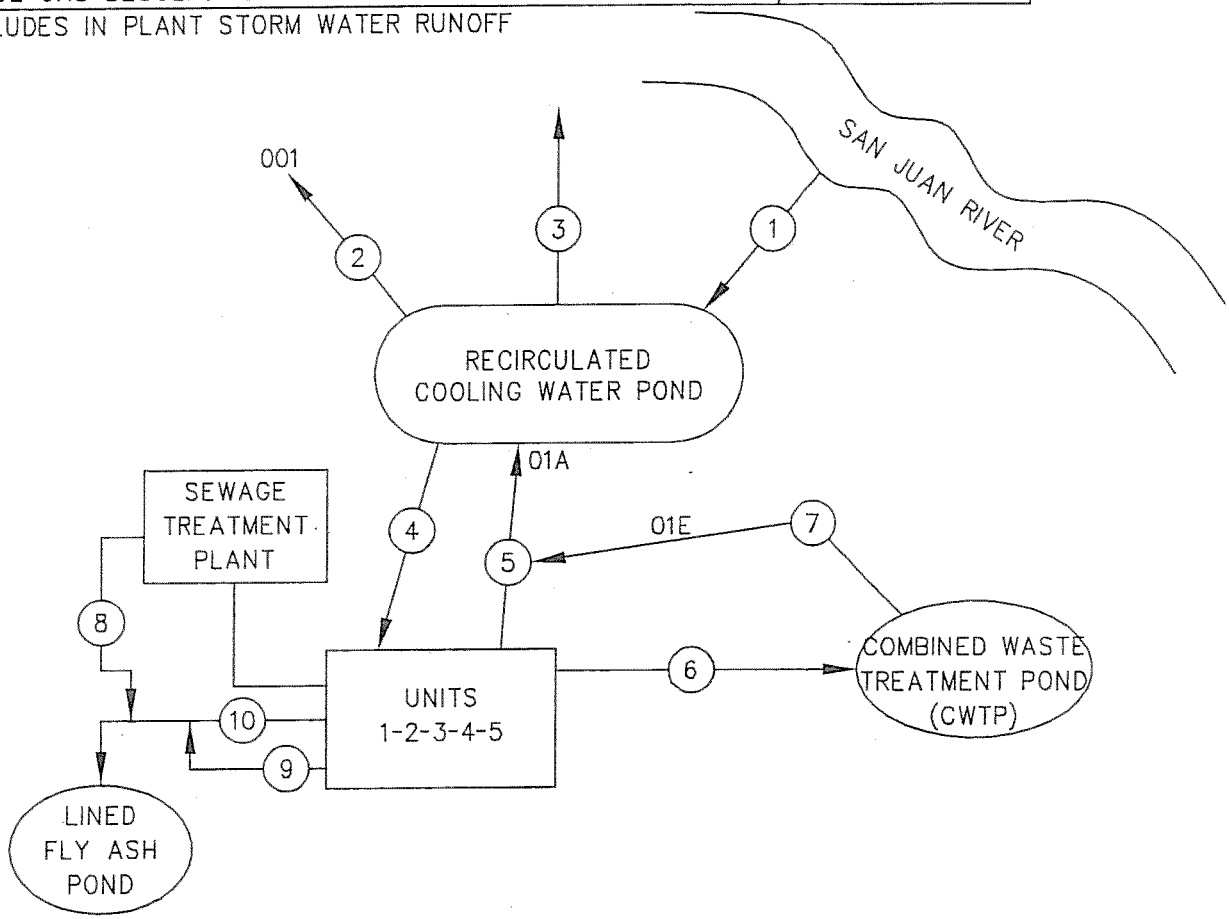
Section 9

Water Flow Line

Please note that this diagram depicts water flows for all five units.

NO.	TITLE	AVG. RATE (MGPD)
1	RIVER MAKE-UP; COOLING WATER INTAKE	17-28
2	RECIRCULATED COOLING WATER POND DISCHARGE/BLOW-DOWN	3-14.6
	SYSTEM EVAPORATION	13.3
4	SERVICE & RECIRCULATED COOLING WATER INTAKE*	1000-1726.7
5	RECIRCULATED COOLING WATER RETURN	1000-1713.6
6	COMBINED WASTE STREAMS *	13.0
7	CWTP (L.V.W.) DISCHARGE	13.0
8	SANITARY SEWAGE	.027-.04
9	CHEMICAL METAL CLEANING WASTES	.100
10	FLUE GAS DESULFURIZATION WASTEWATER	0.8-1.4

* INCLUDES IN PLANT STORM WATER RUNOFF



NO.	DATE	REVISION	DWN	CHD	EXD	RVWD	APVD	W A
4	4-24-07	AS-BUILT	MDC		HB		BS	
3	2-23-07	GENERAL REVISIONS	MDC		HB		BS	
2	10-4-05	CHG. NO. 2 FROM 14.7 TO 14.6 MGPD	MDC		WB	WB	BS	
1	9-27-05	CHG. NO. 8 FROM .1 TO .04 MGPD & NO. 9 FROM .005 TO .100 MGPD AND REVISED TEXTS	MDC		CW	CW	BS	

FOUR CORNERS
COMMON
N.P.D.E.S PERMIT APPLICATION
WATER FLOW LINE

DATE 08-24-02
SCALE NONE
W.A. _____

APS

DWN GK\MC | EXD RDB | CHD WB | RVWD DB

APPROVED
D. BLOOMFIELD
ENGINEERING SUPERVISOR

UNIT	DISC	TYPE	SYS	NUMBER	SHEET
FC	C	16	CEM	114058	1

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Section 10

Four Corners NPDES Recirculated Cooling Water Flow Diagram

Please note that this diagram depicts water flows for all five units.

UNITS 1, 2 & 3:

1. SCRUBBER SERVICE WATER
2. CIRCULATING COOLING WATER
3. FIRE WATER
4. SERVICE WATER
5. EQUIPMENT COOLING WATER (SEE SHEET 2 FOR SPECIFIC LIST)

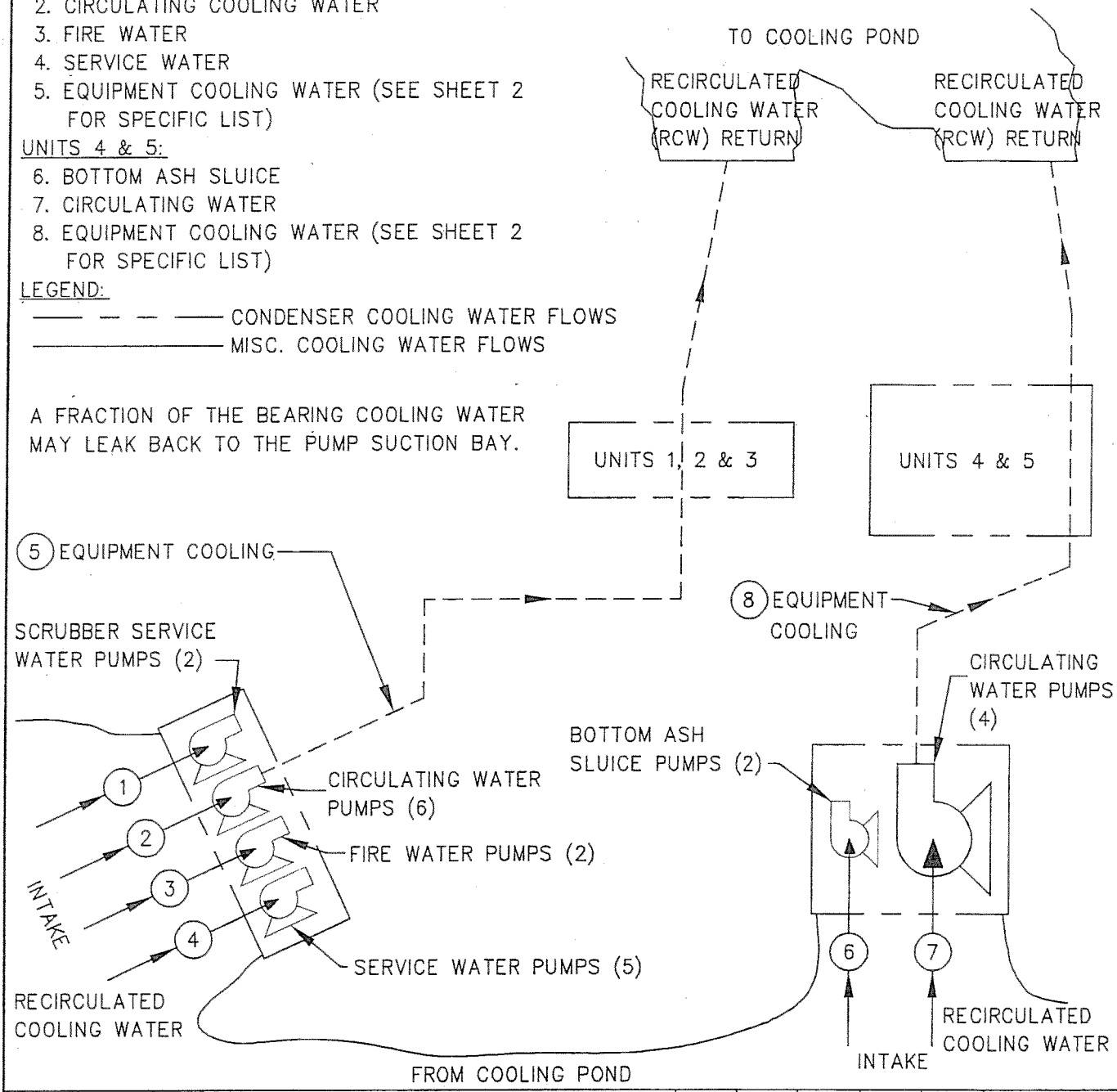
UNITS 4 & 5:

6. BOTTOM ASH SLUICE
7. CIRCULATING WATER
8. EQUIPMENT COOLING WATER (SEE SHEET 2 FOR SPECIFIC LIST)

LEGEND:

— — — — CONDENSER COOLING WATER FLOWS
———— MISC. COOLING WATER FLOWS

A FRACTION OF THE BEARING COOLING WATER MAY LEAK BACK TO THE PUMP SUCTION BAY.



NO.	DATE	REVISION	DWN	CHD	EXD	RVWD	APVD	W A
5	03-02-07	TEXT MODIFICATIONS	MDC		HB		BS	
4	02-23-07	GENERAL REVISIONS	MDC		HB		BS	
3	09-30-05	ADDED NOTE	MDC		CW	CW	BS	

FOUR CORNERS COMMON
N.P.D.E.S. RECIRCULATED COOLING WATER FLOW DIAGRAM

DATE 08-17-92
SCALE NONE
W.A. _____

APS

DWN MDC | EXD RDB | CHD WB | RVWD

APPROVED
D.C. BLOOMFIELD
ENGINEERING SUPERVISOR

UNIT	DISC	TYPE	SYS	NUMBER	SHEET
FC	C	16	CWS	114046	1

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(5) EQUIPMENT COOLING WATER

UNITS 1, 2 & 3:

SCRUBBER SERVICE WATER PUMP BEARING COOLING WATER (2-PUMPS)
CIRCULATING WATER PUMP BEARING COOLING WATER (6-PUMPS)
FIRE WATER PUMP BEARING COOLING WATER (2-PUMPS)
SERVICE WATER PUMP BEARING COOLING WATER (5-PUMPS)
TURBINE LUBE OIL COOLING WATER (3-UNITS)
HYDROGEN COOLER COOLING WATER (3-UNITS)

(8) EQUIPMENT COOLING WATER

UNITS 4 & 5:

BOTTOM ASH SLUICE PUMP BEARING COOLING WATER (2-PUMPS)
CIRCULATING WATER PUMP BEARING COOLING WATER (4-PUMPS)
TURBINE LUBE OIL COOLING WATER (2-UNITS)
SAMPLE CHILLER COOLING WATER (2-UNITS)
BOILER FEED BOOSTER PUMP BEARING COOLING (6-PUMPS)
AUXILIARY TURBINE LUBE OIL COOLING (2-UNITS)
AIR CONDITIONER COOLING RETURN (2-UNITS)
AIR COMPRESSOR (3-COMPRESSORS)
CONDENSER VACUUM PUMP COOLER COOLING (3-PUMPS)
ISOPHASE BUS COOLER COOLING (3-UNITS)
STATOR WINDING HEAT EXCHANGER COOLING (2-UNITS)
HP GENERATOR HYDROGEN COOLER COOLING (2-UNITS)
HP ALTERNATOR AIR COOLER COOLING (2-UNITS)
LP GENERATOR HYDROGEN COOLER COOLING (2-UNITS)
LP ALTERNATOR AIR COOLER COOLING (2-UNITS)
COOLING WATER PUMP BEARING (3-PUMPS)
BOTTOM ASH FLUSH BEARING COOLING (2-PUMPS)
SEAL AIR FAN BEARING COOLING (4-FANS)
SCREEN WASH PUMP BEARING COOLING (2-PUMPS)

BAG HOUSE:

AIR COMPRESSOR COOLING (4-COMPRESSORS)
DIESEL FIRE PUMP COOLING (2-UNITS)

NO.	DATE	REVISION	DWN	CHD	EXD	RVWD	APVD	W A
4	03-02-07	GENERAL REVISION	MDC		HB		BS	
3	02-20-07	GENERAL REVISION	MDC		HB		BS	
2	10-20-04	AS-BUILT	MDC		WB	WEB	BS	
1	10-19-04	GEN REV. & REDRAWN ONTO AUTO-CAD	MDC		WB		DCB	

FOUR CORNERS
COMMON
N.P.D.E.S. RECIRCULATED COOLING WATER
FLOW DIAGRAM

DATE 08-17-92
SCALE NONE
W.A.

APS

DWN MDC | EXD RDB | CHD WB | RVWD

APPROVED
D.C. BLOOMFIELD
ENGINEERING SUPERVISOR

UNIT	DISC	TYPE	SYS	NUMBER	SHEET
FC	C	64	CWS	114046	2

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