

50-255



**Consumers
Power
Company**

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • (517) 788-0550

January 6, 1981

Mr. Thomas Wambach
USNRC
Phillips Building
7920 Norfolk Ave.
Bethesda, MD 20014

Enclosed are the Palisades equipment list data sheets for rotating equipment with horsepower rating of greater than 30 hp. We had discussed on the phone, December 19, your SEP reviewer's interest in this information. I have highlighted the equipment located outside containment with the required horsepower rating.

Jim Kuemin

J L Kuemin
Senior Engineer
Nuclear Activities

CC SEP Topic III.4.C

KUEM 1-81

RECEIVED DISTRIBUTION
SERVICES UNIT

1981 JAN 13 AM 10 03

US NRC
DISTRIBUTION SERVICES
BRANCH

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1/1

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LIST OF DRAWINGS

PALISADES M-250

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90 of 120

CPC

2	REVISED C6A, C6B, C6C PER FC 162	WLR	MLH	CJM	OS	ARK			11-12-79
5	ADDED OIL VAPOR EXTRACTOR FC 294	RES		PRS	PL				11/2/79
4	REVISED FORMAT AND SHEET NUMBERS	ENG	DR	CHK	SUPV	MATL	APPROVALS - OS		11/1/79
3	ADDED FC-162 & FC-244 REF. TO C6A, B & C.	RDO	L	ERL					7-14-77

BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

EQPT No	SERVICE	FAN & COMPRESSOR							DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	CFM	DIFF HD	TEMP °F	SPEED RPM	TYPE	HP	MFR			
C1A	Gland Steam Condenser Exhauster	Turbo Blowers	West		21" vac.		3600	AC motor	7.5	West.	M-3	7	
C1B	Gland Steam Condenser Exhauster	Turbo Blower	West		21" vac.		3600	AC motor	7.5	West.	M-3	7	
C2A	Air Compressor	Recip. Non Lube	Penn Compr	200	100 psi	AMB	400	AC motor	60	West	M-41	4	
C2B	Air Compressor	Recip. Non Lube	Penn Compr	200	100 psi	AMB	400	AC motor	60	West	M-41	4	
C2C	Air Compressor	Recip. Non Lube	Penn Compr	200	100 psi	AMB	400	AC motor	60	West	M-41	4	
C3A	Emergency Diesel Gen. (K-6A) Recip. Air Compressor (Dual Drive)	Recip.	Worth	16	250	AMB	980	AC motor	5HP	Kohler	M-12	2	
C3B	Emergency Diesel Gen. (K-6B) Recip. Air Compressor (Dual Drive)	Recip.	Worth	16	250	AMB	980	AC motor	5HP	Kohler	M-12	2	
	Hogging Ejector	Steam Jet	IR	2100	7"	289F					M-4	3	
C5A	L.O. Reservoir Vapor Extractor	Turbo Blowers	West					AC motor	5	West	P.O. 45090		
C5B	L.O. Reservoir Vapor Extractor	Turbo Blowers	West			with turbine		AC motor	5	West	M-3	2	
C6A	HIGH PRESSURE CONTROL AIR COMPRESSOR (EAST)	RECIP 2-STAGE	I-R	22.4	325psi			AC motor	10		M-77	5	
C6B	HIGH PRESSURE CONTROL AIR COMPRESSOR (WEST)	"	I-R	22.4	325psi			AC motor	10		M-77	5	
C6C	HIGH PRESSURE CONTROL AIR COMP (TURB. BLDG)	"	I-R	22.4	325psi			AC motor	10		M-77	5	
C7	Gen. Bearing Oil Vapor Extractor	Centrif.	West			with turbine	3600	AC motor	2	West	M-3	2	
C8A	Isophase Bus Cooler Fan					with isophase bus		AC motor	2		E-3	2	
C8B	Isophase Bus Cooler Fan					with isophase bus		AC motor	2		E-3	2	

EQUIPMENT LIST - FAN & COMPRESSOR INFORMATION SHEET
PALISADES PLANT
CONSUMERS POWER COMPANY
DEC 29 1980

JACKSON MICH. CO. CONSUMERS POWER

JOB No 5935
M-250

REV. 5

M-305-E-1
3-5-64

2 REVISED FORMAT & SHEET NUMBERS

RES

hrs DED

CHG

10-10-78

ISSUED AS BUILT

REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
0								
	EQPT No OR QUAN.	SERVICE	RATING	VENDOR/MFR.	REQ'N No	MAINT. PRIOR.		
	K1	Turbine-Generator	700 MWe 22,000 V TC4F-44 comprising HP turbine LP turbine A, LP turbine B, and generator automatic engagement; 50 hp turns rotor at 1-1/2 rpm	Westinghouse	M-3	3		
	K2	Turbine Turning Gear		with T-G	M-3	6		
	K3	Generator H ₂ Supply Manifold		with T-G	M-3	4		
	K4	Generator CO ₂ Supply Manifold		with T-G	M-3	4		
		Fire Pump Diesel Driver	175HP (U.L. Rating)	with pump. Cummings (sub-vendor) Worthington (Vendor)	M-32	3		
	K6A	Emergency Diesel Gen. Set	3125KVA, 0.8pF, air start, water cooled	Alco	M-12	6		
	K6B	Emergency Diesel Gen. Set	3125KVA, 0.8pF, air start, water cooled	Alco	M-12	6		
	K7A	Feedwater Pump (PIA) Turbine Driver	7000HP multistage, 5000 rpm	Worthington	M-18	7		
	K7B	Feedwater Pump (PIB) Turbine Driver	7000HP multistage, 5000 rpm	Worthington	M-18	7		
	K8	Aux. Feed Pump (P8B) Turbine Driver	450HP, 3560 rpm	Bingham/Elliot	M-17	6		
	K9A	Stm.Gen.F,P.Turb.Driver Turbing Gear (K7A)	1hp rotor rpm = 7.5	Worthington	M-18	with F.P. 3		
	K9B	Stm.Gen.F.P.Trub.Driver Turbing Gear (K7B)	1hp rotor rpm = 7.5	Worthington	M-18	Turb. Dr. 3		

POWER DIVISION ENGINEERING



CONSUMERS POWER COMPANYS POWER

PALISADES PLANT

AND EQUIPMENT

TURBINE, DIESEL GENERATOROPY

EQUIPMENT INFORMATION CENTER

ENGINE RECORDS

DEC 22 1980

JACKSON MCH. CO.

SHEET 24 OF 120

M-250

JOB No

5935

REV.

2

1008072

M-305-E-1
3-5-84

REVISED FORMAT AND SHEET NUMBERS

ISSUED AS BUILT

RES

RES

MA

CASO

DATE

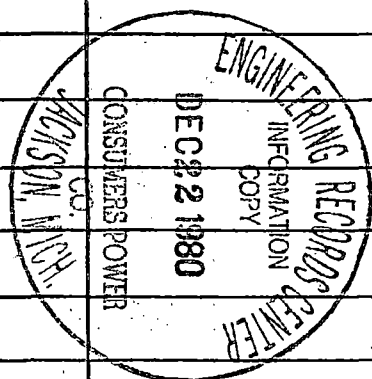
REV. DESCRIPTION ENG DR CHK SUPV MATL APPROVALS DATE

BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

EQUIPMENT LIST
CRANES AND HOISTS
PALISADES PLANT
CONSUMERS POWER COMPANY

EQPT N° OR QUAN.	SERVICE	LIFT FT.	RATING	VENDOR/MFR.	REQ'N N°	MAINT. PRIOR.
L1	Reactor Building Crane		125 ton with 15 ton aux., pendant controlled circular overhead bridge	Dresser Crane	M-73	6
	Main hook	71'	Hoist, 60HP; Bridge drive, 90HP			
	Aux. hook	110'	Hoist, 50HP; Trolley drive, 7½HP			
L2	Turbine Building Crane		150 ton with 20 ton aux., traveling overhead bridge cab or pendant controlled	Whiting Corp.	M-72	6
	Main hook	60'	Hoist, 50HP; Bridge drive, 25HP			
	Aux. hook	75'	Hoist, 50HP; Trolley drive, 7½HP			
L3	Fuel Building Crane	Main hook 54'	100 ton with 15 ton aux., elec. operated hoist & trolley with sling pendant control	Dresser Crane	M-61	4
		Main	Hoist, 40HP; Trolley drive, 10HP			
		Aux.	Hoist, 15HP; Bridge Drive, 15HP			
L4	Machine Shop Crane		5 ton hoist, 18' 6" span	Dresser	M-62	2
L5	Miscellaneous Hoists		<u>Type</u> <u>Number</u> <u>Rating (tons)</u>	Dresser	M-62	2
			Chain Hoist 1 1/2			
			" 2 1			
			" 2 2			
			" 1 3			
			" 1 4			
			" 1 8			
			" 1 10			
			" 1 15			
			Jib Crane 1 1			
			" 2 2			
			Roller Chain 1 3/4			
L-13	Transfer Carriage		45 tons		M-70	6

MODIFIED & RERATED TO 135 TON.



1000073

JOB NO 5935
M-250
SHEET 26 OF 120
REV. 2

3	Added Well Pumps P6C and P6D	HRV	✓	EPL		OS	DR	8-276
4	REVISED FORMAT & SHEET NUMBERS	REV	-	HRS	alt			10-16-75
0	ISSUED AS BUILT							

REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
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EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIOR.
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P1A	Steam Generator Feed Pump	Horiz. Cent.	Bingham	13500	1920	376	5000	Stm. Turb.	7000	Worthington	M-6	5
P1B	Steam Generator Feed Pump	Horiz. Cent.	Bingham	13500	1920	376	5000	Stm. Turb.	7000	Worthington	M-6	5
P2	SPARE (NO MOTOR) CONDENSATE PUMP-Complete	Vertical Canned Cent.	IR	9250	1000	101	1188	AC Motor	3000	Allis Chalm	M-4	
P2A	Condensate Pump	Vertical Canned Cent.	I.R	9250	1000	101	1188	AC motor	3000	Allis-Chalm.	M-4	5
P2B	Condensate Pump	Vertical Canned Cent.	I.R	9250	1000	101	1188	AC motor	3000	Allis-Chalm.	M-4	5
P3A	DELETED Circulating Water Pump	Vertical Mix. Flow	I.R	1.95x10 ⁵	25	765	234	AC motor	1500	Allis-Chalm	M-4	
P3B	DELETED Circulating Water Pump	Vertical Mix. Flow	I.R	1.9x10 ⁵	25	765	234	AC motor	1500	Allis-Chalm.	M-4	
P4	Screen Wash Pump	Vertical Turbine	Peerless	1150	225	75	1800	AC motor	75	G.E.	M-33	3
P5	Warm Water Recirculation Pump	Vertical Turbine	Layne & Bowler L.A.	17000	11.5	32-70	700	AC motor	75	G.E.	M-15	3
P6 A	Well Pump	Vertical Turbine		75	200			AC motor	7		C-29	2
P6.B	Well Pump	Vertical Turbine		75	200			AC motor	5		C-29	2
P6C	Well Pump	Vertical Turbine	Sta-Rite		95			AC motor	7.5		C-29	
P6D	Well Pump	Vertical Turbine	Sta-Rite		50			AC motor	5		C-29	
P7A	Service Water Pump	Vertical Turbine	Layne & Bowler Memphis	8000	140	75	1180	AC motor	350	G.E.	M-11	3
P7B	Service Water Pump	Vertical Turbine	"	8000	140	75	1180	AC motor	350	G.E.	M-11	3
P7C	Service Water Pump	Vertical Turbine	"	8000	140	75	1180	AC motor	350	G.E.	M-11	3

BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

ENGINEERING
EQUIPMENT LIST - PUMPS
PALISADES PLANT
CONSUMERS POWER
DEPARTMENT
CONSUMERS POWER COMPANY

JOB NO
M-250
5935
REV. 4

CPG

3 REVISED FORMAT & SHEET NUMBERS

2 CHANGED P14A & P14B TO HEATING BOILER ROOM

(FOR RECORD)

ERL

OS: AKH

CR 50

10/16/78

11-12-75

REV. DESCRIPTION ENG DR CHK SUPV MATL APPROVALS DATE

BECHTEL CORPORATION
POWER DIVISION ENGINEERING

EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIOR.
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P8A	Auxiliary Feed Pump	Horiz. Cent.	Bingham	415	2730	150	3560	AC motor	450	GE	M-17	3
P8B	Auxiliary Feed Pump	Horiz. Cent.	Bingham	365	2724	150	3560	Turb.	450	Elliot	M-17	3
P9A	Fire Pump	Vertical Turbine	Worthington	1500	313	75	1760	AC motor	150	GE	M-32	2
P9B	Fire Pump	Vertical Turbine	"	1500	313	75	1760	diesel engine	150	Cummins	M-32	2
P10A	Heater Drain Pump	Vertical Canned	Bingham	3760	620	384	1760	AC motor	800	GE	M-10	5
P10B	Heater Drain Pump	Vertical Canned	Bingham	3760	620	384	1760	AC motor	800	GE	M-10	5
	Condensate Transfer Pump	Horiz. Cent.	Goulds	150	108	110	3500	AC motor	7 1/2	Louis Allis	M-34	3
P12A	Domestic Water Pump	Horiz. Cent.	Pacific	80	65	100°F	3600	AC motor	10	GE	M-37	2
P12B	Domestic Water Pump	Horiz. Cent.	Pacific	80	165	100°F	3600	AC motor	10	GE	M-37	2
P13	Fire System Jockey Pump	Vertical Turbine	Peerless	50	254	75	3600	AC motor	7.5	G.E.	M-33	2
P14A	Heating Boiler Room Sump Pump	Vertical Cent.	Chicago pump	23	26	AMB	1730	AC Motor	1	GE	M-22	2
P14B	Heating Boiler Room Sump Pump	Vertical Cent.	Chicago pump	23	26	AMB	1730	AC motor	1	GE	M-22	2

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EQUIPMENT LIST
PALISADES PLANT
CONSUMERS POWER COMPANY
SEP 22 1980

CONSUMERS POWER
CO.
JACKSON MICH.

M-250
42 120

5935
REV. 3

2	REVISED FORMAT & SHEET NUMBERS	REL	--	125	2/7	CASO	10/16/78
1	ADDED P15E & P15F FOR RECORD		MWS	ERL	7 ³ App.		12-1274

REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
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BECHTEL CORPORATION
POWER DIVISION ENGINEERING

EQUIPMENT LIST
 PALISADES PLANT
 CONSUMERS POWER COMPANY
 JACOBS ENGINEERING CO.
 CONSUMERS POWER

EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIOR.
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P15A	Hydrazine Feed Pump	Positive Displace	BIF	0.03	1150	60-100F	48	AC motor	1/3	GE	M-46	2
P15B	Ammoniumhydroxide Feed Pump	Positive Displace	BIF	0.06	1150	60-100F	30	AC motor	1/2	GE	M-46	2
P15C	Phosphate Feed Pump	Positive Displace	BIF	0.13	2380	60-100F	192	AC motor	3/4	GE	M-46	2
P15D	Spare Chemical Injection Pump	Positive Displace	BIF	0.13	2380	60-100F	192	AC motor	3/4	GE	M-46	2
P15E	Hydrazine Feed Pump	Positive Displace	BIF	0.20	1500	60-100F	192	AC Motor	1/2	GE	M-46	2
P15F	Hydrazine Feed Pump	Positive Displace	BIF	0.20	1500	60-100F	192	AC Motor	1/2	GE	M-46	2
P16	Lube Oil Transfer Pump	Horizontal Centr.	Gould	175	50	150	3500	AC Motor	5	Louis Allis	M-34	2
P17	Lube Oil Filter Pump	Positive Displace	Viking	54	94	150	1800	AC motor	3	GE	M-43	3
P18A	Diesel Oil Transfer Pump	self-prim. horz.cent.	Goulds	20	20	100	1150	AC motor	3	Louis Allis	M-34	3
P18B	Diesel Oil Transfer Pump	self-prim. horz.cent.	Goulds	20	20	100	1150	AC motor	3	Louis Allis	M-34	3
P19A	Turb-Gen. Electro-hydraulic HP Supply Pump					with T/G	1800	AC motor	30	West	M-3	3
P19B	Turb-Gen. Electro-hydraulic HP Supply Pump					with T/G	1800	AC motor	30	West	M-3	3
P20A	Heating Boiler Feedpump	Horiz. Cent.	Pacific pump.	70	75	180	3600	AC motor	3	-	M-49	3
P20B	Heating Boiler Feedpump	Horiz. Cent.	Pacific pump.	70	75	180	3600	AC motor	3	-	M-49	3
P21	Gen. H ₂ Side Seal Oil Pump					with T/G		AC motor	7.5		M-3	4

JOB NO 5935
 M-250
 SHEET 43 OF 120
 REV. 2

08080011

M-303-E
6-28-58

3	REVISED FORMAT & SHEET NUMBERS	REF	-	HES VLL	CNSCL	10/16/58
2	SHOWED P 23 AS 50 HP (FOR RECORD)		L	ERL		2-24-75
	ISSUED AS BUILT					

REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
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BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

EQUIPMENT LIST
PALISADES PLANT
CONSUMERS POWER COMPANY
DEC 22 1980

REVISIONS
3
SHEET 44 OF 120

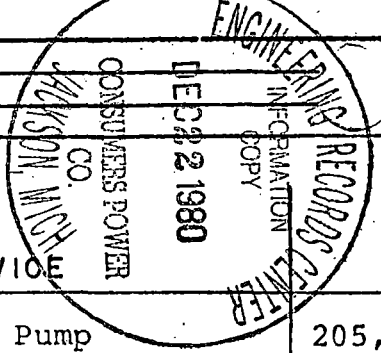
EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIOR.
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P22	Gen. Air Side Seal Oil Pump				with T/G			AC motor	50		M-3	4
P23	HP Air Side Seal Oil Sys. Backup Pump				with T/G			AC motor	50		M-3	4
P24	Emergency Air Side Seal Oil Backup Pump				with T/G			DC motor	25		M-3	4
P-25A	SERV. WTR. BOOSTER PUMPS	CENT		100			3200	AC MOTOR	5		FIELD PURCH	3
P-25B	" " " "	"		"			"	"	5		"	3
P-25C	" " " "	"		"	with T/G		"	AC	5		M-3	3
P-26	TURNING GEAR OIL PUMP				WITH T/G			AC MOTOR	60		M-3	2
	TG Emergency Bearing Pump				with T/G			AC motor	60		M-3	3
	Turb. Gen. Bearing Lift Pump				with T/G			AC motor	15		M-3	6
P29A	FW pump (PIA) & Turb. Driver(K7A) lube oil pump	Positive Disp. Gear	Turbine Driver	150	195	120	900	Turb. shaft	13	Worthington	M-18	4
P29B	FW pump (PIA) & Turb. Driver(K7A) aux. lube oil pump	Positive Disp. Gear	With Turbine Driver	123	195	120	1150	AC motor	15	Reliance	M-18	4
P29C	FW pump (PIB) & Turb. Driver(K7B) lube oil pump	Positive Disp. Gear		150	195	120	900	Turb. Shaft	13	Worthington	M-18	4
P29D	FW pump (PIB) & Turb. Driver(K7B) aux. lube oil pump	Positive Disp. Gear		123	195	120	1150	AC motor	15	Reliance	M-18	4
P30A	FW Pump (PIA) & Turb. Driver (K7A) Turn. Gear Oil Pump			56			1150	AC Motor	5	Worthington	M-18	4
P30B	FW Pump (PIB) & Turb. Driver (K7B) Turn. Gear Oil Pump			56			1150	AC motor	5	Worthington	M-18	4

RECORDED
INDEXED
DEC 22 1980
EQUIPMENT LIST
PUMPS
CONSUMERS POWER COMPANY

REVISIONS
3
SHEET 44 OF 120

M-305-E-
3-5-64

ISSUED FOR USE
REV. DESCRIPTION



REC - JRS
ENG DR CHK SUPV MATL APPR S DATE

POWER DIVISION
ENGINEERING

CONSUMERS POWER COMPANY
PALISADES PLANT

EQUIPMENT LIST
PUMPS

JOB No 5935

5935-M-250

SHEET 46 OF 120

EQPT N° OR QUAN.	SERVICE	RATING	VENDOR/MFR.	REC'N N°	MAIN. PRIOR
P-39A	Cooling Tower Pump	205,000 gpm @ 90 Ft., 7000Hp	Hitachi	M-306	7
P-39B	Cooling Tower Pump	205,000 gpm @ 90 Ft., 7000Hp	Hitachi	M-306	7
P-40A	Dilution Water Pump	30,000 gpm @ 21Ft., 300 Hp	Byron Jackson	M-314	6
P-40B	Dilution Water Pump	30,000 gpm @ 21Ft., 300 Hp	Byron Jackson	M-314	6
P-41	(Diesel) Cooling Tower Fire Pump	1500 gpm @ 313Ft. <i>SEE K-10</i>	Worthington	M-317	2
P-42A	Evaporator Heating Boiler F.W.Pump	70 gpm @ 75Ft., 5 HP	Pacific Pump- ing Company	M-320	2
P-42B	Evaporator Heating Boiler F.W.Pump	70 gpm @ 75Ft., 5 HP	Pacific Pump- ing Company	M-320	2
P-43A	Evaporator Condensate Return Pump	20 gpm @ 50Ft., 3/4Hp	AMF Beard Inc.	M-307	2
P-43B	Evaporator Condensate Return Pump	20 gpm @ 50Ft., 3/4Hp	AMF Beard Inc.	M-307	2
P-43C	Evaporator Condensate Return Pump	20 gpm @ 50Ft., 3/4Hp	AMF Beard Inc.	M-307	2
P-43D	Evaporator Condensate Return Pump	20 gpm @ 50Ft., 3/4Hp	AMF Beard Inc.	M-307	2
P-44	Generator Seal Oil Cooler Service Water Booster Pump	400 gpm @ 215 Ft., 40 Hp	Gould Pump	M-292	2

80880011

REV.

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REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
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POWER DIVISION
 ENGINEERING
 BECHTEL CORPORATION

EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIOR.
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P50A	Primary Coolant Circulating Pump 1A	Vertical Cent.	B-J	83000	260	650	890	4160V 3 ph	5500	A-C	M-1	7
P50B	Primary Coolant Circulating Pump 1B	Vertical Cent.	B-J	83000	260	650	890	60cyc	5500	A-C	M-1	7
P50C	Primary Coolant Circulating Pump 2A	Vertical Cent.	B-J	83000	260	650	890	"	5500	A-C	M-1	7
P50D	Primary Coolant Circulating Pump 2B	Vertical Cent.	B-J	83000	260	650	890	"	5500	A-C	M-1	7
P51A	Fuel Pool Cooling Pump	Horiz. Cent.	Goulds	1700	64	125	1180	AC motor	40	Louis Allis	M-24	4
P51B	Fuel Pool Cooling Pump	Horiz. Cent.	Goulds	1700	64	125	1180	AC motor	40	Louis Allis	M-24	4
P52A	Component Cooling Pump	Horiz. Cent.	Goulds	6000	164	140	1750	AC motor	300	Louis Allis	M-34	4
P52B	Component Cooling Pump	Horiz. Cent.	Goulds	6000	164	140	1750	AC motor	300	Louis Allis	M-34	4
P52C	Component Cooling Pump	Horiz. Cent.	Goulds	6000	164	140	1750	AC motor	300	Louis Allis	M-34	4
P53A	Washing Machine Filter Pump	Vert Cent	Crane Deming					a-c Motor			M-88	
P54A	Containment Spray Pump	Vertical Cent.	I-R	1315	455	300	3600	AC motor	250	Louis Allis	M-8	4
P54B	Containment Spray Pump	Vertical Cent.	I-R	1315	455	300	3600	AC motor	250	Louis Allis	M-8	4
P54C	Containment Spray Pump	Vertical Cent.	I-R	1315	455	300	3600	AC motor	250	Louis Allis	M-8	4
P55A	Charging Pump (Variable Capacity)	Positive Displacement	Manton Gould	333-40	3010 psig	250	70-116	AC	100	GE	M-1	4
P55B	Charging Pump (Fixed Capacity)	Positive Displacement	"	40	3000 psig	250	205	AC	75	GE	M-1	4
P55C	Charging Pump (Fixed Capacity)	Positive Displacement	"	40	3000 psig	250	205	AC	75	GE	M-1	4

EQUIPMENT LIST - PUMPS INFORMATION
 PALISADES PLANT
 CONSUMERS POWER COMPANY
 1980
 JACKSON MICHIGAN
 CONSUMERS POWER
 STREET 48 OF 120
 M-250
 5935
 REV. 3

10-16-78
 6-2-76

3	REVISED FORMAT & SHEET NUMBERS	REC	-	MR	WAL	CASO	10-16-78
2	ADDED A TO P60	MWS	ERL	T.S. APPR.:	mt		10-17-74
	ISSUED AS BUILT						

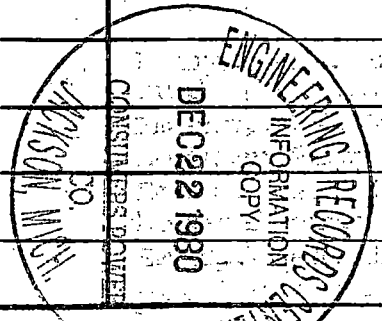
REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
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BECHTEL CORPORATION
 POWER DIVISION ENGINEERING

EQUIPMENT LIST - PUMPS
 PALISADES PLANT
 CONSUMERS POWER COMPANY

EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIOR.
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P56A	Boric Acid Pump	Horiz. Cent.	Dean Bros	143	225	250	30	AC motor	3.0	Furn. by CE	M-1	4
P56B	Boric Acid Pump	Horiz. Cent.	Dean Bros	143	225	250		AC motor	3.0	Furn. by CE	M-1	4
P57	Metering Pump			40 GPH	15 psi	200		AC motor	1/4	Furn. by CE	M-1	2
P58A	Treated Waste Monitor Pump	Horiz. Cent.	Goulds	150	140	130	3500	AC motor	15	Louis Allis	M-24	2
P58B	Treated Waste Monitor Pump	Horiz. Cent.	Goulds	150	140	130	3500	AC motor	15	Louis Allis	M-24	2
P60A	Dirty Waste Drain Pump	Horiz. Cent.	Goulds	75	160	150	3500	AC motor	10	Louis Allis	M-24	2
P60B	Dirty Waste Drain Pump	Horiz. Cent.	Goulds	75	160	150	3500	AC motor	10	Louis Allis	M-313	2
P61	Controlled Lab Drain Pump	Horiz. Cent.	Goulds	10	158	150	3500	AC motor	7.5	Louis Allis	M-24	2
P62	Laundry Drain Pump	Horiz. Cent.	Goulds	20	216	150	3500	AC motor	7½	Louis Allis	M-34	3
P63	Filtered Waste Monitor Pump	Horiz. Cent.	Goulds	75	150	100	3500	AC motor	10	Louis Allis	M-24	4

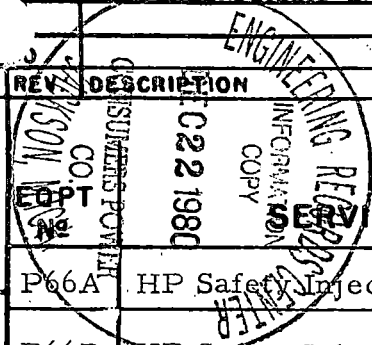
JOB NO 5935
 SHEET M-250 490F 120
 REV. 3



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ISSUED AS BUILT

REV	DESCRIPTION	PUMP	PUMP			DRIVER			REQ'N NO	MAINT. PRIOR.		
			TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM			TYPE	HP
	HP Safety Injection Pump	Horiz. Centr.	Bingham	300	2400	350	3600	AC motor	400	Furn. by GE	M-1	4
	HP Safety Injection Pump	Horiz. Centr.	Bingham	300	2400	350	3600	AC motor	400	Furn. by GE	M-1	4
	HP Safety Injection Pump	Horiz. Centr.	Bingham	300	2400	350	3600	AC motor	400	Furn. by GE	M-1	4
	LP Safety Injection Pump	Horiz. Centr.	I-R	3000	350	350	1800	AC motor	400	Furn. by GE	M-1	4
	LP Safety Injection Pump	Horiz. Centr.	I-R	3000	350	350	1800	AC motor	400	Furn. by GE	M-1	4
	Degasifier Pump	Horiz. Centr.	Goulds	160	190	Sat. @ 130	3500	AC motor	20	Louis Allis	M-24	3
	Degasifier Pump	Horiz. Centr.	Goulds	160	190	Sat. @ 130	3500	AC motor	20	Louis Allis	M-24	3
	Receiver Tank Pump	Horiz. Centr.	Goulds	100	203	130	3500	AC motor	15	Louis Allis	M-24	3
	Receiver Tank Pump	Horiz. Centr.	Goulds	100	203	130	3500	AC motor	15	Louis Allis	M-24	3
	Receiver Tank Circ. Pump	Horiz. Centr.	Goulds	250	121	130	3500	AC motor	15	Louis Allis	M-24	3
	Primary System Drain Tank Pump	Horiz. Centr.	Goulds	75	80	Sat. @ 270	3500	AC motor	5	Louis Allis	M-24	3
	Primary System Drain Tank Pump	Horiz. Centr.	Goulds	75	80	Sat. @ 270	3500	AC motor	5	Louis Allis	M-24	3



BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

EQUIPMENT LIST - PUMPS
PALISADES PLANT
CONSUMERS POWER COMPANY

JOB NO. 5935
M-250
SHEET 50 OF 120
REV.

78030011

1-303-E -28-56	3	REVISED FORMAT AND SHEET NUMBERS	REV	—	175	175	CASO	10-16-78
	4	Added P-76A for record		BLY			PW	8-31-79
		ISSUED AS BUILT						

REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
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EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT PRIORITY
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P72A	Engineered Sfgd. Pump Rm Sump Pump	Vertical Cent.	Crane-Deming	15	100	135F	1750	AC motor	1	GE	M-22	2
P72B	Engineered Sfgd. Pump Rm Sump Pump	Vertical Cent.	Crane-Deming	15	100	135F	1750	AC motor	1	GE	M-22	2
P73A	Engineered Sfgd. Pump Rm Sump Pump	Vertical Cent.	Crane-Deming	15	100	135F	1750	AC motor	1	GE	M-22	2
P73B	Engineered Sfgd. Pump Rm Sump Pump	Vertical Cent.	Crane-Deming	15	100	135F	1750	AC motor	1	GE	M-22	2
P74	SIR W Tank Recirculation Pump	Horiz. Cent.	Goulds	35	12	75	1750	AC motor	1	Louis Allis	M-24	3
P75A	Equip. Drain Tank Pump	Horiz. Cent.	Gould	100	266	Sat. @ 212	3500	AC motor	25	Louis Allis	M-24	3
P75B	Equip. Drain Tank Pump	Horiz. Cent.	Gould	100	266	Sat. @ 212	3500	AC motor	25	Louis Allis	M-24	3
P76	Circ. Water Sample Pump	Horiz. Cent.	Goulds	10				AC motor	1/2		M-216	3
P76A	Liq. Disch. Sample PP.	Horiz. Cent.	Gorman Rupp					AC Motor	1/2	GE	M-217	
P77A	Shield Cooling Pump	Horiz. Cent.	Goulds	125	38	200	1750	AC motor	7 1/2	Louis Allis	M-34	2
P77B	Shield Cooling Pump	Horiz. Cent.	Goulds	125	38	200	1750	AC motor	7 1/2	Louis Allis	M-34	2
P79A	Primary System Makeup Transfer Pump	Horiz. Cent.	Goulds	165	312	100	3500	AC motor	40	Louis Allis	M-24	3
P79B	Primary System Makeup Transfer Pump	Horiz. Cent.	Goulds	165	312	100	3500	AC motor	40	Louis Allis	M-24	3

BECHTEL CORPORATION
 ENGINEERING RECORDS
 POWER DIVISION
 ENGINEERING
 JACKSON, MICH.
 CONSUMERS POWER CO.
 DEC 22 1980
 PALISADES PLANT
 CONSUMERS POWER COMPANY
 EQUIPMENT LIST - PUMPS

JOB No 5935
 M-250
 REV. 4

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M-305-E-1
3-5-64

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REV. DESCRIPTION

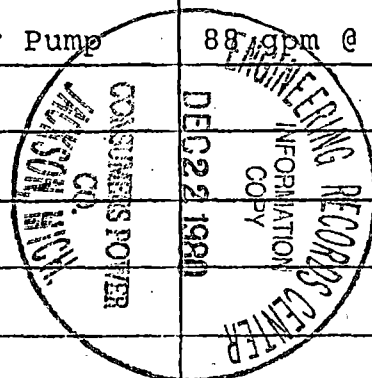
REF - JRS
ENG DR CHK SUPV MATL APPR S DATE
CRSD 10/16/78

POWER DIVISION
ENGINEERING

CONSUMERS POWER COMPANY
PALISADES PLANT

EQUIPMENT LIST
PUMPS

EQPT N° OR QUAN.	SERVICE	RATING	VENDOR/MFR.	REQ'N N°	MAINT. PRICE-ITY
P-89A	Misc. Waste Distillate Pump	88 gpm @ 109Ft., 7.5Hp, S.S.	Gould Pumps	M-313	2
P-89B	Misc. Waste Distillate Pump	88 gpm @ 109Ft., 7.5Hp, S.S.	Gould Pumps	M-313	2
P-90A	Primary System Make-Up Water Pump	165 gpm @ 344Ft., 40Hp, S.S.	Gould Pumps	M-313	2
P-90B	Primary System Make-Up Water Pump	165 gpm @ 344Ft., 40Hp, S.S.	Gould Pumps	M-313	
P-91A	Utility Water Transfer Pump	88 gpm @ 165Ft., 10Hp, S.S.	Gould Pumps	M-313	2
P-91B	Utility Water Transfer Pump	88 gpm @ 165Ft., 10Hp, S.S.	Gould Pumps	M-313	2
P-92A	Misc. Waste Transfer Pump	88 gpm @ 131Ft., 10Hp, S.S.	Gould Pumps	M-313	2
P-92B	Misc. Waste Transfer Pump	88 gpm @ 131Ft., 10Hp, S.S.	Gould Pumps	M-313	2
P-94	Clean Waste Transfer Pump	88 gpm @ 86Ft., 5Hp, S.S.	Gould Pumps	M-313	3



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JOB No 5935
5935-M-250
SHEET 54 OF 120

REV. 0

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REV. DESCRIPTION

RES - 1RS
ENG DR CHK SUPV MATL APPROVALS DATE

POWER DIVISION
ENGINEERING



EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P901A	Deleted											
P901B	Deleted											
P902A	Deleted											
P902B	Deleted											
P903A	Deleted											
P903B	Deleted											
P904A	Raw Water Transfer	Hor. Centr.	North- ington	220	115	70	3600	ODP	15	GE	M-111	
P904B	Raw Water Transfer	"	"	"	"	"	"	"	"	"	"	
P904C	Raw Water Transfer	"	"	"	"	"	"	"	"	"	"	
P905A	Deleted											
P905B	Deleted											
P906	Deleted											
P907	Acid Feed	Vert. Centr.	Goulds	20	100	116	3500	ODP	5	GE	M-111	
P908	Caustic Feed	"	"	20	100	116	3500	ODP	7 1/2	GE	"	
P909	Spare Acid/ Caustic Feed	"	"	20	100	116	3500	ODP	5	GE	"	
P910	Condenser Vacuum	Rotary	Nash	665 cfm	NA	NA	1050	ODP	40	"	M-91	
P911A	Deleted											
P911B	Deleted											
P912A	Filtered Water Transfer	Hor. Centr.	Worth- ington	330	85	70	3600	ODP	15	GE	M-111	
P912B	Filtered Water Transfer	"	"	"	"	"	"	"	"	"	"	
P913	Filter Backwash	"	"	750	70	"	3600	ODP	25	"	"	

EQUIPMENT LIST - PUMPS

Consumers Power Company
Palisades Plant
South Haven, Michigan

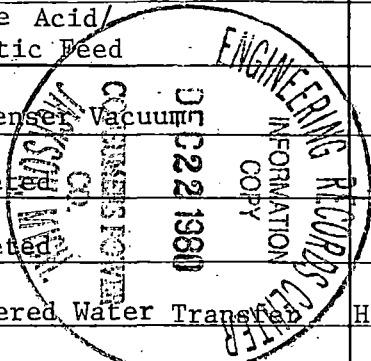
JOB No 10512-016

5935 -M- 250

SHEET 57 OF 120

REV.

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0 ISSUED FOR USE
 REV. DESCRIPTION ENG DR CHK SUPV MATL APPROVALS DATE

POWER DIVISION
ENGINEERING



EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P914A	Degasified Water Booster	Hor. Centr.	Worthington	330	138	70	3600	ODP	20	GE	M-111	
P914B	Degasified Water Booster	"	"	"	"	"	"	"	"	"	"	
P915A	Degasifier Vacuum	Rotary	Nash	475cfm @27"HgV			890	"	30	"	"	
P915B	Degasifier Vacuum	"	"	"			"	"	"	"	"	
P915C	Degasifier Vacuum	"	"	"			"	"	"	"	"	
P916A	Sodium Hypochlorite Feed	Positive Disp.	Lapp	2.0 GPH	150 psig	70	1725	ODP	1/6	"	"	
P916B	Sodium Hypochlorite Feed	"	"	"	"	"	"	"	"	"	"	
P917A	Neutralized Waste Transfer	Hor. Centr.	Worthington	130	70	70	3600	ODP	5	"	"	
P917B	Neutralized Waste Transfer	"	"	"	"	"	"	"	"	"	"	
P918	Sodium Hypochlorite Transfer	"	Jabsco	10	50	"	3600	ODP	3/4	"	"	
P919A	Deleted											
P919B	Deleted											
P920A	Deleted											
P920B	Deleted											
P921A	Deleted											
P921B	Deleted											
P922A	Deleted											
P922B	Deleted											
P923A	HTG Boiler Feed Pump	Centr-Turbine	Kewanee	91	46.2	180	1750		7 1/2		M-604	3.0341
P923B	HTG Boiler Feed Pump	"	"	"	"	"	"		7 1/2		M-604	3.0341

EQUIPMENT LIST - PUMPS

Consumers Power Company
Palsades Plant
South Haven, Michigan

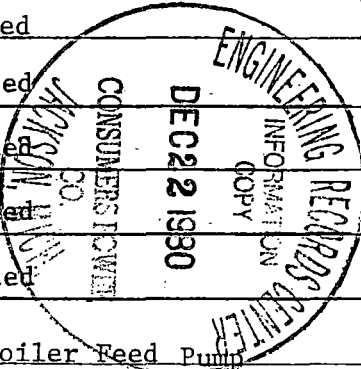
JOB No 10512-016

5935 -M- 250

SHEET 58 OF 120

REV.

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REV. DESCRIPTION ENG DR CHK SUPV MATL APPROVAL DATE

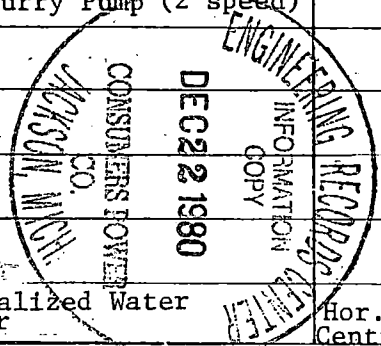
POWER DIVISION
ENGINEERING



EQUIPMENT LIST - PUMPS

Consumers Power Company
Palisades Plant
South Haven, Michigan

EQPT No	SERVICE	PUMP						DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	GPM	DIFF HD FT	TEMP °F	SPEED RPM	TYPE	HP	MFR		
P924A	Holding Pump	Hor. Centr.	Goulds	750	40	180	1750	ODP	15	West.	M-112.3	
P924B	Holding Pump	"	"	"	"	"	"	"	"	"	"	
P924C	Holding Pump	"	"	"	"	"	"	"	"	"	"	
P924D	Holding Pump	"	"	"	"	"	"	"	"	"	"	
P925	Deleted											
P926	Recoat Slurry	Hor. Centr.	Goulds	2250	60	180	1180	ODP	40	West.	"	
P927A	Resin Bodyfeed	Pos. Disp. Screw	Moyno	13	450 psi	Amb	950		10	Reliance	"	
P927B	Resin Bodyfeed	"	"	"	"	"	"		10	"	"	
P928A	Backwash Water	Hor. Centr.	Goulds	500	100	50-180	1750	ODP	30	West.	"	
P928B	Backwash Water	"	"	"	"	"	"	"	30	"	"	
P929	Resin Bodyfeed (Var. Speed)	Pos. Disp. Screw	Moyno	13	450 psi	Amb	120 to 950		10	Reliance	"	
P930A	Decant Pump	Vertical Centrifugal	Sundstrand	150	500#	125	10,200	ODP	100	Louis Allis	M-80A	
P930B	Decant Pump	Vertical Centrifugal	"	150	"	125	"	"	100	Louis Allis	M-80A	
P931A	Spent Resin Slurry Pump (2 speed)	Pos. Disp. Screw	Moyno	39 & 87	40#	125	175/350	TEFC	10/5	Reliance	M-84	
P931B	Spent Resin Slurry Pump (2 speed)	"	Moyno	40 & 88	40#	125	175/350	"	10/5	"	"	
P932	Deleted											
P933	Deleted											
P934	Deleted											
P935	Deleted											
P936	Demineralized Water Transfer	Hor. Centrifugal	Goulds	330	89	40 TO 104	3550	ODP	15	"	M-80B	



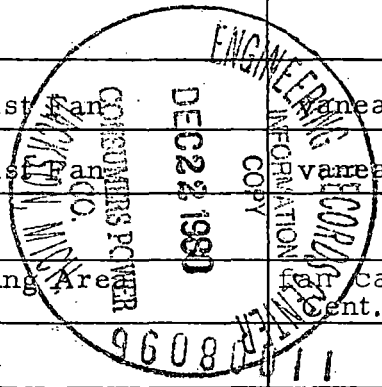
JOB No 10512-016
5935 -M- 250
SHEET 59 OF 120
REV. 0

2	REVISED FORMAT AND SHEET NUMBERS	RES	-	JES	PLA	CMSO	10/1/78	
0	ISSUED AS BUILT							
REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE

BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

EQUIPMENT LIST - FANS & COMPRESSORS
PALISADES PLANT
CONSUMERS POWER COMPANY

EQPT No	SERVICE	FAN & COMPRESSOR						DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	CFM	DIFF HD	TEMP °F	SPEED RPM	TYPE	HP	MFR		
V1A	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4 1/2"	104	1750	AC motor	75	GE	M-59	4
V1B	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4-1/2"	104	1750	AC motor	30	GE	M-59	4
V2A	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4 1/2"	104	1750	AC motor	75	GE	M-59	4
V2B	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4-1/2"	104	1750	AC motor	30	GE	M-59	4
V3A	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4 1/2"	104	1750	AC motor	75	GE	M-59	4
V3B	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4-1/2"	104	1750	AC motor	30	GE	M-59	4
V4A	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4 1/2"	104	1750	AC motor	75	GE	M-59	4
V4B	Containment Cooler Recirculation Fan	vaneaxial	Buf-fulo	30,000	4-1/2"	104	1750	AC motor	30	GE	M-59	4
V5	Containment Purge Supply Fan	vaneaxial	Buf-fulo	75,000	2.8"	95	1750	AC motor	75	GE	M-59	4
V6A	Main Exhaust Fan	vaneaxial	Buf-fulo	75,000	4 2/3"	104	1750	AC motor	60	GE	M-59	6
V6B	Main Exhaust Fan	vaneaxial	Buf-fulo	75,000	4 2/3"	104	1750	AC motor	60	GE	M-59	6
V7	Fuel Handling Area Supply Fan	fan cabinet Am Cent.	Air	12,000	1-1/2"	95	1750	AC motor	10	GE	M-57	4



JOB No 5935
M-250
SHEET 83 OF 120
REV. 2

2 REVISED FORMAT AND SHEET NUMBERS

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10-16-78

0 ISSUED AS BUILT

REV. DESCRIPTION ENG DR CHK SUPV MATL APPROVALS DATE

BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

PALISADES PLANT
CONSUMERS POWER COMPANY

EQUIPMENT LIST - FANS & COMPRESSORS

EQPT No	SERVICE	FAN & COMPRESSOR						DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	CFM	DIFF HD	TEMP °F	SPEED RPM	TYPE	HP	MFR		
V8A	Fuel Handling Area Exhauster	centrifugal	Buf-fulo	6,000	4.0"	104	1896	AC motor	7.5	GE	M-58	3
V8B	Fuel Handling Area Exhauster	centrifugal	Buf-fulo	6,000	4.0"	104	1896	AC motor	7.5	GE	M-58	3
V9A	Turbine Bldg. supply fan	fan cabinet Cent.	AM AIR	22,700	1-1/2"	60	1750	AC motor	15	GE	M-57	2
V9B	Turbine Bldg. supply fan	fan cabinet Cent.	AM AIR	24,000	1-1/2"	60	1750	AC motor	15	GE	M-57	2
V9C	Turbine Bldg. supply fan	fan cabinet Cent.	AM AIR	21,400	1-1/2"	60	1750	AC motor	15	GE	M-57	2
V9D	Turbine Bldg. supply fan	fan cabinet Cent.	AM AIR	23,100	1-1/2"	60	1750	AC motor	15	GE	M-57	2
V10	Radwaste Area Supply Fan	Cent.	Buf-fulo	32,000	4"	60	1945	AC motor	30	GE	M-58	3
V12A	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1
V12B	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1
V12C	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1
V12D	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1
V12E	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1
V12F	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1
V12G	Turbine Building Roof Exhauster	Vaneaxial roof ex.	Bertram	30,000	1/4"	104	700	AC motor	5	West	M-56	1

ENGINEERING INFORMATION REPORT COPY

DEC 22 1980

CONSUMERS POWER

JOB NO 5935

M-250

SHEET 84 OF 120

2

REV.

2 REVISED FORMAT & SHEET NUMBERS

REC

yes

Wd

CASE

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0 ISSUED AS BUILT

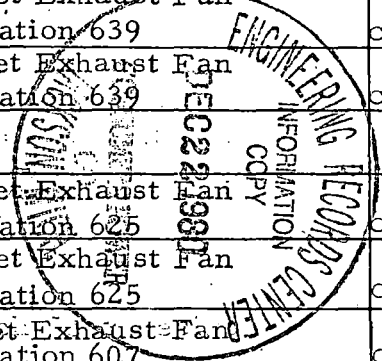
REV. DESCRIPTION ENG DR CHK SUPV MATL APPROVALS DATE

BECHTEL CORPORATION
POWER DIVISION
ENGINEERING

EQUIPMENT LIST - FANS & COMPRESSORS

PALISADES PLANT
CONSUMERS POWER COMPANY

EQPT No	SERVICE	FAN & COMPRESSOR					DRIVER			REQ'N No	MAINT. PRIORITY	
		TYPE	MFR	CFM	DIFF HD	TEMP °F	SPEED RPM	TYPE	HP			MFR
V33	Switchgear Supply Unit	centrifugal	Am Air	20,000	1-1/2"	104	1800	AC motor	15	GE	M-57	1
V34	Control Room Air Handling Unit	centrifugal	Am Air	4,000	1-1/2"	95	1750	AC motor	5	GE	M-57	4
V35	Purge Exhaust Fan	vaneaxial	Buf-fulo	75,000	5 3/4"	104	1750	AC motor	100	GE	M-59	4
V36	Control Room Isolation Filter Fan	centrifugal	Buf-fulo	1,000	3 1/4"	95	3500	AC motor	3	GE	M-58	4
V37A	Toilet Exhaust Fan Elevation 639	centrifugal	Cl-range	894	1/4"	104	860	AC motor	1/6		M-56	1
V37B	Toilet Exhaust Fan Elevation 639	centrifugal	Cl-range	894	1/4"	104	860	AC motor	1/6		M-56	1
V38A	Toilet Exhaust Fan Elevation 625	centrifugal	Cl-range	437	1/4"	104	1150	AC motor	1/12		M-56	1
V38B	Toilet Exhaust Fan Elevation 625	centrifugal	Cl-range	437	1/4"	104	1150	AC motor	1/12		M-56	1
V40A	Toilet Exhaust Fan Elevation 607	centrifugal	Cl-range	1,333	1/4"	104	1140	AC motor	1/6		M-56	1
V40B	Toilet Exhaust Fan Elevation 607	centrifugal	Cl-range	1,333	1/4"	104	1140	AC motor	1/6		M-56	1
V42	Auxiliary Building Recirculation Fan	centrifugal	Buf-fulo	14,000	2 1/2"	104	900	AC motor	7.5	GE	M-58	1
V43	Switchgear Recirculation Fan	vaneaxial	Buf-fulo	20,000	1/2"	104	810	AC motor	2	GE	M-59	2
V45	Office Area Supply Fan	Centrifugal	Am Air	11,500	1-1/2"	95	1800	AC motor	7-1/2"	GE	M-57	1



JOB NO 5935
REV. 2
SHEET 89 OF 120
M-250

CP

3 V67 & V68 V-69 APPED - FC-28
6 REVISED FORMAT & SHEET NUMBERS
ISSUED AS BUIL

JFW
RCS

ERL
JRS

CRG

2-27-76

REV.	DESCRIPTION	ENG	DR	CHK	SUPV	MATL	APPROVALS	DATE
4	DELETED V-67, V-68, V-69; Renumbered V-81, V-82, V-83 on M-614, Sh 27.			ERL	DLH			5-3-76

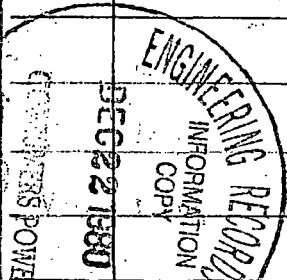
POWER DIVISION
ENGINEERING



EQUIPMENT LIST - FANS & COMPRESSORS

CONSIGNED FOR THE COMPANY
10055882

EQPT No	SERVICE	FAN & COMPRESSOR						DRIVER			REQ'N No	MAINT. PRIORITY
		TYPE	MFR	CFM	DIFF HD	TEMP °F	SPEED RPM	TYPE	HP	MFR		
V46	Air Space Purge Fan		Buf-falo	5,000	8"	95 F	1770	AC motor	3	GE	M-58	1
V47	Viewing Gallery and Switch gear rooms		Buf-falo	30,000	3"	104 F	1750	AC motor	75	GE		1
V50 A	MS & FW Penet. cooling fans		Clara-ge	600	1"	104 F	1750	AC motor				3
V50 B	MS & FW Penet. cooling fans		Clara-ge	600	1"		1750	AC motor				3
V49A	CRDM Cooling fans		Joy	27000	4 1/2"							6
V49B	CRDM Cooling fans		Joy	27000	4 1/2"							6
V61A	Pressure Shed Cooling fans		Ber-tram	5000	1/2"	104 °F	3600	AC MOTOR	2			3
V61B	Pressure Shed Cooling fans		Ber-tram	5000	1/2"		3600		2			3
V61C	Pressure Shed Cooling fans		Ber-tram	5000	1/2"		3600		2			3
V62	Elec. Penet. Roof Exh. fan		Clara-ge	2135	1/2"		1750		1/2			3
V64	SWITCHYARD RELAY HOUSE SUPPLY FAN		"	7600	1 1/2"	95 F	1750		5			2
V65	Battery Room Exh.		Clara-ge	870	3/8"	104 F	1140		1/2			2
V66	AIR ROOM REC REC FAN					FREE DEL. 104 F	1750		3			2



SHEET 90 OF 120
M-750
JOB No 5935
REV. 5