DRESSER PUMP DIVISION DRESSER

Dresser Pump Division, Dresser Industries, Inc.
5715 Bickett Street • Huntington Park, CA 90255-2634 • 213/588-2201 • Telex 673-283

Brach

November 13, 1989

U.S.N.R.C.
Washington, D.C 20555

Attention: Director, Office of Inspection and Inforcement

Sir:

The following information is being provided as required by 10CFR Part 21 Paragraph 21.21 and pertains to potentially defective basic components. This information is numbered as in Paragraph 21.21 b (3).

(i) Edwin Bailey, General Manager
Pacific Pumps Operation
Dresser Pump Division
Dresser Industries, Inc.
5715 Bickett Street
Huntington Park, CA 90255

(ii) Pressure Reducing Sleeve
Drawing Numbers: A16484, A16588, A20119, A21903, B12189, B19786, B20119, B20198, B21107, B22197, C24021, C60223.

(iii) Pacific Pumps Operation
Dresser Pump Division
Dresser Industries, Inc.

(iv) The Pressure Reducing Sleeve is intended to be surface hardened. Pressure Reducing Sleeves have failed during test when through hardened. We have found one pressure reducing sleeve delivered to a utility in the through hardened condition. A through hardened Pressure Reducing Sleeve could have a brittle crack failure that may result in excessive vibration and/or pump seizure.

(v) 11-2-89

(vi) See installation list included.

(vii) Defective Pressure Reducing Sleeves have been limited to those flame hardened in house. Therefore we have discontinued the flame hardening of Pressure Reducing Sleeves in house and are relying on a vendor that has provided this service successfully for many years. The inspection of Pressure Reducing Sleeves has been revised to detect the through hardened condition.

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(viii) (a) Inspect spare Pressure Reducing Sleeves for the through hardened condition. Check the hardness gradient across the end face. Hardness readings should be RC 45 minimum at the O.D. and RC 27 maximum at a point 25 % of the material thickness out from the I.D.

(b) There will be no concern for Pressure Reducing Sleeves installed in pumps that are running. Failures will occur within one hour of start up.

This information was given to Mr. Phil Ray, Head Quarters Operations Officer on Friday 11-10-89.

Sincerely,

DRESSER PUMP DIVISION
Pacific Pumps Operations

Ed Bailey / J J Pantell

Edwin Bailey
General Manager

EB/la

attachments

cc: Jack Martin - Reg. Adm.
U.S.N.R.C. - Reg. 5
1450 Maria Ln.
Suite 210
Walnut Creek, CA 94596-5368

nucprev1

PARTIAL INSTALLATION LIST OF "PACIFIC" BRAND PRODUCTS IN NUCLEAR PLANTS

11/13/1989

Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#)

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY ASME SECT III CODE RELT	Y/N	YEAR	ADNDA	CLS	NOTES
Commonwealth Edison	Dresden Nuc Sta #1		Divine	Illin	U.S.	H 32004	25463	1958	6 S	BFAC	3		?	N				
Commonwealth Edison	Dresden Nuc Sta #1		Divine	Illin	U.S.	H 32004	25464	1958	6 S	BFAC	3		?	N				
Commonwealth Edison	Dresden Nuc Sta #1		Divine	Illin	U.S.	H 32004	25465	1958	6 S	BFAC	3		?	N				
AEC			Hanford	Wash	U.S.	B 35699	30688	1960	6 S	BFAC	3		?	N				
AEC			Hanford	Wash	U.S.	B 35699	30689	1960	6 S	BFAC	3		?	N				
AEC			Hanford	Wash	U.S.	B 35699	30690	1960	6 S	BFAC	3		?	N				
Argonne Natl Lab			Scoville	Idaho	U.S.	B 33863	27507	1960	4 X	BFI	11		?	N				
AEC	TVA		Oak Ridge	Tenn	U.S.	B 35700	30691	1961	4 X	BFI	10		?	N				
AEC	TVA		Oak Ridge	Tenn	U.S.	B 35700	30692	1961	4 X	BFI	10		?	N				
Philadelphia Elct Co	Peach Bottom		Delta	Penn	U.S.	B 38934	34823	1963	4 X	BFI	11		?	N				
Philadelphia Elct Co	Peach Bottom		Delta	Penn	U.S.	B 38934	34824	1963	4 X	BFI	11		?	N				
Aerojet Nuclear Co	Natnl Rctr Tst Sta		Scoville	Idaho	U.S.	B 48364	48302	1972	4 X	BFI	5		?					
Commonwealth Edison	Dresden Nuc Sta #1		Divine	Illin	U.S.	H 32003	25460	1958	6 LL	BFI	6		?	N				
Commonwealth Edison	Dresden Nuc Sta #1		Divine	Illin	U.S.	H 32003	25461	1958	6 LL	BFI	6		?	N				
Commonwealth Edison	Dresden Nuc Sta #1		Divine	Illin	U.S.	H 32003	25462	1958	6 LL	BFI	6		?	N				
Consumers Power	Big Rock Point		Charlevoix	Mich	U.S.	B 35711	30700	1961	6 LL	BFI	6		?	N				
Consumers Power	Big Rock Point		Charlevoix	Mich	U.S.	B 35711	30701	1961	6 LL	BFI	6		?	N				
Govt of India			Tarapur		India	B 42459	39383	1965	10 S	BFI	5		?	N				
Govt of India			Tarapur		India	B 42459	39384	1965	10 S	BFI	5		?	N				
Govt of India			Tarapur		India	B 42459	39385	1965	10 S	BFI	5		?	N				
Govt of India			Tarapur		India	B 42459	39386	1965	10 S	BFI	5		?	N				
Govt of India			Tarapur		India	B 42459	39387	1965	10 S	BFI	5		?	N				
Commonwealth Edison	La Salle #1		Seneca	Illin	U.S.	B 48542	48806	1975	16 RX	BFI	2		?					
Commonwealth Edison	La Salle #2		Seneca	Illin	U.S.	B 48544	48809	1975	16 RX	BFI	2		?					
Commonwealth Edison	Braidwood #1	CAE	Byron	Illin	U.S.	B 50090	52317		4 SR	BFIDS								
Commonwealth Edison	Braidwood #1	CAE	Byron	Illin	U.S.	B 50090	52318		4 SR	BFIDS								
Commonwealth Edison	Braidwood #2	CAE	Byron	Illin	U.S.	B 50091	52319		4 SR	BFIDS								
Commonwealth Edison	Braidwood #2	CAE	Byron	Illin	U.S.	B 50091	52320		4 SR	BFIDS								
Commonwealth Edison	Byron #1	CBE	Byron	Illin	U.S.	B 50092	52321		4 SR	BFIDS								
Commonwealth Edison	Byron #1	CBE	Byron	Illin	U.S.	B 50092	52322		4 SR	BFIDS								
Commonwealth Edison	Byron #2	CBE	Byron	Illin	U.S.	B 50093	52323		4 SR	BFIDS								
Commonwealth Edison	Byron #2	CBE	Byron	Illin	U.S.	B 50093	52324		4 SR	BFIDS								
Public Srvc Co, Ind	Marblehill #1		Plainfield	Indiana	U.S.	B 50366	52754	1979	4 SR	BFIDS	10		?					
Public Srvc Co, Ind	Marblehill #1		Plainfield	Indiana	U.S.	B 50366	52755	1979	4 SR	BFIDS	10		?					
Public Srvc Co, Ind	Marblehill #2		Plainfield	Indiana	U.S.	B 50367	52756	1980	4 SR	BFIDS	10		?					
Public Srvc Co, Ind	Marblehill #2		Plainfield	Indiana	U.S.	B 50367	52757	1980	4 SR	BFIDS	10		?					
Central Nuc-Sayago	Sayago #1	PWE	Moral de Sayago		Spain	B 49855	51895	1978	2 RL	IJ	7		?					
Central Nuc-Sayago	Sayago #1	PWE	Moral de Sayago		Spain	B 49855	51896	1978	2 RL	IJ	7		?					

Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#)

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY REL?	ASME SECT III CODE Y/N	YEAR	ADNDA	CLS	NOTES
Houston Lght & Pwr	So Texas Proj #1	TGX	Palacios	Texas	U.S.	B 49857	51899	1977	2 RL	IJ	7		?					
Houston Lght & Pwr	So Texas Proj #1	TGX	Palacios	Texas	U.S.	B 49857	51900	1977	2 RL	IJ	7		?					
Central Pwr & Light	So Texas Proj #2	THX	Palacios	Texas	U.S.	B 49858	51901	1978	2 RL	IJ	7		?					
Central Pwr & Light	So Texas Proj #2	THX	Palacios	Texas	U.S.	B 49858	51902	1978	2 RL	IJ	7		?					
Philippine Nat Pwr	Napot Point #1	PLA	Bagac	No Luz	Philip	B 50409	52818	1978	2 RL	IJ	7	CHQ/SI	Y					?
Philippine Nat Pwr	Napot Point #1	PLA	Bagac	No Luz	Philip	B 50409	52819	1978	2 RL	IJ	7	CHQ/SI	Y					?
Korea Electric Pwr	Ko-Ri #2	KPR			Korea	B 50573	53065	1979	2 RL	IJ	7		?					
Korea Electric Pwr	Ko-Ri #2	KPR			Korea	B 50573	53066	1979	2 RL	IJ	7		?					
Pub Srvc Elct & Gas	Salem #1	PSE	Salem	New Jer	U.S.	B 46817	45603	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Pub Srvc Elct & Gas	Salem #1	PSE	Salem	New Jer	U.S.	B 46817	45604	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Indiana & Mich Elct	Donald C Cook #2	AEP	Bridgeman	Mich	U.S.	B 46817	45605	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Indiana & Mich Elct	Donald C Cook #2	AEP	Bridgeman	Mich	U.S.	B 46817	45606	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Indiana & Mich Elct	Donald C Cook #2	AMP	Bridgeman	Mich	U.S.	B 46817	45607	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Indiana & Mich Elct	Donald C Cook #2	AMP	Bridgeman	Mich	U.S.	B 46817	45608	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Commonwealth Edison	Zion #2	CWE	Zion	Illin	U.S.	B 46817	45609	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Commonwealth Edison	Zion #2	CWE	Zion	Illin	U.S.	B 46817	45610	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Pacific Gas & Elct	Diablo Canyon #1	PGE	Avila Beach	Calif	U.S.	B 46817	45611	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Pacific Gas & Elct	Diablo Canyon #1	PGE	Avila Beach	Calif	U.S.	B 46817	45612	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Philadelphia Elct Co	Salem #2	PNJ	Salem	New Jer	U.S.	B 46817	45613	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Philadelphia Elct Co	Salem #2	PNJ	Salem	New Jer	U.S.	B 46817	45614	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Commonwealth Edison	Zion #1	CON	Zion	Illin	U.S.	B 46817	45615*	1970	2.5 RL	IJ	11	CHQ/SI	Y					
Commonwealth Edison	Zion #1	CON	Zion	Illin	U.S.	B 46817	45616	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Pacific Gas & Elct	Diablo Canyon #2	PEG	Avila Beach	Calif	U.S.	B 46817	45617	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Pacific Gas & Elct	Diablo Canyon #2	PEG	Avila Beach	Calif	U.S.	B 46817	45618	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
TVA	Sequoyah #1	TVA	Daisy	Tenn	U.S.	B 46817	45619	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
TVA	Sequoyah #1	TVA	Daisy	Tenn	U.S.	B 46817	45620	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
TVA	Sequoyah #2	TEN	Daisy	Tenn	U.S.	B 46817	45621	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
TVA	Sequoyah #2	TEN	Daisy	Tenn	U.S.	B 46817	45622	1970	2.5 RL	IJ	11	CHQ/SI	Y					1
Duquesne Light	Beaver Valley #1	DLW	Shippingport	Penn	U.S.	BB 47096	46351?	1972	2.5 RL	IJ	11	CHQ/SI	Y					
Duquesne Light	Beaver Valley #1	DLW	Shippingport	Penn	U.S.	BB 47096	46352	1972	2.5 RL	IJ	11	CHQ/SI	Y					1,10
Duquesne Light	Beaver Valley #1	DLW	Shippingport	Penn	U.S.	BB 47096	46353	1972	2.5 RL	IJ	11	CHQ/SI	Y					1,10
Virginia Elct & Pwr	North Anna #1	VRA	Mineral	Virg	U.S.	B 47096	46357	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Virginia Elct & Pwr	North Anna #1	VRA	Mineral	Virg	U.S.	B 47096	46358	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Virginia Elct & Pwr	North Anna #1	VRA	Mineral	Virg	U.S.	B 47096	46359	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Virginia Elct & Pwr	North Anna #2	VQB	Mineral	Virg	U.S.	B 47096	46362	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Virginia Elct & Pwr	North Anna #2	VQB	Mineral	Virg	U.S.	B 47096	46363	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Virginia Elct & Pwr	North Anna #2	VQB	Mineral	Virg	U.S.	B 47096	46364	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Kansai Elct Pwr	Takahama #1	TAK	Takahama-Cho		Japan	B 47096	46365	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Kansai Elct Pwr	Takahama #1	TAK	Takahama-Cho		Japan	B 47096	46366	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Kansai Elct Pwr	Takahama #1	TAK	Takahama-Cho		Japan	B 47096	46367	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Portland Gen Elct	Trojan #1	POR	Prescott	Oregon	U.S.	B 47096A	46360	1972	2.5 RL	IJ	11	CHQ/SI	Y					1,9
Portland Gen Elct	Trojan #1	POR	Prescott	Oregon	U.S.	B 47096A	46361	1972	2.5 RL	IJ	11	CHQ/SI	Y					1,9
Alabama Pwr Co	Joseph M Farley #2	APR	Dothan	Alabama	U.S.	B 47919	47667	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Alabama Pwr Co	Joseph M Farley #2	APR	Dothan	Alabama	U.S.	B 47919	47668	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Alabama Pwr Co	Joseph M Farley #2	APR	Dothan	Alabama	U.S.	B 47919	47669	1972	2.5 RL	IJ	11	CHQ/SI	Y					2
Alabama Pwr Co	Joseph M Farley #1	ALA	Dothan	Alabama	U.S.	B 48252	48354	1972	2.5 RL	IJ	11	CHQ/SI	Y					2

Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#)

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY ASME SECT III CODE REL?	Y/N	YEAR	ADNDA	CLS	NOTES
Alabama Pwr Co	Joseph M Farley #1	ALA	Dothan	Alabama	U.S.	8 48252	46355	1972	2.5 RL	IJ	11	CHG/SI	Y					2
Alabama Pwr Co	Joseph M Farley #1	ALA	Dothan	Alabama	U.S.	8 48252	46356	1972	2.5 RL	IJ	11	CHG/SI	Y					2
Duke Power	W B McGuire #1	DAP	Cowans Ford Dam	No Caro	U.S.	8 46530	48582	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	W B McGuire #1	DAP	Cowans Ford Dam	No Caro	U.S.	8 48530	48583	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	W B McGuire #1	DBP	Cowans Ford Dam	No Caro	U.S.	8 48530	48584	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	W B McGuire #1	DBP	Cowans Ford Dam	No Caro	U.S.	8 48530	48585	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Kansai Elct Pwr	Ohi #1	OHI	Ohi-Cho		Japan	8 48531	48586	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Kansai Elct Pwr	Ohi #1	OHI	Ohi-Cho		Japan	8 48531	48587	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Kansai Elct Pwr	Ohi #2	OKB	Ohi-Cho		Japan	8 48531	48588	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Kansai Elct Pwr	Ohi #2	OKB	Ohi-Cho		Japan	8 48531	48589	1972	2.5 RL	IJ	11	CHG/SI	Y					3
TVA	Watts Bar #1	WAT	Spring City	Tenn	U.S.	8 48532	48590	1972	2.5 RL	IJ	11	CHG/SI	Y					3
TVA	Watts Bar #1	WAT	Spring City	Tenn	U.S.	8 48532	48591	1972	2.5 RL	IJ	11	CHG/SI	Y					3
TVA	Watts Bar #2	WBT	Spring City	Tenn	U.S.	8 48532	48592	1972	2.5 RL	IJ	11	CHG/SI	Y					3
TVA	Watts Bar #2	WBT	Spring City	Tenn	U.S.	8 48532	48593	1972	2.5 RL	IJ	11	CHG/SI	Y					3
Central Nuc-Almaraz	Almaraz #1	ARZ	Almaraz	Caceres	Spain	8 48891	49160	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Almaraz	Almaraz #1	ARZ	Almaraz	Caceres	Spain	8 48891	49161	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Almaraz	Almaraz #1	ARZ	Almaraz	Caceres	Spain	8 48891	49162	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Almaraz	Almaraz #2	ASZ	Almaraz	Caceres	Spain	8 48892	49163	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Almaraz	Almaraz #2	ASZ	Almaraz	Caceres	Spain	8 48892	49164	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Almaraz	Almaraz #2	ASZ	Almaraz	Caceres	Spain	8 48892	49165	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Lemoniz	Lemoniz #1	LEM	Lemoniz	Vizcayn	Spain	8 48893	49166	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Lemoniz	Lemoniz #1	LEM	Lemoniz	Vizcayn	Spain	8 48893	49167	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Lemoniz	Lemoniz #1	LEM	Lemoniz	Vizcayn	Spain	8 48893	49168	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Lemoniz	Lemoniz #2	LOM	Lemoniz	Vizcayn	Spain	8 48894	49169	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Lemoniz	Lemoniz #2	LOM	Lemoniz	Vizcayn	Spain	8 48894	49170	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Central Nuc-Lemoniz	Lemoniz #2	LOM	Lemoniz	Vizcayn	Spain	8 48894	49171	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Fuerzas El-Cataluna	ASCO #1	FEY	Tarragona		Spain	8 48895	49172	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Fuerzas El-Cataluna	ASCO #1	FEY	Tarragona		Spain	8 48895	49173	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Fuerzas El-Cataluna	ASCO #1	FEY	Tarragona		Spain	8 48895	49174	1974	2.5 RL	IJ	11	CHG/SI	Y					5
Fuerzas El-Cataluna	ASCO #2	FFY	Tarragona		Spain	8 48896	49175	1975	2.5 RL	IJ	11		?					
Fuerzas El-Cataluna	ASCO #2	FFY	Tarragona		Spain	8 48896	49176	1975	2.5 RL	IJ	11		?					
Fuerzas El-Cataluna	ASCO #2	FFY	Tarragona		Spain	8 48896	49177	1975	2.5 RL	IJ	11		?					
S Carolina Elct & Gs	Virgil C Summer #1	CQE	Parr	So Caro	U.S.	8 48897	49178	1975	2.5 RL	IJ	11	CHG/SI	Y					4
S Carolina Elct & Gs	Virgil C Summer #1	CQE	Parr	So Caro	U.S.	8 48897	49179	1975	2.5 RL	IJ	11	CHG/SI	Y					4
S Carolina Elct & Gs	Virgil C Summer #1	CQE	Parr	So Caro	U.S.	8 48897	49180	1975	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #1	CQL	Newhill	No Caro	U.S.	8 48898	49181	1974	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #1	CQL	Newhill	No Caro	U.S.	8 48898	49182	1974	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #1	CQL	Newhill	No Caro	U.S.	8 48898	49183	1974	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #2	CRL	Newhill	No Caro	U.S.	8 48899	49184	1976	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #2	CRL	Newhill	No Caro	U.S.	8 48899	49185	1976	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #2	CRL	Newhill	No Caro	U.S.	8 48899	49186	1976	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #3	CSL	Newhill	No Caro	U.S.	8 48900	49188	1976	2.5 RL	IJ	11	CHG/SI	Y					4

Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#)

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY ASME SECT III CODE RELT	Y/N	YEAR	ADNDA	CLS	NOTES
Portland Gen Elct	Trojan #1	POR	Prescott	Oregon	U.S.	8 48900A	49187	1976	2.5 RL	IJ	11	CHG/SI	Y					3, 9
Portland Gen Elct	Trojan #1	POR	Prescott	Oregon	U.S.	8 48900A	49189	1976	2.5 RL	IJ	11	CHG/SI	Y					3, 9
Duquesne Light	Beaver Valley #2	DMW	Shippingport	Penn	U.S.	8 48901	49190	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Duquesne Light	Beaver Valley #2	DMW	Shippingport	Penn	U.S.	8 48901	49191	1975	2.5 RL	IJ	11	CHG/SI	Y					3,10
Duquesne Light	Beaver Valley #2	DMW	Shippingport	Penn	U.S.	8 48901	49192	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Public Srvc Co, Ind	Marblehill #1	PBJ	Plainfield	Indiana	U.S.	8 49224	49766	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Public Srvc Co, Ind	Marblehill #1	PBJ	Plainfield	Indiana	U.S.	8 49224	49767	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Public Srvc Co, Ind	Marblehill #2	PCJ	Plainfield	Indiana	U.S.	8 49224	49768	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Public Srvc Co, Ind	Marblehill #2	PCJ	Plainfield	Indiana	U.S.	8 49224	49769	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Byron #1	CAE	Byron	Illin	U.S.	8 49224	49770	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Byron #1	CAE	Byron	Illin	U.S.	8 49224	49771	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Byron #2	CBE	Byron	Illin	U.S.	8 49224	49772	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Byron #2	CBE	Byron	Illin	U.S.	8 49224	49773	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Braidwood #1	CCE	Braidwood	Illin	U.S.	8 49224	49774	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Braidwood #1	CCE	Braidwood	Illin	U.S.	8 49224	49775	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Braidwood #2	CDE	Braidwood	Illin	U.S.	8 49224	49776	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Braidwood #2	CDE	Braidwood	Illin	U.S.	8 49224	49777	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	Catawba #1	DCP	Lake Wylie	So Caro	U.S.	8 49224	49778	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	Catawba #1	DCP	Lake Wylie	So Caro	U.S.	8 49224	49779	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	Catawba #2	DDP	Lake Wylie	So Caro	U.S.	8 49224	49780	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Duke Power	Catawba #2	DDP	Lake Wylie	So Caro	U.S.	8 49224	49781	1975	2.5 RL	IJ	11	CHG/SI	Y					3
Swedish States Pwr	Ringhals #2	SSP	Varberg		Sweden	8 49517	48704	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Swedish States Pwr	Ringhals #2	SSP	Varberg		Sweden	8 49517	48705	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Swedish States Pwr	Ringhals #2	SSP	Varberg		Sweden	8 49517	48706	1975	2.5 RL	IJ	11	CHG/SI	Y					5
Kansas Gas & Elct	Wolf Creek #1	SAP	Burlington	Kansas	U.S.	8 49739	51669	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Kansas Gas & Elct	Wolf Creek #1	SAP	Burlington	Kansas	U.S.	8 49739	51670	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Northern States Pwr	Tyrone #1	SEP	Durand	Wis	U.S.	8 49740	51671	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Northern States Pwr	Tyrone #1	SEP	Durand	Wis	U.S.	8 49740	51672	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Union Electric	Callaway #1	SCP	Fulton	Missou	U.S.	8 49741	51673	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Union Electric	Callaway #1	SCP	Fulton	Missou	U.S.	8 49741	51674	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Rochester Gas & Elct	Sterling Unit	SDP	Sterling	New Yor	U.S.	8 49742	51675	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Rochester Gas & Elct	Sterling Unit	SDP	Sterling	New Yor	U.S.	8 49742	51676	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Union Electric	Callaway #2	SFP	Fulton	Missou	U.S.	8 49743	51677	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Union Electric	Callaway #2	SFP	Fulton	Missou	U.S.	8 49743	51678	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Texas Utilities Gen	Comanche Peak #1	TBX	Glen Rose	Texas	U.S.	8 49745	51681	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Texas Utilities Gen	Comanche Peak #1	TBX	Glen Rose	Texas	U.S.	8 49745	51682	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Pub Srvc, New Hamp	Seabrook #1	NAH	Sea Brook	New Ha	U.S.	8 49746	51683	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Pub Srvc, New Hamp	Seabrook #1	NAH	Sea Brook	New Ha	U.S.	8 49746	51684	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Pub Srvc, New Hamp	Seabrook #2	NCH	Sea Brook	New Ha	U.S.	8 49748	51687	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Pub Srvc, New Hamp	Seabrook #2	NCH	Sea Brook	New Ha	U.S.	8 49748	51688	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Carblina Pwr & Lght	Shearon Harris #4	CSL	Newhill	No Caro	U.S.	8 49790	52409	1978	2.5 RL	IJ	11	CHG/SI	Y					4
Carolina Pwr & Lght	Shearon Harris #4	CSL	Newhill	No Caro	U.S.	8 49790	52410	1978	2.5 RL	IJ	11	CHG/SI	Y					4

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CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY ASME SECT III CODE REL?	Y/N	YEAR	ADNDA	CLS	NOTES
Carolina Pwr & Light	Shearon Harris #4	CSL	Newhill	No Caro	U.S.	B 49790	52411	1978	2.5 RL	IJ	11	CHG/SI	Y					4
Texas Utilities Gen	Comanche Peak #2	TCK	Glen Rose	Texas	U.S.	B 49860	51905	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Texas Utilities Gen	Comanche Peak #2	TCK	Glen Rose	Texas	U.S.	B 49860	51906	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Northeast Nuc Enrgy	Millstone #3	NEU	Waterford	Conn	U.S.	B 49861	51807	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Northeast Nuc Enrgy	Millstone #3	NEU	Waterford	Conn	U.S.	B 49861	51808	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Northeast Nuc Enrgy	Millstone #3	NEU	Waterford	Conn	U.S.	B 49861	51809	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Georgia Power	Alvin W Vogtle #1	GAE	Waynesboro	Georgia	U.S.	B 50033	52233	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Georgia Power	Alvin W Vogtle #1	GAE	Waynesboro	Georgia	U.S.	B 50033	52234	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Georgia Power	Alvin W Vogtle #2	GBE	Waynesboro	Georgia	U.S.	B 50034	52235	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Georgia Power	Alvin W Vogtle #2	GBE	Waynesboro	Georgia	U.S.	B 50034	52236	1977	2.5 RL	IJ	11	CHG/SI	Y					6
Taiwan Pwr	Maanshan #1	TWP	Maanshan		Taiwan	B 50216	52533	1979	2.5 RL	IJ	11	CHG/SI	Y					7
Taiwan Pwr	Maanshan #1	TWP	Maanshan		Taiwan	B 50216	52534	1979	2.5 RL	IJ	11	CHG/SI	Y					7
Taiwan Pwr	Maanshan #1	TWP	Maanshan		Taiwan	B 50216	52535	1979	2.5 RL	IJ	11	CHG/SI	Y					7
Taiwan Pwr	Maanshan #2	TXP	Maanshan		Taiwan	B 50217	52536	1979	2.5 RL	IJ	11	CHG/SI	Y					7
Taiwan Pwr	Maanshan #2	TXP	Maanshan		Taiwan	B 50217	52537	1979	2.5 RL	IJ	11	CHG/SI	Y					7
Taiwan Pwr	Maanshan #2	TXP	Maanshan		Taiwan	B 50217	52538	1979	2.5 RL	IJ	11	CHG/SI	Y					7
Fuerzas El-Cataluna	Vandellos #2	EAS	Vandellos		Spain	B 50479	52920	1979	2.5 RL	IJ	11	CHG/SI	Y					8
Fuerzas El-Cataluna	Vandellos #2	EAS	Vandellos		Spain	B 50479	52921	1979	2.5 RL	IJ	11	CHG/SI	Y					8
Fuerzas El-Cataluna	Vandellos #2	EAS	Vandellos		Spain	B 50479	52922	1979	2.5 RL	IJ	11	CHG/SI	Y					8
Fuerzas El-Cataluna	ASCO #2	FFY	Tarragona		Spain	B 50683	53239	1980	2.5 RL	IJ	11	CHG/SI	Y					5
Fuerzas El-Cataluna	ASCO #2	FFY	Tarragona		Spain	B 50683	53240	1980	2.5 RL	IJ	11	CHG/SI	Y					5
Fuerzas El-Cataluna	ASCO #2	FFY	Tarragona		Spain	B 50683	53241	1980	2.5 RL	IJ	11	CHG/SI	Y					5
Korea Electric Pwr	Ko-Ri #5	KQA			Korea	B 50851	53497	1980	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #5	KQA			Korea	B 50851	53498	1980	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #5	KQA			Korea	B 50851	53499	1980	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #6	KHB			Korea	B 50852	53500	1980	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #6	KHB			Korea	B 50852	53501	1980	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #6	KHB			Korea	B 50852	53502	1980	2.5 RL	IJ	11	CHG/SI	Y					7
Duquesne Light	Beaver Valley #2	DMW	Shippingport	Penn	U.S.	B 51108	53883	1982	2.5 RL	IJ	11	CHG/SI	Y					3,1[illegible]
Duquesne Light	Beaver Valley		Shippingport	Penn	U.S.	B 51108A?	MC00020-01	1989	2.5 RL	IJ	11	CHG/SI	Y					3,10
Korea Electric Pwr	Ko-Ri #7	KSR			Korea	B 51109	53887	1981	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #7	KSR			Korea	B 51109	53888	1981	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #7	KSR			Korea	B 51109	53889	1981	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #8	KTR			Korea	B 51111	53892	1981	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #8	KTR			Korea	B 51111	53893	1981	2.5 RL	IJ	11	CHG/SI	Y					7
Korea Electric Pwr	Ko-Ri #8	KTR			Korea	B 51111	53894	1981	2.5 RL	IJ	11	CHG/SI	Y					7
Commonwealth Edison	Zion		Zion	Illin	U.S.	B 51951	B51951-01	1982	2.5 RL	IJ	11	CHG/SI	Y					1
Commonwealth Edison	Braidwood		Braidwood	Illin	U.S.	B 52084	B52084-01	1983	2.5 RL	IJ	11	CHG/SI	Y					3
Commonwealth Edison	Braidwood		Braidwood	Illin	U.S.	B 52084	B52084-02	1983	2.5 RL	IJ	11	CHG/SI	Y					3

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Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#)

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY REL?	ASME SECT III CODE Y/N	YEAR	ADNDA	CLS	NOTES
Duke Power	Catawba #1	DCP	Lake Wylie	So Caro	U.S.	B 52147	852147-01	1983	2.5 RL	IJ	11	CHG/SI	Y					3
Indiana & Mich Elct	Donald C Cook		Bridgeman	Mich	U.S.	B 52799	852799-01	1985	2.5 RL	IJ	11	CHG/SI	Y					1
Savske Electrane	Krsko	KRK	Krsko		Yugoslva	B 49854	51893	1978	2 RL	IJ	7	CHG	Y	Y	1974	S'74	2	
Savske Electrane	Krsko	KRK	Krsko		Yugoslva	B 49854	51894	1978	2 RL	IJ	7	CHG	Y	Y	1974	S'74	2	
Savske Electrane	Krsko	KRK	Krsko		Yugoslva	B 49854	53083	1978	2 RL	IJ	7	CHG	Y	Y	1974	S'74	2	
Savske Electrane	Krsko	KRK	Krsko		Yugoslva	B 49854	53084	1978	2 RL	IJ	7	CHG	Y	Y	1974	S'74	2	
Kansai Elct Pwr	Ohi #1	OHI	Ohi-Cho		Japan	J 48994	49347	1974	3	JHF	10		?					
Kansai Elct Pwr	Ohi #1	OHI	Ohi-Cho		Japan	J 48994	49348	1974	3	JHF	10		?					
Kansai Elct Pwr	Ohi #2	OHB	Ohi-Cho		Japan	J 48994	49349	1974	3	JHF	10		?					
Kansai Elct Pwr	Ohi #2	OHB	Ohi-Cho		Japan	J 48994	49350	1974	3	JHF	10		?					
TVA	Watts Bar #1	WAT	Spring City	Tenn	U.S.	J 48995	49351	1974	3	JHF	10		?					
TVA	Watts Bar #1	WAT	Spring City	Tenn	U.S.	J 48995	49352	1974	3	JHF	10		?					
TVA	Watts Bar #2	WBT	Spring City	Tenn	U.S.	J 48995	49353	1974	3	JHF	10		?					
TVA	Watts Bar #2	WBT	Spring City	Tenn	U.S.	J 48995	49354	1974	3	JHF	10		?					
Duke Power	W B McGuire #1	DAP	Cowans Ford Dam	No Caro	U.S.	J 48996	49355	1976	3	JHF	10		?					
Duke Power	W B McGuire #1	DAP	Cowans Ford Dam	No Caro	U.S.	J 48996	49356	1976	3	JHF	10		?					
Duke Power	W B McGuire #1	DBP	Cowans Ford Dam	No Caro	U.S.	J 48996	49357	1976	3	JHF	10		?					
Duke Power	W B McGuire #1	DBP	Cowans Ford Dam	No Caro	U.S.	J 48996	49358	1976	3	JHF	10		?					
Duke Power	Catawba #1	DCP	Lake Wylie	So Caro	U.S.	J 48997	49359	1976	3	JHF	10		?					
Duke Power	Catawba #1	DCP	Lake Wylie	So Caro	U.S.	J 48997	49360	1976	3	JHF	10		?					
Duke Power	Catawba #2	DDP	Lake Wylie	So Caro	U.S.	J 48997	49361	1976	3	JHF	10		?					
Duke Power	Catawba #2	DDP	Lake Wylie	So Caro	U.S.	J 48997	49362	1976	3	JHF	10		?					
Public Srvc Co, Ind	Marblehill #1	PBJ	Plainfield	Indiana	U.S.	J 49218	49754	1975	3	JHF	10		?					
Public Srvc Co, Ind	Marblehill #1	PBJ	Plainfield	Indiana	U.S.	J 49218	49755	1975	3	JHF	10		?					
Aerojet Nuclear Co	Battle Atmc Pwr Lb		Scoville	Idaho	U.S.	J 49218	49756	1976	3	JHF	10		?					
Public Srvc Co, Ind	Marblehill #2	PCJ	Plainfield	Indiana	U.S.	J 49218	49757	1975	3	JHF	10		?					
Commonwealth Edison	Byron #1	CAE	Byron	Illin	U.S.	J 49218	49758	1974	3	JHF	10		?					
Commonwealth Edison	Byron #1	CAE	Byron	Illin	U.S.	J 49218	49759	1974	3	JHF	10		?					
Commonwealth Edison	Byron #2	CBE	Byron	Illin	U.S.	J 49218	49760	1974	3	JHF	10		?					
Commonwealth Edison	Byron #2	CBE	Byron	Illin	U.S.	J 49218	49761	1974	3	JHF	10		?					
Commonwealth Edison	Braidwood #1	CCE	Braidwood	Illin	U.S.	J 49218	49762	1975	3	JHF	10		?					
Commonwealth Edison	Braidwood #1	CCE	Braidwood	Illin	U.S.	J 49218	49763	1975	3	JHF	10		?					
Commonwealth Edison	Braidwood #2	CDE	Braidwood	Illin	U.S.	J 49218	49764	1975	3	JHF	10		?					
Commonwealth Edison	Braidwood #2	CDE	Braidwood	Illin	U.S.	J 49218	49765	1975	3	JHF	10		?					
Public Srvc Co, Ind	Marblehill #2	PCJ	Plainfield	Indiana	U.S.	J 452'1	52079	1975	3	JHF	10		?					
Kansas Gas & Elct	Wolf Creek #1	SAP	Burlington	Kansas	U.S.	J 49728	51647	1977	3	JHF	11		?					
Kansas Gas & Elct	Wolf Creek #1	SAP	Burlington	Kansas	U.S.	J 49728	51648	1977	3	JHF	11		?					
Northern States Pwr	Tyrone #1	SEP	Durand	Wis	U.S.	J 49729	51649	1978	3	JHF	11		?					
So California Edsn	San Onofre #1	SCE	San Clemente	Calif	U.S.	J 49729A	51650	1986	3	JHF	11		?					
Union Electric	Callaway #1	SCP	Fulton	Missou	U.S.	J 49730	51651	1977	3	JHF	11		?					
Union Electric	Callaway #1	SCP	Fulton	Missou	U.S.	J 49730	51652	1977	3	JHF	11		?					
Rochester Gas & Elct	Sterling Unit	SDP	Sterling	New Yor	U.S.	J 49731	51653	1977	3	JHF	11		?					

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CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY REL?	ASME SECT III CODE Y/N	YEAR	ADHDA	CLS	NOTES
Rochester Gas & Elct	Sterling Unit	SDP	Sterling	New Yor	U.S.	J 49731	51654	1977	3	JHF	11		?					
Union Electric	Callaway #2	SFP	Fulton	Missou	U.S.	J 49732	51655	1977	3	JHF	11		?					
Union Electric	Callaway #2	SFP	Fulton	Missou	U.S.	J 49732	51659	1977	3	JHF	11		?					
Pub Srvc, New Hamp	Seabrook #1	NAH	Sea Brook	New Ha	U.S.	J 49735	51661	1977	3	JHF	11		?					
Pub Srvc, New Hamp	Seabrook #1	NAH	Sea Brook	New Ha	U.S.	J 49735	51662	1977	3	JHF	11		?					
Pub Srvc, New Hamp	Seabrook #2	NCH	Sea Brook	New Ha	U.S.	J 49736	51663	1977	3	JHF	11		?					
Pub Srvc, New Hamp	Seabrook #2	NCH	Sea Brook	New Ha	U.S.	J 49736	51664	1977	3	JHF	11		?					
Texas Utilities Gen	Comanche Peak #1	TBX	Glen Rose	Texas	U.S.	J 49738	51667	1977	3	JHF	11		?					
Texas Utilities Gen	Comanche Peak #1	TBX	Glen Rose	Texas	U.S.	J 49738	51668	1977	3	JHF	11		?					
Northeast Nuc Enrgy	Millstone #3	NEU	Waterford	Conn	U.S.	J 49870	51926	1977	3	JHF	11		?					
Northeast Nuc Enrgy	Millstone #3	NEU	Waterford	Conn	U.S.	J 49870	51927	1977	3	JHF	11		?					
Texas Utilities Gen	Comanche Peak #2	TCX	Glen Rose	Texas	U.S.	J 49871	51928	1977	3	JHF	11		?					
Texas Utilities Gen	Comanche Peak #2	TCX	Glen Rose	Texas	U.S.	J 49871	51929	1977	3	JHF	11		?					
Georgia Power	Alvin W Vogtle #1	GAE	Waynesboro	Georgia	U.S.	J 50031	52229	1977	3	JHF	11		?					
Georgia Power	Alvin W Vogtle #1	GAE	Waynesboro	Georgia	U.S.	J 50031	52230	1977	3	JHF	11		?					
Georgia Power	Alvin W Vogtle #2	GBE	Waynesboro	Georgia	U.S.	J 50032	52231	1977	3	JHF	11		?					
Georgia Power	Alvin W Vogtle #2	GBE	Waynesboro	Georgia	U.S.	J 50032	52232	1977	3	JHF	11		?					
Govt of India			Tarapur		India	B 43053	40225	1965	1.5	UNI	12		?	N				
Govt of India			Tarapur		India	B 43053	40226	1965	1.5	UNI	12		?	N				
Govt of India			Tarapur		India	B 43053	40227	1965	1.5	UNI	12		?	N				
Govt of India			Tarapur		India	B 43053	40228	1965	1.5	UNI	12		?	N				
Wisconsin Pub Srvc	Kewaunee		Carlton	Wis	U.S.	B 47237	46573	1971	1.5	UNI	11		?					
Wisconsin Pub Srvc	Kewaunee		Carlton	Wis	U.S.	B 47237	46574	1971	1.5	UNI	11		?					
Wisconsin Pub Srvc	Kewaunee		Carlton	Wis	U.S.	B 47237	46575	1971	1.5	UNI	11		?					
Northern States Pwr	Prairie Island #1		Red Wing	Minn	U.S.	B 47239	46578	1971	1.5 S	UNI	11		?					
Northern States Pwr	Prairie Island #1		Red Wing	Minn	U.S.	B 47239	46579	1971	1.5 S	UNI	11		?					
Northern States Pwr	Prairie Island #2		Red Wing	Minn	U.S.	B 47239	46580	1971	1.5 S	UNI	11		?					
Northern States Pwr	Prairie Island #2		Red Wing	Minn	U.S.	B 47239	46581	1971	1.5 S	UNI	11		?					
So California Edsn	San Onofre #1	SCE	San Clemente	Calif	U.S.	A 42002	38771	1965	2	Z	12		?	N				
So California Edsn	San Onofre #1	SCE	San Clemente	Calif	U.S.	A 42002	38772	1965	2	Z	12		?	N				
Connecticut Yankee	Haddam Neck Nuc	CYW	Haddam Neck	Conn	U.S.	A 42192	39041	1966	2	Z	13		?	N				
Connecticut Yankee	Haddam Neck Nuc	CYW	Haddam Neck	Conn	U.S.	A 42192	39042	1966	2	Z	13		?	N				

NOTES:

1. '69 Buy Configuration, 600 HP, 60 HZ
2. '69 Buy Configuration, 900 HP, 60 HZ
3. '72 Buy Configuration, 600 HP, 60 HZ
4. '72 Buy Configuration, 900 HP, 50 HZ
5. '72 Buy Configuration, 900 HP, 50 HZ
6. '75 Buy Configuration, 600 HP, 60 HZ

Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#) SFTY ASME SECT III CODE

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	RELT	Y/N	YEAR	ADNDA	CLS	NOTES

7. '75 Buy Configuration, 900 HP, 60 HZ
8. '75 Buy Configuration, 900 HP, 50 HZ
9. Converted to Internal Seal Flush
10. Converted to Internal Seal Flush & Lube from Gear

Pumps with Pressure Reducing Sleeves (by Type, Size, S.O.#)

CUSTOMER	PLANT NAME	SPIN	CITY	STATE	COUNTRY	S.O.	S/N	YEAR	SIZE	TYPE	STG	SERVICE	SFTY ASME SECT III CODE RELT	Y/N	YEAR	ADNDA	CLS	NOTES

7. '75 Buy Configuration, 900 HP, 60 HZ
8. '75 Buy Configuration, 900 HP, 50 HZ
9. Converted to Internal Seal Flush
10. Converted to Internal Seal Flush & Lube from Gear