

Medium and Large Power Transformer Users List Retrofill & New Installations

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	100	245	72.5	Petrobras	Trafo Brazil	Substation	KNAN/KNAF	N
1	22.14 MVAR	242	242	Electronorte Brazil	Areva Brazil	3 Ph Reactor	KNAN	N
1	230	236	18	TECO	Hitachi	GSU	KNAN/KNAF/KNAF	R
1	212	230	18	Platte River Power Authority Ft. Collins, CO	Waukesha Electric Systems	GSU	KNAN/KNAF/KNAF	N
2	100	230	115	Platte River Power Authority Ft. Collins, CO	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
2	100	230	115	Platte River Power Authority Ft. Collins, CO	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
2	100	230	115	Platte River Power Authority Ft. Collins, CO	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
1	50	230	34.5	State University of New York - Buffalo	Waukesha Electric Systems	Substation	KNAN	N
1	37.5	230	6.9	Sam Houston Electric Coop	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
1	33	230	115	CFE Mexico	IEM	Autotransformer	KNAN/KNAF/KNAF	R

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2	28	230	24.9	Sam Houston Electric Coop	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
4	8	230	12.5	Missoula Electric Coop Ovando, MT	GE	1 Ph Transmission	KNAN/KNAF/ KFAF	R
2	40	220	21	Iberdrola	Incoesca	Substation	KNAN/KNAF/ KNAF	N
1	240	161	19	Alliant Energy, Burlington, IA	Waukesha Electric Systems	GSU	KNAN/KNAF/ KNAF	N
1	200	161	19	Alliant Energy, Burlington, IA	Moloney	GSU	KNAF	R
4	115	161	13.8	Century Aluminum	Siemens	Substation	KFAF	N
2	115	161	13.8	Century Aluminum	Siemens	Substation	KFAF	N
1	56	161	69	Paragould Water Light & Cable	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
2	25	161	13.8	Riley Power (Alliant Energy)	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
1	25	161	12.5	Valero Refinery Memphis, TN	Waukesha Electric Systems	Substation	KNAN/KNAF/ KFAF	N

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2	25	161	12.5	Valero Refinery Memphis, TN	Waukesha Electric Systems	Substation	KNAN/KNAF/ KFAF	N
1	25	161	12.5	Premcor Refinery Memphis, TN	GE	Substation	KNAN/KNAF/ KNAF	R
1	11.04 MVAR	138	138	Electronorte Brazil	Trafo Brazil	3 PH Reactor	KNAN	N
2	64	138	12	Alliant Energy Beloit, WI	GE	GSU	KNAN/KNAF	R
1	56	138	7.2	FMI - Sierrita	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
2	50	138	13.8	Thermal Energy Coop, Houston TX	Delta Star	Substation	KNAN/KNAF/ KNAF	N
1	50	138	13.8	Air Liquide	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
1	40	138	13.8	Electronorte Brazil	Comtrafo	Substation	KNAN/KNAF	N
1	40	138	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF	N
1	40	138	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAN	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	40	138	13.8	Celesc Brazil	Siemens Brazil	Substation	KNAN/KNAF/ KNAF	N
1	40	138	13.8	Light Brazil	Densitel	Substation	KNAN/KNAF/ KNAF	N
1	36	138	13.8	Ampla Brazil	Trafo Brazil	Substation	KNAN/KNAF/ KNAF	N
1	36	138	13.8	Tropicana Beverages Bradenton, FL	Westinghouse	GSU	KNAN/KNAF/ KNAF	R
1	30	138	24	Celesc Brazil	WEG	Mobile Substation	KNAN	N
1	30	138	24	Celesc Brazil	Trafo Brazil	Mobile Substation	KNAN	N
2	28	138	13.8	SMU	Ilgin	Substation	KNAN/KNAF/ KNAF	N
1	28	138	13.8	Duncan Public Utility Authority	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
1	28	138	5	Dynergy-Midwest Generation	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
2	26	138	12	ATI Titanium	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
2	40	138	13.8	Celesc Brazil	Siemens Brazil	Substation	KNAN/KNAF/ KNAF	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
1	25	138	24.5	Celesc Brazil	Trafo Brazil	Mobile Substation	KNAN	N
1	24	138	24 x 69	ATC DePere, WI	Westinghouse	Substation	KNAN/KNAF/ KNAF	R
2	20	138	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF	N
1	20	138	13.8	Electronorte Brazil	WEG	Autotransformer	KNAN/KNAF/ KNAF	N
1	20	138	13.8	Coelba	Siemens Brazil	Substation	KNAN	R
1	15	138	13.8	Coelce	CEMEC	Substation	KNAN	N
3	15	138	13.8	Coelce	WEG	Substation	KNAN	N
1	12.5	138	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF	N
1	15	138	12.5	Texas A&M	Delta Star	Substation	KNAN/KNAF	N
1	12	138	12.5	United REMC Roanoke, IN	Waukesha Electric Systems	Dist	KNAN/KNAF/ KNAF	N

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2	28	134	24.9	Sam Houston Electric Coop	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
2	25	134	13.2	Wood County EC Quitman, TX	Waukesha Electric Systems	Substation	KNAN/KNAF	N
1	90	132	33	EDF Energy Networks	Areva	Substation	KNAN	N
2	50	132	11	Energy Australia	Wilson	Substation	KNAN	N
1	120	115	17.5	Alliant Energy Cedar Rapids, IA	North American	GSU	KNAN/KNAF/ KNAF	R
2	60	115	15	USBR - Nimbus Gen. Station, Folsom, CA	Delta Star	GSU	KNAN/KNAF/ KNAF	N
1	55	115	13.2	Alliant Energy Cedar Rapids, IA	Allis Chalmers	GSU	KNAN/KNAF/ KNAF	R
1	50	115	69	Az Electric Power Coop	US Transformer	Substation	KNAN/KNAF/ KNAF	R
1	40	115	13.8	Puget Sound Energy	Waukesha Electric Systems	GSU	KNAN	N
4	40	115	13.8	Puget Sound Energy	Siemens	Substation	KNAN	R

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
1	40	115	13.8	Mason County PUD	Shilin	Substation	KNAN	N
1	30	115	13.8	Los Alamos National Lab	GE	Substation	KNAN/KNAF/ NAF	R
1	30	115	12.5	Lawrence Berkeley National Labs	Delta Star	Substation	KNAN/KNAF/ NAF	N
1	30	115	12.5	PG&E, San Francisco, CA	Waukesha Electric Systems	Substation	KNAN/KNAF/ NAF	N
1	30	115	6.9	Phelps Dodge Miami, AZ	GE	Substation	KNAN/KNAF	N
1	30	115	6.9	Phelps-Dodge Miami, AZ	Siemens	Substation	KNAN, KNAF/ KFAF	R
1	30	115	4.16	FMI - Bagdad AZ	Moloney	Substation	KNAN/KNAF/ NAF	R
2	27	115	13.2	City of Manassas Manassas, VA	Waukesha Electric Systems	Substation	KNAN, KNAF, KNAF	N
2	25	115	12.5	Lower Valley Energy Afton, WY	Kuhlman	Substation	KNAN/KNAF	R
1	22	115	34.5	Maquoketa, IA	Waukesha Electric Systems	Substation	KNAN/KNAF/ NAF	R

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	20	115	12.5	Platte River Power Authority Ft. Collins, CO	Waukesha Electric Systems	Substation	KNAN/KNAN	N
1	20	115	12.5	Lower Valley Energy Afton, WY	Delta Star	Substation	KNAN/KNAF	R
1	28	115	4.16	FMI - Bagdad AZ	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
1	20	115	4.16	FMI - Bagdad AZ	RTE/ASEA	Substation	KNAN/KNAF/ KNAF	R
1	20	115	4.16	FMI - Miami AZ		Substation	KNAN/KNAF/ KNAF	R
1	20	115	2.4	FMI - Miami AZ		Substation	KNAN/KNAF/ KNAF	R
1	15	115	12.5	Lane Electric Coop Eugene, OR	N/A	Substation	KNAN	R
2	15	115	12.5	City of Opelika Alabama	Kuhlman	Substation	KNAN/KNAF	N
2	12	115	38	FP&L	Prolec	Substation	KNAN/KNAF/ KNAF	N
2	12	115	12.5	Lower Valley Energy Afton, WY	GE	Substation	KNAN/KNAF	R
2	20	115	12.5	Platte River Power Authority Ft. Collins, CO	Waukesha Electric Systems	Substation	KNAN/KNAN	N
1	20	115	12.5	Lower Valley Energy Afton, WY	Delta Star	Substation	KNAN/KNAF	R

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	12	115	5	Lectrics	Waukesha Electric Systems	Substation	KNAN/KNAN	N
2	10.5	115	4.16	Midwest Energy	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
1	40	110	20	EnBW - Stuttgart	Siemens Dresden	Substation	KNAN	N
1	40	110	20	Energieteam Germany	Areva Moenchengladbach	Substation	KNAN	N
1	22.4	110	13.2	Entergy	Westinghouse	Substation	KNAN	R
1	20	110	12.5	Lower Valley Energy Afton, WY	Delta Star	Substation	KNAN	R
2	20	88	13.8	AES Eletropaulo Brazil	WEG	Substation	KNAN/KANF	N
4	70	72.5	15	Petrobras	Trafo Brazil	Substation	KNAN/KNAF/KNAF	N
8	60	72.5	15	Petrobras	Trafo Brazil	Substation	KNAN/KNAF	N
1	36	70.6	12.5	Opti-Solar	Delta Star	Substation	KNAN/KNAF/KNAF	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
1	110	69	13.8	US Steel	IEM	GSU	KANA/KNAF/KNAF	N
1	66	69	13.8	US Steel	Kuhlman	Substation	KNAN/KNAF/KNAF	N
1	66	69	13.8	US Steel	Kuhlman	GSU	KNAN/KNAF/KNAF	N
1	50	69	13.8	Braskem Brazil	Siemens Brazil	Substation	KNAN	N
1	50	69	12.5	Alliant Energy Dubuque, IA	Westinghouse	GSU	KNAF	R
1	40	69	8.32	Easton Utilities Easton, MD	Westinghouse	Substation	KNAN/KNAF/KNAF	R
2	30	69	13.8	Archer Daniels Midland Clinton, IA	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
1	30	69	13.8	Wyandotte Municipal	Westinghouse	Substation	KNAN/KNAF	R
4	30	69	13.8	Archer Daniels Midland Clinton, IA	Waukesha Electric Systems	Substation	KNAN/KNAF/KNAF	N
1	28	69	25	Easton Utilities Easton, MD	Delta Star	Dist	KNAN/KNAF	R

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
1	28	69	8.32	Easton Utilities Easton, MD	Delta Star	Substation	KNAN/KNAF/ NAF	R
1	26.6	69	13.8	Electronorte Brazil	Siemens	Substation	KNAN/KNAF/ NAF	N
1	26.6	69	13.8	Electronorte Brazil	Comtrafo	Substation	KNAN/KNAF	N
2	26.6	69	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF/ NAF	N
1	26.6	69	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF/ NAF	N
1	26	69	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF/ NAF	N
1	20	69	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF/ NAF	N
1	20	69	13.2	Maui Electric	Waukesha Electric Systems	GSU	KNAN/KNAF/ NAF	N
2	20	69	13.2	Maui Electric Maalaea, HI	Waukesha Electric Systems	GSU	KNAN/KNAF/ FAF	N
1	20	69	13.2	Maui Electric Maalaea, HI	ABB	GSU	KNAN/KNAF/ KFAF	R

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
7	20	69	4.16	Archer Daniels Midland, Cedar Rapids, IA	Pennsylvania Transformer	Substation	KNAN/KNAF	N
2	18	69	20	So. California Edison California	Kuhlman	Substation	KNAN/KNAF/ KFAF	N
1	15	69	12.5	Waverly L&P Waverly, IA	Westinghouse	Substation	KNAN/KNAF/ KFAF	R
1	15	69	5	Victoria Canal Pump	Virginia Transf.	Substation	KANA/KNAF/ NAF	N
2	14	69	4	Maui Electric Maalea, HI	GE	GSU	KNAN/KNAF/ KNAF	R
1	12.5	69	13.8	Electronorte Brazil	Trafo Brazil	Substation	KNAN/KNAF	N
1	12	69	4.16	American Electric Power Roanoke, VA	Virginia Transf.	GSU	KNAN/KNAF/ KNAF	N
2	10	69	12	Dept. of Water & Power Los Angeles, CA	Delta Star	Mobile	KNAN/KNAF/ KNAF	N
1	10	69	4.16	People's Coop Rochester, MN	Uptegraff	Substation	KNAN/KNAF	N
1	8.92	69	69	Electronorte Brazil	Trafo Brazil	Grounding Transformer	KNAN	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
1	8.72	69	0.41	Electronorte Brazil	Siemens Brazil	Substation	KNAN/KNANF/ KNAF	N
2	7.58	69	12.5	Lower Valley Energy Afton, WY	GE	Substation	KNAN/KNAF	R
2	7.5	69	12.5	Lower Valley Energy Afton, WY	GE	Substation	KNAN/KNAF	R
1	37.5	67	12.5	Reedy Creek Energy Lake Buena Vista, FL	Waukesha Electric Systems	Substation	KNAN/KNAF	R
2	20	67	11	Country Energy Australia	Wilson	Substation	KNAF	N
1	25	67	13.8	Wyandotte Municipal	Waukesha Electric Systems	Substation	KNAN/KNAF/ KNAF	N
1	16.8	67	12.5	Waverly L&P Waverly, IA	Delta Star	Substation	KNAN/KNAF/ KFAF	R
2	10	67	11	ETSA Utilities	Wilson	Skid mounted Mobile		N
1	10	60	25	Kinross Gold	Virginia Transf.	Substation	KNAN/KNAF/ KNAF	N
1	12.5	60	12.5	Lassen Municipal Utility	Waukesha Electric Systems	Substation	KNAN	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	20	46	13.8	Phelps Dodge Morenci, AZ	Ferranti-Packard	Substation	KNAN/KNAF/ KNAF	R
1	20	46	13.8	Phelps-Dodge Miami, AZ	Ferranti-Packard	Substation	KNAN, KNAF/ KFAF	R
2	15	44	13.8	Kennecott Copper Salt Lake City, UT	Kuhlman	Substation	KNAN/KNAF	R
1	27	37	0.65	Noranda Aluminum New Madrid, MO	Toshiba	Rectif.	KNAN/KNAF	R
2	27	37	0.6	Noranda Aluminum New Madrid, MO	Toshiba	Rectif	KNAN/KNAF	R
1	26	37	0.6	Noranda Aluminum New Madrid, MO	Fuji	Rectif	KNAN/KNAF	R
1	18	35	4.16	GE Energy	Virginia Transf.	Substation	KNAN/KNAF/K NAF	N
2	60	34.5	13.8	Thyssen Krupp Mt. Vernon, AL	WEG	Substation	KNAN/KNAF/K NAF	N
4	40	34.5	13.8	Utah Data Services	Prolec	Substation	KNAN/KNAF/K NAF	N
1	40	34.5	13.8	Altos Hornos de Mexico, S.A.	Prolec	Substation	KNAN/KNAF/K NAF	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	30	34.5	0.6	Noranda Aluminum New Madrid, MO	Fuji	Rectif	KNAN/KNAF	R
1	30	34.5	0.56	Noranda Aluminum New Madrid, MO	Fuji	Rectif.	KNAN/KNAF	R
1	22	34.5	12	Maquoketa, IA	Kuhlman	Substation	KNAN/KNAF	N
2	20	34.5	17.2	City of Pasadena, CA	Shilin	Substation	KNAN/KNAF/ KNAF	N
1	20	34.5	13.8	Altos Hornos de Mexico, S.A.	Prolec	Substation	KNAN/KNAF/ KNAF	N
6	18	34.5	13.8	Thyssen Krupp Mt. Vernon, AL	WEG	Substation	KNAN/KNAF/ KNAF	N
2	24	27.6	600	Ford Windsor, Canada	GE	Substation	KNAN/KNAF/ KNAF	R
1	39	24	5	Alliant Ottumwa, IA	GE	Aux Transformer	KNAN/KNAF	R
1	37.5	24	13.8	PCS Phosphates	Delta Star	GSU	KNAN/KNAF/ KNAF	N
2	20	23	13.8	Northrop Grumman Newport News, VA	Delta Star	Substation	KNAN/KNAF	N

Qty	Base MVA	HV (kV)	LV (kV)	End User	Manufacturer	Type	Cooling Class	Notes
2	11	20	4.4	Alliant Energy Burlington, IA	Allis Chalmers	Aux. Power	KNAN/KNAF	R
1	25	19	13.2	Keyspan Energy Queens, NY	Delta Star	Aux. Power	KNAF	R
4	15	19	4.36	Georgia Power/Ctrs for Disease Control Atlanta, GA	Waukesha Electric Systems	GSU	KNAN/KNAF	N
1	10	18	2.4	Alliant Energy Cedar Rapids, IA	GE	Aux. Power	KNAF	R
2	110	13.8	14	Century Aluminum	Siemens	Voltage Reg	KNAN	N
2	30	13.8	5	Thyssen Krupp Mt. Vernon, AL	WEG	Substation	KNAN/KNAF/KNAF	N
1	11.5	13.8	4.16	Tropicana Beverages Bradenton, FL	Ward	Substation	KNAN/KNAF	R
1	9.38	13.8	34.5	Electronorte Brazil	Trafo Brazil	GSU	KNAN/KNAF	N
1	6.25	13.8	34.5	Electronorte Brazil	Trafo Brazil	GSU	KNAN/KNAF	N
1		13.8		Alliant Energy, Cedar Rapids, IA	Waukesha Electric Systems	Grounding Transformer	KNAN	N

Bulletin B110
April 2013

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