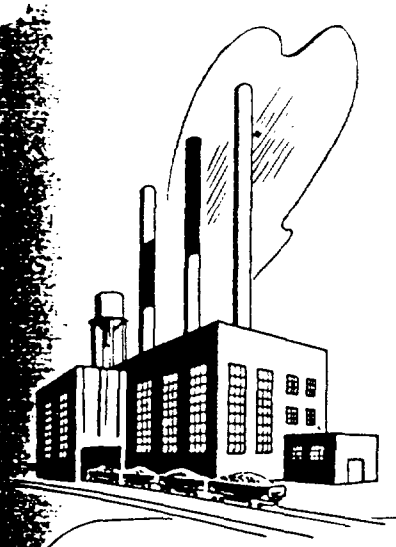
1948 MODERN PLANT SURV

PLAINTIFF'S EXHIBIT
GE-103



Technical highlights of utility and industrial power-plant construction to meet unprecedented load growth; tabulated engineering features of over 700 new steam and hydroelectric stations

SINCE THE WAR'S END pitched us into the greatest wave of construction the industry has yet known, power engineers have had little time for anything but their own immediate problems—keeping existing machines rolling and putting new kilowatts on the line as fast as possible. Yet from the hundreds of new plants being built, or old ones being extended or modernized, much can be learned. Hence this special section—POWER's 69th.

Here we have tried to dig out answers to the questions you would ask if you had time to sit back and examine current practice in power-plant design. As a basis, we started with POWER's continuing survey of new plant installations. The returns proved exceptionally good, so we are able to tabulate for your reference the technical highlights of over 700 plants now being designed or built.

For the benefit of busy engineers we have analyzed this mass of data and summarized in charts and words the principal design trends in both central-station and industrial installations. In these pages you will see at a glance what other engineers have done about pressures, temperatures, capacities, heat-release rates, fuels, firing equipment, boiler auxiliaries, fan and pump drives, etc.

To build some flesh on these bare bones of data, this special section also includes concise descriptions of six central stations and eight industrial power plants. We selected these to give, as far as possible, a broad cross-section of today's practice as it is influenced by geographical location, plant size and type, nature of fuels available, and type of load served. Comprehensive equipment tables show the specific choices made by individual designers.

The current high level of construction and operating costs, which is likely to continue, puts tremendous emphasis on plant design—layout simplification for lower first cost, heat-balance ingenuity for high economy, and sound equipment selection for reliability and low maintenance. Power engineers everywhere are burning the midnight oil on these problems and working out their own solutions. This special section is our report to you on what others have done—use it as a guide in working out the answers for your plant.

1940 Listing of Typical Central-Station

For Notes on Uses and Limitations of this Tabulation • See page 122

Compiled by B G A Skrotzki, Associate Editor

Company	Location	Plant Name	Consulting Engineers	First Operation, Year Units	Nominal Pressure, psi	Nominal Steam Temperature, F	BOILERS: Number	Capacity, Each 1000 lb per hr	Manufacturer	Superheater Surface, 1000 sq ft	Boiler, Waterwall Surface, 1000 sq ft	Furnace Volume, 1000 cu ft	Heat release, 1000 Btu per cu ft per hr
Houston Lighting & Power Co	Houston, Texas	Greens Bayou	Ebasco Services	9–49	900	900	1	675	RS		31 6	30 0	31.0
				9–49	900	900	1	675	RS		31 6	30 0	31.0
Jersey Central Power & Light Co	Sayreville, N J	Raritan River	Burns & Roe	2–40	900	900	1	400	BW				23.1
Kentucky Utilities Co	Tyrone, Ky	Tyrone	Sargent & Lundy	7–48	900	900	2	150	BW	9 2	13 3	10 1	18.8
Georgia Power Co	Harryat, Ga	Atkinson	Commonwealth & South	10–48	900	900	1	900	CE		27 5	35 5	
Bd Water & Elec Light Comm	Lansing, Mich	Ottawa St.	Burns & Roe	2–49	900	900	3	275	BW	13 2		15 7	20.5
Public Svc Co of Colorado	Denver, Colorado	Lacomoe	Electric Advisors	1948	900	850	1	350	BW	13 3	16 5	17 7	26.9
					900	850	1	150	BW	2 0	8 7	5 1	46.4
Public Service Co of N H	Portsmouth, N. H	Resistance[7]	A A Winters	11–47[18]	900	900	2	170	BW				
Georgia Power Co	Arkwright, Ga	Arkwright	Comm & Southern	10–48	900	860	1	400	BW		9 8	22 3	22.5
800 PSI TO 899 PSI													
Rockland Light & Power Co	Tomkins Cove, N. Y.	Hudson	Burns & Roe	12–48	880	900	1	200	BW	7 0	17 7	16 3	16.1
Braddock Light & Power Co, Inc	Alexandria, Va	Station C	Stone & Webster	6–49	875	925	1	300	CE	29 3	29 0	36 0	16.9
				6–50	875	925	1	300	CE	29 3	29 0	36 0	16.9
City of Burbank	Burbank, Calif	Burbank	C A Heintz	7–49	875	900	1	215	CE	5 9	17 1	8 3	33 6
Virginia Electric & Power Co	Wheelwright, Va	Chesterfield	Stone & Webster	10–49	875	900	1	650	CE	17 3	26 4	40 3	22 6
Virginia Electric & Power Co	Possum Point, Va	Possum Point	Stone & Webster	12–48	875	900	1	650	CE	17 3	26 4	40 3	22 6
	Uncasville, Conn	Montville	United Engr & Const	3–48	850	950	1	300	CE	10 3	25 3	17 0	20 5
Connecticut Light & Power Co				1–49	850	950	1	300	CE	10 3	25 3	17 0	20 5
	Devon, Conn	Devon	United Engr & Const	5–47	850	925	2	225	CE	8 5	22 0	12 6	22 9
Alabama Power Co	Gadsden, Ala	Gadsden	Comm & Southern	2–49	850	900	1	600	CE	13 7	28 4		21 0
				2–49	850	900	1	600	CE	13 7	28 4		21 0
Mississippi Power Co	Hattiesburg, Miss	Eaton	Comm & Southern	7–47	850	900	1	250	RS	7 4	19 0	13 4	21 4
				8–49	850	900	1	250	RS	7 4	19 0	13 4	21 4
Public Serv Co of Indiana	Noblesville, Ind	Noblesville	Sargent & Lundy	6–50	850	950	3	300	RS	11 8	28 3	22 5	16 9
Empire District Elec Co of Kan	Riverton, Kan	Riverton	Black & Veatch	1–50	850	900	1	300	FW	11 8	18 7	23 0	16 8
Kentucky Utilities Co	Green River, Ky	Green River	Sargent & Lundy	10–49	875	910	3	215	BW	7 1	15 8	14 7	18.1
Florida Power Corp	Enterprise, Fla	Geo E Turner	J G White Engrg Corp	2–46	860	900	1	300	BW		20 3	21 9	17 0
Florida Power Corp	Inglis, Fla	Inglis	J G White Engrg Corp	6–47	860	900	1	300	BW		20 9	21 9	17
Central Illinois Light Co	East Peoria, Ill	Rex Wallace	Comm & Southern	1–49	850	900	2	300	RS	49 3	21 0		18 0
Central Illinois Pub Serv Co	Meredosia, Ill	Meredosia	Sargent & Lundy	1–48	850	900	2	285	CE	11 0	19 2	20 2	18 0
				10–48	850	900	2	285	CE	11 0	19 2	20 2	18 0
Central Power and Light Co	Corpus Christi, Tex	Nueces Bay	Sargent & Lundy	9–49	850	900	1	300	BW	7 3	04 5		31 5
Cons Gas, Elec Lt & Pwr Co, Balt	Baltimore, Md	Westport		1–50	850	900	1	610	BW	21 5	35 1	38 2	19 8
Dairyland Power Cooperative	Alma, Wis	Alma	Vern E Alden	7–47	850	825	2	190	BW		14 8		19 8
Ohio Public Service Co	Shadyside, Ohio	R E Burger	Electric Advisors	9–50	850	950	2	500	BW	23 0	37 7	24 2	26 8
N Y State Elec & Gas Corp	Dresden, N. Y	Greenidge	Gilbert Assoc	4–50	850	910	2	288	BW	12 0	21 2	17 4	17.3
Arkansas-Missouri Power Co	Campoell, Mo	Jim Hill	Ebasco Services	9–49	850	900	1	350	CE		18 9	18 7	
Union Electric Power Co	Venice, Ill	Venice No. 2	Stone & Webster	7–50	850	900	1	900	BW	39 2	29 0	83 8	13 7
				1–51	850	900	1	900	BW	39 2	29 0	83 8	13 7
Mississippi Power & Light Co	N Jackson, Miss	Rex Brown	Ebasco Services	9–48	850	900	1	350	CE	9 0	14 4	18 7	26 0
New Bedford Gas & Edison Lt Co	New Bedford, Mass	Cannon Street	Gilbert Assoc	1950	850	900	1	300	CE	10 5	31 0	22 2	16.7
Kansas Gas & Electric Co	Wichita, Kan	Ripley	Ebasco Services	5–50	850	900	1	350	CE		29 7	26 0	18.5
The Hartford Electric Light Co	Hartford, Conn	South Meadow	Stone & Webster	1949	850	900	1	425	BW		18 2	38 4	14.3
Illinois Power Company	Havana, Ill	Havana	Sargent & Lundy	1947	850	900	3	285	CE	12 5	19 0	20 0	18 0
Indianapolis Power & Light Co	N Martinsville, Ind	White River	Gibbs & Hill	5–50	850	900	1	400	CE	14 0	26 0	23 2	22.8
Interstate Power Company	Lansing, Ia	Lansing	Sargent & Lundy	8–48	850	900	2	120	RS		13 4	8 9	17 4
Iowa-Illinois Gas & Elec Co	Davenport, Iowa	Riverside	United Lt & Rwy Serv Co	6–49	850	900	2	250	RS	9 5	14 5	17 5	19.8
Iowa Public Service Co	Waterloo, Iowa	Maynard	J F Pritchard	9–50	850	900	1	200		5 0	17 5	10 0	25 0
				7–47	825	825	1	120	LM		11 0	9 0	29 8
City of Jacksonville	Jacksonville, Fla	No. 2	Reynolds, Smith & Hills	1951	850	900	1	300	BW		29 0		24 9
				1951	850	900	1	300	BW		29 0		24 9
City of Lakeland	Lakeland, Fla	Lakeland	Charles Larsen	7–49	850	900	1	200	BW	5 7	14 4	8 4	32 1
				12–47	850	900	1	640	FW	20 5	30 5	47 1	18 0
Louisville Gas & Electric Co	Louisville, Ky	Paddy's Run	Pioneer Serv & Eng Co	1–50	850	900	1	640	FW	20 5	30 5	47 1	18 0
				10–50	850	900	1	640	FW	20 5	30 5	47 1	18 0
Metropolitan Edison Co	Middletown, Pa	Crawford	Gilbert Associates	12–47	850	900	2	250	FW	7 2	04 5	13 6	20 0
Northern Virginia Power Co	Riverton, Va	Riverton	Sanderson & Porter	12–49	850	900	1	350	RS		26 3	21 2	20.8
Orlando Utilities Comm	Orlando, Fla	Orlando	Robert W Gow	2–49	850	900	2	150	BW	5 9	12 6	9 4	21.0
City of Pasadena	Pasadena, Calif	Pasadena	Carl Hoffman	5–49	850	900	2	250	CE	9 3	15 5	11 5	25 6
San Diego Gas & Electric Co	San Diego, Calif	Silver Gate	Pioneer Serv & Eng Co	3–48	850	900	2	300	BW	8 6	21 5	12 3	35 8
Pennsylvania Electric Co	Warren, Pa	Warren	Gilbert Assoc	7–48	850	900	4	185	FC	3 6	17 4	13 0	17.4
Southern California Edison Co	Redondo, Calif	Redondo	Stone & Webster	2–48	850	900	2	400	BW	14 7	7 7	13 3	
				2–48	850	900	2	400	BW	14 7	7 7	13 3	
South Carolina Power Co	Charleston, S C	Harllee	Gilbert Assoc	11–48	850	900	1	250	RS	7 4	21 2	9 4	21 4
Southwestern Gas & Electric Co	Longview, Texas	Knox Lee	Sargent & Lundy	3–50	850	900	1	325	BW				
Southwestern Public Service Co	Borger, Texas	Riverview				900	1	350	RS		7 4	14 0	34.3
Staten Island Edison Corp	Travis, S. I., N. Y	Arthur Kill	George Fuas	11–47	850	900	2	420	BW	4 4	12 3	7 6	19 2
Utah Power & Light Co	Carbonet, Utah	Provo	Ebasco Services	6–49	850	900	1	450	RS	12 0	44 3	33 0	18 0
Wisconsin Power & Light Co	Madison, Wis	Black Hawk	Sargent & Lundy	2–50	850	900	1	275	BW	9 5	15 5	11 5	15 8
Minnesota Power & Light Co	Duluth, Minn	Duluth	Ebasco Services	7–47	850	900	1	350	FC	8 8	20 7	21 3	21 0
Dallas Power & Light Co	Dallas, Texas	Mt Creek	Ebasco Services	5–49	850	900	1	450	BW	8 3	23 0		29 0
				5–49	850	900	1	250	BW	7 2	14 2		29 0
Dallas Power & Light Co	Dallas, Texas	Dallas	Ebasco Services	3–51	850	900	1	675	CE				26 9
Worcester County Electric Co	Worcester, Mass	Webster Street	United Eng & Const	1950	850	900	1	325	RS	11 2	33 1	29 0	19.6
Southern Indiana Gas & Elec Co	Evansville, Ind	Ohio River	Gilbert Assoc		825	900	2	250	BW	7 7	22 5	13 7	22.0
600 PSI TO 799 PSI													
Central Illinois Light & Gas Co	Peoria, Ill	Edwards	Stone & Webster	5–47	725	750	2	180	BW	5 4	16 1	10 4	23.3
Alabama Power Co	Birmingham, Ala	Gaston	Comm & Southern	5–47	775	850	1	90	BW	2 4	7 1	8 5	27 0

Air-Heater No./ Boiler, 1000 sq ft	F-D FANS: Air-Heater Type	F-D FANS: Drive	F-D FANS: Air-Volume Control	I-D FANS: Drive	I-D FANS: Gas-Volume Control	Firing	FUEL: Type	FUEL: Heating Value, 1000 Btu per lb	FUEL: Ash-Fusion Temperature, F	FEED PUMPS: Drive	FEED PUMPS: Flow Control	TURBINES: Capacity, 1000 kw	TURBINES: Speed, rpm	TURBINES: Manufacturer	CONDENSERS: Back pressure, psia	CONDENSERS: No. of Bleed Points	CONDENSERS: Generator Cooling	CONDENSERS: Surface, 1000 sq ft	CONDENSERS: No. Water Passes	CONDENSERS: Tube Material	Total Boiler Capacity Incl New Units, 1000 lb	Total Generator Capacity Incl New Units, 1000 kw
67.0	Tu	M	V	M	D	G	G	1018[1]		3M, IT		60	3600	WE	1.75	4	H	60	2	AsCu	675	66
67.0	Tu	M	V	M	D	G	G	1018[1]		3M, IT		60	3600	WE	1.75	4	H	60	2	AsCu	1350	135
70.4	Tu	M	D, V	M	Ma	P	C	14.0	2550	3M	Hy	25	3600	GE	300	0	H				1560	105
43.4	Pf	M	D	M	Hy	P	C	12.0	2300	1M	R	25	3600	WE	0.5	4	H	25	2	Mu	600	50
99.4	Re					P	C&G	13.1				60	3600	GE	1.0	4	H				2700	240
84.3	Tu	M	Hy	M	Hy	P	C	13.0	2400	4M	R	25[14]	3600	AC	0.5	6	H	23.5	2	Ad	1275	75
63.3	Tu	M	V	M	V	P, G, O	L, G, O	9.0	2100	2M, IMT	R	35	3600	GE	0.6	7	H	25.0	2	PAd	615	47.5
15.2	Tu	M	V	M	V	G, O	G, O	850[11]				30	3600	GE	.75	4	A				340	30
47.7	Re	M	V	M	S	P, G	C, G	13.1	2200	2M	S	43.8	3600	GE	1.0	4	H	31.3	2	Ad	1600	175
60.7	Tu	M	D	M	Hy	P	C	13.4	2050	2M		22	3600	GE	0.5	4	H	17.5	1	Ad	200	22
122.5	Tu	M	V	M	Ma	P	C	13.5	2450	3M	R	80	1800	GE	0.5	5	H	75	2	Ad	800	80
122.5	Tu	M	V	M	Ma	P	C	13.5	2450	3M	R	80	1800	GE	0.5	5	H	75	2	Ad	1600	160
31.7	Re	M	S, V	M	D, V	G, O	G, O	1100[11]		2M	R	20	3600	AC	.75	4	H	18	2	AnAd	585	40
48.9	Re	M[19]	D, V	M[19]	D, V	P	C	13.6	2400	3M, IT	S	60	3600	GE	.75	4	H	45	1	AAd	1175	110
48.9	Re	M	D, V	M	D, V	P	C	13.6	2360	3M, IT	S	60	3600	GE	0.75	4	H	50	2	AAd	650	60
82.0	Re	M	V	M	Hy	P	C	12.5	2400	2M	R	31.25	3600	GE	0.5	5	H	24	2	AlBr	690	70
82.0	Re	M	V	M	Hy	P	C	12.5	2400	2M	R	31.25	3600	GE	0.5	5	H	24	2	AlBr	990	101
82.0	Re	M	V	M	Hy	P	C	12.5	2400	2M	R	45	3600	WE	0.5	5	H	30	1	AlBr	2025	165
63.0	Re	M	Hy	M	Hy	P	C	12.0	2750	2M	R	60	3600	GE	1.0	4	H	47.0	2	Ad	600	60
63.0	Re	M	Hy	M	Hy	P	C	12.0	2750	2M	R	60	3600	WE	1.0	4	H	47.0	2	Ad	1200	120
33.3	Tu	Mp	V	Mp	V	G, O	G, O	1000[11]		2M	R	22.5	3600	GE	1.0	3	H	20.3	2	Ad	440	45
33.3	Tu	Mp	V	Mp	V	G, O	G, O	1000[11]		2M	R	22.5	3600	WE	1.0	3	H	20.3	2	Ad	690	67.5
117.1	Re	M	V	M	V	P	C	11.0	2100	3M, IT	R	40[14]	3600	WE	0.75	4	H	40	2	AAd	900	80
100.2	Re	2M	V	2M	D, Hy	P, O, G	C, O, G	11.8	2040	1M, IT	R	30.0	3600	WE	.56	4	H	32.5	2	Ad	1325	100
50.5	Pf	M	D	M	Hy	P	C	11.0	2200	2M, IT	R	30.0[14]	3600	WE		4	H	27.5	2		645	60
64.5	Tu	M	V	M	S	O	O	18.4		3M	R	25.0	3600	WE	1.0	4	H	25.0	1	Ad	450	37.5
84.5	Tu	M	V	M	D	O	O	18.4		3M	R	25	3600	GE	1.0	4	H	23.0	1		700	50
	Tu	M	Hy	M	Hy	P	C	9.8	1900	2M		35	3600	WE	0.5	4	H		2	PAd	1790	141.4
	Tu	M	Ma	M	Ma	P	C	9.8	2000	1M, IT	R	50	3600	GE	0.5	4	H	45	1	AsCu[20]	1570	50
51.4	Tu	M	Ma	M	Ma	P	C	9.8	2000	2M	R	50	3600	GE	0.5	4	H	45	1	AsCu[20]	1140	100
51.4	Tu	M	V	M	V	P	C	1050[13]		1M, IT	R	30	3600	WE	.75	4	H	27.5	2	AAlBr		75
42.4	Tu	M	V	M	S, D	P	C	12.9	2376	1M	S	60	3600	GE	0.5	5	H	55	2	AAlBr	3936	307.5
86.6	Re	M	V	M	Hy	P	C	11.0	2100	3M	R	30	3600	GE	0.5	4	H	12	2		380	30
54.8	Tu	M	Hy	M	Hy	P	C	12.4	1900	4MT	R	100	3600	WE	0.75	6	H	70.0	2		2400	230
25.5	Tu	Mp	V	Mp	V	P	C	13.2	2000	1M, IT, IMT	S	40	3600	GE	0.5	4	H	32.5	2	Ads	680	80
2	Re	M	V	Mp	V	P	C					30	3600	GE		3					350	30
8	Tu					G, O	G, O															
170.8	Re	M	Hy	M	Hy	P	C	11.0	1900	2M	R	80	1800	GE	0.7	4	H	75.0	2	Ad	3060	320
170.8	Re	M	Hy	M	Hy	P	C	11.0	1900	2M	R	80	3600	WE	0.7	4	H	75.0	2	Ad	3980	400
52.8	Tu	M	D	M	D, V	G	G	1000[13]		2M, IT	R	30	3600	GE	.12	4	H	27.5	2		350	30
62.8	Tu	M	V	M	V	G	G, O	12.4[30]	1900	1M, IMT	R	30	3600	WE	0.75	5	H	25.0	2	AlBr	1723	137.5
76.2	Re	M	D, V	M	D	G, O	G, O	1013[33]		2M		30	3600	WE	0.75	4	H	30.0	2	AsCu	990	78
43.5	Re	M	D, Hy	M	D, Hy	P	C, O	12.6	2150	2M, IT	R	45	3600	GE	0.75	3	H	36.0	2	Aa	2300	230
47.9	Tu	M	D, Hy	M	D, Hy	P	C	10.5	1900	2M, IT	R	40[14]	3600	GE	0.5	4	H	30.0	1	AsCu	855	80
69.7	Re	M	V	M	V	P	C	11.0	1970	2M, IMT	R	45	3600	GE	0.75	5	H	30.0	2	AAd	800	80
20.8	Tu	M	V	M	Hy	P	C	10.5	2050	1M, IT	R	15	3600	AC	0.5	4	H	15.0	2	PAd	240	15
68.1	Re	M	V	M	Hy	P, G	C, O, G	10.0	1930	2M		40	3600	GE	0.75	5	H	37.5	2	PAd	1660	109.7
												5	3600	WE	0.75	1	A	5.5	2	PAd	1660	114.7
15.0	Tu	M	D, V	M	D	SS[42][25]	C	10.5	1900	1M, IT	S, R	20	3600	GE	0.75	4	H	18.0	2	Ad	715	60
9.0	Tu	M	D, V	M	D	SS 29[15]	C	10.5	1900	1M, IT	S, R	10	3600	GE	0.75	4	A	10	1	Ad	515	40
51.1	Tu	Mp	V	Mp	D	O	O	18.4		2M	R	30	3600	WE	0.75	4	H	27.5	1	AlBr	300	30
51.1	Tu	Mp	V	Mp	D	O	O	18.4		2M	R	30	3600	WE	0.75	4	H	27.5	1	AlBr	600	60
23.0	Tu	M	V	M	V	O	O	16.6		2M, IT	R	20	3600	AC	1.0	4	H	32.5	2	Aa	530	55
144.0	Re	M	Ma	M	Ma	P	C	10.2	1900	3M		60	3600	WE	0.75	5	H	55.0	2	Aa	1165	120
144.0	Re	M	Ma	M	Ma	P	C	10.2	1900	3M		60	3600	GE	0.75	5	H	55.0	2	Ad	1905	180
144.0	Re	M	Ma	M	Ma	P	C	10.2	1900	3M		60	3600	WE	0.75	5	H	55.0	2	Ad	2545	240
45.0	Re	M	V	Mp	V	P	C	13.0	2100	2M, IMT	R	35	3600	GE	0.5	4	H	34.0	2	Ad		
												3	3600	GE	350		A					115.5
59.0	Tu	M	V	M	D	P	C	13.0[9]	2000	2M	R	30	3600	GE	0.75	4	H	27.5	2	Ad	350	30
	Re	M	V	M	V	O	O	18.5		2M, IT	R	25	3600	GE	1.0	4	H	30.0	2	Ad	365	43
36.7	Re	Mp	V	Mp	V	G, O	G, O	1100[11]		3M	R	35	3600	AC	1.0	4	H	25.0	2	AsCu	1300	75
44.7	Tu	M	V	M	D, Hy	G, O	G, O	1966[13]		3M	R	50	3600	GE	0.75	4	H	40.7	2	AlBr	1000	85
31.8	Tu	M	V	Mp	V	P	C	12.3	2600	2M, IMT	R	35	3600	WE	0.5	4	H	30.0	2	Aa	750	70
62.4	Re	M	D, V	M	D, V	G, O	G, O	13.5		3M, IT	R	60	3600	WE	0.75	4	H	42.5	2	AlBr	800	60
62.4	Re	M	D, V	M	D, V	G, O	G, O	13.5		3M	R	60	3600	GE	0.75	4	H	42.5	2	AlBr	1600	120
31.8	Tu	Mp	V	Mp	V	O	O			2M	R	22.5	3600	GE	1.0	5	H	20.4	2		230	22.5
	Tu	M	V	M	V	G	G	1000[13]		1M, IT	R	35	3600	WE	1.0	4	H	25.0	1		325	33
51.5	Tu	Mp	D, V	Mp	D, V	G	G	936[13]		2M, IT		30	3600	WE	1.25	4	H	32.5	2	AAd	665	69
24.6	Tu	M	V	Mp	V	P	C	13.5	2650	1M, IMT	R	25	3600	WE	0.5	4	H	18.9	2	AlBr	240	25.5
68.0	Tu	M	V	M	V	P	C	12.0	1950	2M, IT	R	40	3600	WE	0.75	4	H	35.0	2	AnAd	650	59
46.6	Tu	M	V	M	V	P	C	11.5		1M	R	25	3600	GE	0.5	4	H	25.0	2		530	50
51.8	Tu	M	D	M	D	P	C	13.4		1M, IT	R	30	3600	GE	1.0	5	H	20.0	1	Aa	975	83
81.0	Re	M	V	M	V	G	G	1000[13]		1M	R	60	3600	GE	1.5	5	H	50.0	1	AsCu	1400	116.25
30.0	Pf	M	V	M	V	G	G	1020[13]		1M	R											
104.7	Tu	M	V	Mp	V	G	G, O	1000[13]		2M	R	60	3600	WE	1.5	5	H		1	Cu	1945	142.5
72.5	Tu					P	C					35	3600	WE	0.75	5	H					70
63.4	Tu	Mp	V	Mp	D	P	C	10.0	2000	1M	R	20	3600	AC	0.5	0	H	18.3	2	Aa	1510	92.5
18.0	Tu	M	D	M	Ma	SS 42b 2	C	10.6	1950	2M, IT		20[14]	3600	AC	0.75	5	A	17.4	2	Ad	1055	75
3.6	Tu	M	V	M	S, D	SS 16a	C, O, G	12.5	2070	1M		2.5	3600	WE	1.0	5	A	2.6	2	PAd	300	16

—Tabular
—Underfeed stoker
Union Iron Works
Vane control
Jerry Vogt Machine Co
—Wickes Boiler Co
—Westinghouse Electric Corp
—Worthington Pump & Mach. Corp
—Stoker grate area, sq ft
nt to 1000 r
ater surface, 31,200 sq ft
per boiler

5—12,000 to 14,000 Btu per lb
6—2000 to 2900 F
7—Lump at 400 psia
8—1 motor, 1 turbine, 2 fans, 1 stand-by
9—One bleed point for induction steam
10—12,000 to 13,900 Btu per lb
11—Gas, 1035 Btu per cu ft
12—Reheater surface, 9360 sq ft
13—60,000-kw rating, 75,000-kw max
14—Btu per cu ft
15—2 stokers being installed
16—Extraction at 200 psig for industrial sales

17—600,000 lb per hr with 12 000-Btu subbituminous coal
18—Floating power plant
19—Bought in 1946, built in 1945
20—2 units of 1 motor driving one i-d, one f-d fan
21—Cyclone-fired, 30,350 Btu or oil
22—All i-d and f-d fans driven by one motor
23—Gas-fired, 29,800 Btu or oil
24—Reheat to 855 F
25—Radiant reheater, 2964 sq ft
26—Reheat to 900 F
27—Radiant reheater, 3414 sq ft
28—12,350 to 14,400 Btu per lb
29—2045 to 2600 F
30—12,410 to 14,600 Btu per lb
31—Coke breeze, gas tar 165,000 Btu per gal
32—Started operation Jan 1945
33—Hi-p element 3600 rpm, lo-p element 1800 rpm
34—See also 1949 unit at 636 psi

1948 Listing of Typical Central-Station

For Notes on Uses and Limitations of this Tabulation • See page 122

Compiled by B G A Skrotzki, Associate Editor

Company	Location	Plant Name	Consulting Engineers	First Operation, New Units	Nominal Pressure, psi	Nominal Steam Temperature, F	BOILERS: Number	BOILERS: Capacity, Each 1000 lb per hr	BOILERS: Manufacturer	BOILERS: Superheater Surface, 1000 sq ft	BOILERS: Boiler, Waterwall Surface, 1000 sq ft	Furnace Volume, 1000 cu ft	Heat release, 1000 Btu per cu ft per hr
1500 PSI AND ABOVE													
Appalachian Elec Pwr Co	Graham Sta, W. Va.	Philip Sporn	Amer Gas & Elec Serv	7-49	2080	1050[1]	1	930	BW	60 [5,2]	29.6	79.8	16.6
The Ohio Power Co	Graham Sta, W. Va.	Philip Sporn	Amer Gas & Elec Serv	6-50	2080	1050[1]	1	930	BW	60 [5,2]	29 6	79.8	16.6
Indiana & Mich Elec Co	Mishawaka, Ind.	Twin Branch	Amer Gas & Elec Serv	5-49	2080	1050[1]	1	930	BW	60.5[2]	23 5	65.7	19.8
City of Detroit Pub Lig Comm	Detroit, Mich.	Mistersky	SH & G, B & R	1950	1675	1000	1	400	BW	16 4	6.8	22.6	19.6
Consolidated Edison Co of N Y	Manhattan, N. Y. C.	Waterside No. 1		12-48	1600	950	1	1000	CE	28.2	30.3	61.0	17.8
				12-48	1600	950	1	1000	CE	28.2	30.3	61.0	17.1
				1948	200	500	.	....	...	....	.....	....	....
				1948	200	500	.	....	...	....	.....	....	....
Consolidated Edison Co of N Y	Bronx, N. Y. C.	Sherman Creek		10-47	1600	950	1	1000	CE	28.2	59 0	53.7	21.9
Columbus & So. Ohio Elec Co	Nr. Athens, Ohio	Poston	Ebasco Services	9-49	1500	955	1	425	FW	25.5	12.5	30.6	17.9
				6-50	1500	955	1	425	FW	25.5	12.5	30 6	17.9
Consolidated Edison Co of N Y	Manhattan, N. Y. C.	East River		6-50	1500	1000	1	1100	BW	39.1	21 8	88.0	15.3
				4-51	1500	1000	1	1100	BW	39.1	21 8	88.0	15.3
Iowa Power & Light Co	Des Moines, Iowa	Des Moines No. 2		6-48	1500	925	1	375	CE	13.0	9 7	25.0	18.0
1200 PSI TO 1499 PSI													
Boston Edison Co	Weymouth, Mass.	Edgar	Jackson & Moreland	9-49	1450	1000[1]	1	585	CE				
Buffalo Niagara Elec Corp	Dunkirk, N. Y.	Dunkirk		1950	1450	1000[1]	1	670	CE	38 6[11]	...	58	15.7
				1950	1450	1000[1]	1	670	CE	38 6[11]	...	58	15.9
Metropolitan Edison Co	Reading, Pa.	Titus	Gilbert Associates	11-50	1450	1000[1]	1	510	CE	34 7[11]	29.3	44.6	15.8
				11-50	1450	1000[1]	1	510	CE	34 7[11]	29.3	44.6	15.8
New England Power Co	Salem, Mass	Salem Harbor	United Engrs & Const	5-51	1450	1000[1]	1	....	....	...	....	....	....
				10-51	1450	1000[1]	1	....	....	...	....	....	....
The Ohio Power Co	Brilliant, Ohio.	Tidd	Amer Gas & Elec Serv Corp	8-48	1375	925	1	950	BW	34.7	24.2	66.5	17.1
Florida Power & Light Co	Cutler, Fla.	Cutler	Ebasco Services	1949	1350	955	1	430	CE	...	16.9	22.0	24.2
				1949	650	835	1	150	CE	3.5	13 3	6.0	12.3
				1949	650	835	1	150	CE	3.5	13.3	6.0	12.3
City Public Service Board	San Antonio, Texas.	Mission Road	Gibbs & Hill	7-48	1350	900	1	325	BW			14.1	12.6
Pacific Gas & Electric Co	Bakersfield, Calif.	Kern	Stone & Webster	5-48	1350	925	2	450	BW	15 0	9.5	18.4	12.5
West Penn Power Co	Nr. Courtney, Pa.	Mitchell	Sanderson & Porter	12-48	1350	925	2	500	BW	21 4	16.6	44.1	12.0
				2-50	1350	925	1	500	BW	21.4	16.6	44.1	12.0
West Penn Power Co	Springdale, Pa	Springdale	Sanderson & Porter	12-45	1250	925	1	800	BW	34 7	23.2	62.6	12.8
Nebraska Public Power System	Bellevue, Nebr	Bellevue	Sargent & Lundy	6-49	1325	950	3	220	BW	12.1	9 07	14.5	20.6
Pacific Gas & Electric Co	San Francisco, Calif	Station P	Stone & Webster	11-48	1300	950	4	475	BW	16.4	8 6	20.6	12.5
Cambridge Electric Light Co	Cambridge, Mass.	Kendall Sq	Gilbert Associates	12-48	1320	900	2	200	BW	7 9	9 9	14.3	12.0
The Dayton Power & Light Co	Miamisburg, Ohio	O H Hutchings	Ebasco Services	5-48	1300	950	1	550	CE	15.8	16.4	31.6	12.3
				1949	1300	950	1	550	CE	15.8	16.4	31.6	12.3
The Detroit Edison Co	Trenton, Mich.	Trenton Channel		8-49	1300	950	4	660[16]	CE	....	26.6	42.2	12.5
Wisconsin Electric Power Co	Port Washington, Wis	Port Washington		9-48	1290	825[24]	1	690	CE	8.5[25]	64.2	61.0	14.0
				6-49	1380	900[26]	1	655	CE	11 0[27]	63.8	61.0	14.0
Buffalo Niagara Elec Corp	Nr. Buffalo, N. Y.	C R Huntley		9-48	1250	950	1	875	BW	29.1	18.4	38.8	12.3
Central New York Power Corp	Oswego, N. Y.	Oswego		12-48	1250	950	1	875	BW	27 2	17 4	43.5	12.3
The Cincinnati Gas & Elec Co	Cincinnati, Ohio	West End		11-48	1250	925	3	350	BW	15 6	19 8	12.3	31.8
The Cincinnati Gas & Elec Co	Columbia Park, Ohio	Columbia	Sargent & Lundy	11-49	1250	950	2	375	BW	24 2	22 6	31.8	34.6
N.Y.C. Board of Transportation	Manhattan, N. Y. C.	59th Street	Burns & Roe	10-49	1250	950	1	600	BW	30.6	12 3	34 6	39.0
Duke Power Co	Cliffside, N. C.	Cliffside		3-48	1250	950	1	620	CE	24 3	24 0	39.0	39.0
				11-48	1250	950	1	620	CE	24 3	24.0	39.0	39.0
Duke Power Co	Leaksville, N. C.	Dan River		11-49	1250	950	1	670	CE	24 8	27 3	42.9	42.9
				4-50	1250	950	1	670	CE	24 8	27 3	42.9	42.9
Connecticut Light & Power Co	Devon, Conn.	Devon	United Eng & Constr.	1-50	1250	950	1	600	CE		19 7	40.0	40.0
				1-51	1250	950	1	600	CE		19 7	40.0	40.0
Long Island Lighting Co	Port Jefferson, L. I.	Port Jefferson	Ebasco Services	9-48	1250	950	1	425	CE	16 2	15 6	29 2	29.2
				11-49	1250	950	1	425	CE	16 2	15 6	29.2	29.2
New Orleans Pub Service, Inc	New Orleans, La	Industrial Canal	Ebasco Services	7-47	1250	950	1	400	FW	13 5	16 0	28.1	28.1
				8-48	1250	950	1	400	FW	13 5	16.0	28.1	28.1
Oklahoma Gas & Elec Co	Harrah, Oklahoma	Horseshoe Lake	Sanderson & Porter Pioneer Serv & Engrg Co	2-49	1250	950	1	500	BW	25 6	16 6	41.7	41.7
Rochester Gas & Elec Corp	Nr. Garbutt, N. Y.	Lakeside	Gilbert Associates	7-47	1250	950	1	290	BW	13 7	9 5	22.0	22.0
Narragansett Electric Co	Providence, R. I.	Manchester St	United Engrs & Constr	10-48	1250	950	1	400	CE	...	15 1	27.1	27.1
				10-47	1200	950	1	450	CE	14 9	15 3	24 0	24.0
				4-49	1200	950	1	450	CE	14 9	15 3	24.0	24.0
900 PSI TO 1199 PSI													
Arkansas Power & Light Co	Lake Catherine, Ark.	Lake Catherine	Ebasco serv		1050	905	2	450	CE				21.0
				11-47	1050	900	1	570	RS	23 3	30 9		22.5
Los Angeles Dept of Water & Pwr	Wilmington, Calif.	Harbor		11-48	987	900	1	650	RS	29 0	32 4		28.0
				12-48	987	900	1	650	RS	29 0	32 4		28.0
				4-49	987	900	1	650	RS	29 0	32 4		28.0
	Lake Charles, La	Riverside	Stone & Webster	8-47	925	825	1	420	FW				
				7-50	900	910	1	400	CE	7 7	20 2		20.5
Gulf States Utilities Co	Baton Rouge, La	Louisiana[34]	Stone & Webster	5-50	900	900	1	400	CE	7 7	20 2		20.5
				2-51	900	900	1	400	CE	7 7	20.2		20.5
	Beaumont, Texas	Neches	Stone & Webster	5-49	875	910	1	400	CE	8 5	13 6		18.0
				10-51	875	910	1	400	CE	8 5	13 6		18.0
Florida Power & Light Co	Miami, Florida	Miami	Ebasco Services	9-45	920	905	2	215	BW	5 6	18.0		9.5
Georgia Power Co	Sterlington, La.	Sterlington	Ebasco Services	5-51	900	905	1	675	CE	...	...		
Columbus & Southern Ohio Elec Co	Nr. Circleville, Ohio	Poweay		7-48	900	900	1	375	FW	9 8	14 4		18.8
Dominion Light Co	So. Heights, Va.	Pinduss		12-49	900	900	1	600	FW	17 8			

A — Anthracite
AB — Anthracite-bituminous mixture
AC — Anthracite culm
B — Bituminous
BC — Bituminous culm
BM — Bituminous mine refuse
BW — Babcock & Wilcox Co
C — Coal, all classifications
CA — Coal, anthracite
CB — Coal, bituminous
CE — Combustion Engineering Co
CL — Coal, lignite
CR — Coal, refuse
CT — Curtis Steam Turbine Co
D — Diesel
DB — Detroit
DC — Detroit Stoker Co
EB — Edge Moor Iron Works
EC — Erie City Iron Works
EM — Edge Moor Iron Works
ER — Erie City Iron Works
G — Natural gas
GE — General Electric Co
GT — Gas Turbine
H — Hydrogen cooled
HC — Hydraulic coupling
L — Lignite
M — Motor drive
MC — Magnetic coupling
MI — Murray Iron Works Co
Mp — Explosions per ton
MT — Motor and turbine drive
Mz — Muntz metal
O — Oil
P — Pulverized-fuel firing
PAL — Phosphorized admiralty
Pl — Plate
R — Regulator
RB — Red brass
Re — Regenerative
RS — Riley Stoker Corp
S — Speed control
SHAG — Smith, Hinchman & Grylls
SS — Spreader stoker
ST — Slag tap
Sy — Superior
T — Turbine drive
TG — Traveling-grate stoker

nd Municipal Power-Plant Installations

Air-Heater Surface per Boiler, 1000 sq ft	Air-Heater Type	F-D FANS: Drive	F-D FANS: Air-Volume Control	I-D FANS: Drive	I-D FANS: Gas-Volume Control	Firing	FUEL: Type	FUEL: Heating Value, 1000 Btu per lb	FUEL: Ash-Fusion Temperature, F	FEED PUMPS: Drive	FEED PUMPS: Flow Control	TURBINES: Capacity, 1000 kw	TURBINES: Speed, rpm	TURBINES: Manufacturer	TURBINES: Back pressure, psia	TURBINES: No. of Bleed Points	CONDENSERS: Generator Cooling	CONDENSERS: Surface, 1000 sq ft	CONDENSERS: No. Water Passes	CONDENSERS: Tube Material	Total Boiler Capacity Incl New Units, 1000 lb	Total Generator Capacity Incl New Units, 1000 kw
281.4	Re	M	V	M	V	P	C	11.4	2300	3M	R	125	3600[11]	GE	0.5	6	H	65.0	1	AsCu	930	125
281.4	Re	M	V	M	V	P	C	11.4	2300	3M	R	125	3600[13]	GL	0.5	6	H	65.0	1	AsCu	1860	250
281.4	Re	M	V	M	V	P	C	10.9	2200	3M	R	125	3600[13]	GE	0.5	6	H	65.0	1	AsCu	3460	366.5
280.0	Tu	M	V	M	Hy	P	C	13.0	2300	2M	Hy	44	3600	WE	0.25	4	H	27.5	1	Ad	1250	120
280.0	Re	M[3]	V	M[3]	D	P	C	13.0[4]	2400[15]	3T	S	50	3600	WE	200	10	H	. .	.	. .	2000	. . .
280.0	Re	M[3]	V	M[3]	D	P	C	13.0[4]	2400[15]	3T	S	50	3600	WE	200	10	H	. .	.	. .	2000	. . .
. . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	60	1800	GE	0.75	25	H	74.5	2	AlB	. .	. . .
. . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	60	1800	GE	0.75	25	H	74.5	2	AlB	. .	658
280.0	Re	M[17]	S	M[17]	S	P	C&O	14.3	2095	3T	S	50	3600	GE	200	10	H	. .	.	. .	3476	265
232.2	Re	M	D	M	D	P	C	11.5	2400	3	.	40	3600	WE	. .	.	H	37.5	2	AsCu	425	40
232.2	Re	M	D	M	D	P	C	11.5	2400	3	.	40	3600	WE	. .	.	H	37.5	2	AsCu	850	80
254.8	Re	. .	. .	. .	. .	P	C	13.0[4]	2400[15]	3T	S	120	3600[13]	GE	0.5	3	H	95.0	1	AlB	5550	400
254.8	Re	. .	. .	. .	. .	P	C	13.0[4]	2400[15]	3T	S	120	3600[13]	GE	0.5	3	H	95.0	1	AlB	6550	520
80.6	Re	M	V	M	Hy	P	C, G	9.2[19]	1980	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1300	85
. . .	Re	M	V	M	S	P	C	14.1	2500	2M	. .	81.25	3600	WE	0.5	5	H	. .	1	AlBr	2375	242
232.2	Re	M[3]	. .	M[3]	. .	P	C	13.1	2050	3M	. .	80	3600	GE	0.5	7	H	50	1	Ad	670	80
232.2	Re	M[3]	. .	M[3]	. .	P	C	13.1	2050	3M	. .	80	3600	GE	0.5	7	H	50	1	Ad	1340	160
204.4	Re	M	Hy	M	V	P	C	13.0	2400	1M	Hy	60[12]	3600	GE	0.5	5	H	42.5	2	Ad	510	75
204.4	Re	M	Hy	M	V	P	C	13.0	2400	1M	Hy	60[12]	3600	GE	0.5	5	H	42.5	2	Ad	1020	150
. . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	75	3600	GE	. .	. .	H	. .	. .	. .	. .	75
. . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	75	3600	WE	. .	. .	H	. .	. .	. .	. .	150
281.4	Re	M	V	M	V	P	C	11.3	2400	3M	R	100	1800	GL	0.5	5	H	58	1	AsCu	1900	200
63	Re	M	D	M	D	O	C	18.3	. .	2M, 1T	. .	40	3600	GE	1.13	5	H	40	2	AlBr	430	40
20	Re	M	D	M	D	O	C	18.3	. .	1M	. .	11.5	3600	EI	1.0	4	A	11.0	2	AlBr	580	51.5
20	Re	M	D	M	D	O	C	18.3	. .	1T	. .	11.5	3600	EI	1.0	4	A	11.0	2	AlBr	730	63
41.7	Tu	Mp	V	Mp	V	G, O	G, O	1070[13]	. .	1M, 1T	R	25	3600	WE	1.0	4	H	22.5	2	PAd	1143	80
67.6	Tu	M[22]	V	M[22]	V	G, O	G, O	1009[13]	. .	3M	R	60	1800	GE	1.37	4	A	35.0	1	Ad	900	60
. . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	3600	GE	2.0	1	A	4.0	1	Ad	900	60
67.4	Tu	M	V	M	D	P	C	12.0	2200	3M	. .	80	3600	WE	75	4	H	50	1	Su	1000	80
67.4	Tu	M	V	M	D	P	C	12.0	2200	3M	. .	80	3600	WE	75	4	H	50	1	Su	1500	160
105	Tu	M	V	M	V	P	C	12.5	2500	3M	. .	80	3600	WE	75	4	H	50	1	AAd	3485	290
40.3	Re	M	V	M	Hy	P	C	12.0	2000	3M, 1T	R	30[14]	3600	GE	0.5	4	H	27.5	1	AsCu	660	60
67.6	Tu	M[22]	V	M[22]	V	G, O	G, O	1009[13]	. .	5M	R	100[14]	3600	GE	0.75	4	H	40.0	1	AlBr	. .	235
. . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	7.5[14]	3600	GE	2.0	1	A	4.0	1	AlBr	. .	250
46.1	Tu	Mp	D, V	T	D, V	P	C, O	14.0	2549	3T	S	15	3600	WE	1	115	H	13	2	AlBr	400	15
43.2	Re	M	V	M	Hy	P	C	13.2	2600	3M	R	50	3600	GE	0.75	5	H	45	2	Ad	550	50
43.2	Re	M	V	M	Hy	P	C	13.2	2600	3M	R	50	3600	GE	0.75	5	H	45	2	Ad	1100	100
57.4	Re	M	Hy	M	Hy	P	C	13.5[16]	2500	3M	Hy	100[14]	1800	GL	0.5	5	H	60	1	Ad	6865	500
121	Pl	M	Ma	M	Ma	P	C	11.4	2156	2M, 1T	. .	80	1800	AC	0.25	5	H	53.7	1	AAd	2070	240
145.2	Pl	M	Ma	M	Ma	P	C	11.4	2156	2M, 1T	. .	80	1800	AC	0.25	5	H	53.7	1	AAd	2725	320
163	Tu	M[3]	V	M	Ma	P	C	12.8	2100	3M	Hy	80	3600	WE	0.5	6	H	58.6	1	Ad	8575	320
158	Tu	M	V	M	Ma	P	C	13.0	2550	3M	Hy	80	1800	GE	0.5	6	H	58.6	1	Ad	2650	240
53.1	Tu	M	V	M	D	P	C	13.9	2480	3T	R	35	3600	WE	275	0	H	. .	.	. .	1950	214
10.4	Re	M	V	M	Hy, D	P	C	13.3	2480	3M	R	80	3600	WE	0.75	4	H	60	2	AsCu	3215	336
197.0	Tu	M	V	M	Hy	P	C, O	13.3[26]	2400[29]	3M	Hy	50	1500	GE	0.5	5	H	55	2	AlB	2600	160
162.6	Re	M	Hy	M	Hy	P	C	12.3	2300	2M	. .	65	3600	WE	0.75	5	H	48.5	2	Ad	1370	145
162.6	Re	M	Hy	M	Hy	P	C	12.3	2300	2M	. .	65	3600	GE	0.75	5	H	48.5	2	Ad	1990	210
131.2	Re	M	V	M	Hy	P	C	. .	. .	3M	. .	70	3600	GE	0.75	6	H	50	2	Ad	670	70
131.2	Re	M	V	M	Hy	P	C	. .	. .	3M	. .	70	3600	GE	0.75	6	H	50	2	Ad	1340	140
249.8	Re	M	V	M	Hy	P	C	12.5	2400	2M	R	60	3600	WE	0.5	5	H	56.0	2	AlBr	. .	225
249.8	Re	M	V	M	Hy	P	C	12.5	2400	2M	R	60	3600	WE	0.5	5	H	50.0	2	AlBr	2650	260
96.0	Re	M	V	M[3]	V	P	C, O	13.5	2200	2M	S, Hy	40	3600	GE	1.25	5	H	37.5	2	AlBr	425	40
96.0	Re	M	V	M[3]	V	P	C, O	13.5	2200	2M	S, Hy	40	3600	GE	1.25	5	H	37.5	2	AlBr	850	80
85.0	Re	M	V	M	D	G	G, O	11000[13]	. .	3M	R	37.5	3600	GE	1.75	4	H	30.0	2	AlBr	400	37.5
85.0	Re	M	V	M	D	G	G, O	11000[13]	. .	3M	R	37.5	3600	GE	1.75	4	H	30.0	2	AlBr	800	75
67.4	Tu	M	V	M	V	P	C	13.0	2050	3M	R	40	3600	WE	0.75	4	H	35.0	1	AAd	500	50
43.0	Re	M	Hy	M	Hy	P	C, G	11.5	1950	2M	R	10.0	3600	GE	315	. .	A	. .	.	. .	1089	92.3
100	Re	M	V	M	V	P	C	13.0	2100	3M	2R, 1Hy	40	3600	GE	0.5	5	H	25	2	Ad	400	40
57.4	Re	M	V	M	Hy	P, O	C, O	14.0	2100	2M	R	40	3600	WE	0.5	5	H	27.5	1	CuNi	1195	116
57.4	Re	M	V	M	Hy	P, O	C, O	14.0	2100	2M	R	40	3600	GE	0.5	5	H	30.0	. .	CuNi	1645	166
66.0	Tu	M	V	M	. .	O, G	G, O	. .	. .	2M, 1T	R	40[24]	3600	AC	0.75	5	H	27.5	1	Ad	900	80
66.3	Re	M	S	M	S	O	O	18.1	. .	2M, 1MT	R	65	3600	WE	0.5	4	H	60	2	AlBr	1140	130
158.0	Re	M	V	M	V	O	O	18.1	. .	3M, 1T	Hy	75	1800	WE	0.75	4	H	70	2	AlBr	1790	205
158.0	Re	M	V	M	V	O	O	18.1	. .	3M, 1T	Hy	75	1800	GE	0.75	4	H	70	2	AlB	2440	280
158.0	Re	M	V	M	V	O	O	18.1	. .	3M, 1T	Hy	75	1800	WE	0.75	4	H	70	2	Ad	3040	355
. . .	Re	M	V	M	V	G	G, O	1000[13]	. .	2M, 1T	. .	35	3600	AC	1.0	. .	. .	35	. .	. .	. .	35
72.7	Re	M	V	M	V	G, O	G, O	1000[13]	. .	2M	R	40	3600	AC	1.0	5	H	35	. .	. .	820	75
72.7	Re	M	V	M	V	G, O	G, O	1000[13]	. .	2M	R	40	3600	WE	1.0	5	H	35	. .	Ad	3950	148.5
72.7	Re	M	V	M	V	G, O	G, O	1000[13]	. .	2M	R	40	3600	WE	1.0	5	H	35	. .	Ad	4550	188.5
62.4	Re	M	V	M	V	G, O	G, O	1060[13]	. .	2M	R	40	3600	WE	1.0	5	H	37.5	2	Ad	1450	125
62.4	Re	M	V	M	V	G, O	G, O	1060[13]	. .	1M, 1T	R	40	3600	WE	1.0	5	H	37.5	2	Ad	1850	165
22.6	Re	M	V	M	V	O	O	18.3	. .	2M, 1T	S	40	3600	GE	1.12	5	H	40	2	AlBr	. .	74
104.7	Tu	. .	. .	. .	. .	G	G	1062[13]	. .	. .	. .	60	3600	GE	. .	4	. .	. .	. .	. .	. .	. .
61.6	Re	M	Ma	M	Ma	P	C	11.5	2470	1T	S	30	3600	GE	0.75	4	H	35	2	AsCu	1415	120
161.6	Re	M	V	M	V	P	C	13.3	2160	1M	P	81.3	3600	WE	0.75	5	H	50	1	Ad	1460	150

—Tubular
—Underfeed stoker
—Union Iron Works
—Vane control
—Henry Vogt Machine Co
—Westinghouse Electric Corp
—Wickes Boiler Co
—Worthington Pump & Mach Corp
—Stoker grate area, sq ft
—Reheat to 1000 F
—Reheater surface, 30 200 sq ft
—Fans per boiler

4—12 000 to 14 000 Btu per lb
5—2000 to 2 400 F
6—Induced at 40 in psia
7—1 motor, 1 turbine, 2 fans, 1 shaft
8—One bleed point for induction steam
9—12 000 to 15 000 Btu per lb
10—4 mos, 1015 Btu per cu ft
11—Evaporator surface, 9500 sq ft
12—60 000-kw rating, 75 000-kw max
13—Btu per cu ft
14—2 turbines being installed
16—Extraction at 200 psig for industrial sales
17—600,000 lb per hr with 12,040-Btu subnormal coal
19—Floating power plant
15—Bought in 1946, built in 1943
16—2 units of 1 motor driving one i-d, one f-d fan
21—Cupro-nickel in top rows of condenser
23—Gas-fired, 30,350 Btu on oil
24—Air i-d and f-d fan driven by one motor
25—Gas-fired, 29 800 Btu on oil
26—Reheat to 855 F
27—Radiant reheater, 2964 sq ft
28—Reheat to 900 F
29—Radiant reheater, 3414 sq ft
30—12,330 to 14 400 Btu per lb
31—2045 to 2800 F
32—12 410 to 14,066 Btu per lb
33—Coke breeze; gas tar 165,000 Btu per gal
34—Started operation Jan 1948
35—H-p element 3600 rpm, l-p element 1800 rpm
36—See also 1949 unit at 650 psi

1948 Listing of Typical Central-Station

For Notes on Uses and Limitations of this Tabulation • See page 122

Compiled by B G A Skrotzki, Associate Editor

Company	Location	Plant Name	Consulting Engineers	First Operation, New Units	Nominal Pressure, psi	Nominal Steam Temperature, F	BOILERS: Number	BOILERS: Capacity, Each 1000 lb per hr	BOILERS: Manufacturer	BOILERS: Superheater Surface, 1000 sq ft	BOILERS: Boiler, Waterwall Surface, 1000 sq ft	Furnace Volume, 1000 cu ft	Heat Release, 1000 Btu per cu ft per hr
✓Consolidated Edison Co of N Y	Bronx, N. Y	Hunts Point		9–48	650	750	2	150	CE	4 0	17 9	13.1	16.6
✓Gulf States Utilities Co	Baton Rouge, La	Louisiana	Stone & Webster	5–49	650	750	1	500	CE	4 7	35 0	37 3	18.7
✓New York State Elec & Gas Corp	Bainbridge, N. Y	Jennison	Gilbert Assoc	10–50	650	910	2	200	CE	8 1	22.9	9.7	27.2
✓Oklahoma Gas & Electric Co	Ponca City, Okla	Beerbower	Pioneer Serv & Eng Co	7–48	650	900	1	250	FW	9.9	17 4	17 0	18.9
✓Eastern Shore Pub Serv of Md	Vienna, Md	Vienna	United Eng & Const	2–48	650	825	1	160	BW			9 6	23.3
				1–49	650	825	1	160	BW			9 6	23.3
✓Kansas Gas & Electric Co	Wichita, Kan	Ripley	Ebasco Services	3–48	650	825	2	160	CE	3 5	10 9	6.1	34.8
✓Missouri Utilities Company	Oran, Mo	Harry Newman	J F Pritchard	8–49	650	825	1	90	CE		12 1		
✓Northwestern Public Service Co	Mitchell, S. D	Mitchell	Sargent & Lundy	10–48	650	825	2	50	RS	2.3	7.7	2.4	28.2
				7–50	650	825	2	80					
✓Public Service Co of Oklahoma	Weleetka, Okla	Weleetka	Sargent & Lundy	1950	650	835	1	300	BW		24 2		
✓Southwestern Public Serv Co	Abernathy, Texas	Tuco		9–49	650	825	1	275	BW	5 3	18 7	11 2	32.0
✓Southwestern Public Serv Co	Amarillo, Texas	East		5–51	650	825	1	380	BW		33 2	17.6	27.8
✓Southwestern Public Serv Co	Carlsbad, N. M	Carlsbad		9–48	650	825	2	80	BW		7 7	3 3	32.8
✓Texas Electric Service Co	Monahans, Texas	Permian Basin	Ebasco Services	1948	650	800	2	150	CE	3.2	12 0		33.1
				1949	650	800	2	150	CE	3 2	12 0		33.1
✓Texas Electric Service Co	Wichita Falls, Texas	Wichita Falls	Ebasco Services		650	800	1	150	CE	3 2	12 9	6 1	33.1
✓Kansas City Power & Light Co	Kansas City, Mo	Grand Avenue	United Lt & Rwy serv	9–48	636	950	1	375	CE	9 9	21 4	21 2	23.1
✓Iowa Public Service Co	Eagle Grove, Iowa		J F Pritchard	4–49	635	835	1	100	BW			4 8	27.8
✓Iowa Public Service Co	Storm Lake, Iowa	Hawkeye	J F Pritchard	4–49	635	835	1	100	BW			4 8	27.8
✓Central Louisiana Electric Co	St Landry, La	Coughlin	Sargent & Lundy	6–48	625	825	2	90	BW	2 1	18 4	4.3	28.8
✓Glendale Public Service Dept	Glendale, Calif	Glendale	Carl Heinze	10–47	625	825	1	200	CE	2 5	15 0	7.8	33.5
✓Public Service Co of New Mexico	Albuquerque, N. M	Albuquerque	Stearns, Roger	11–48	600	825	1	125	BW	2.2	11 7	5.0	
				8–47	600	750	2	35	BW	0 8	4 9	0.5	
City of Lubbock	Lubbock, Texas	Lubbock	Truman Green	7–49	600	825	1	100	CE		11 0	3 9	25.0
✓Missouri Power & Light Co	Mexico, Mo	Mexico	Black & Veatch	1949	600	825	1	90	CE		12 0		
✓West Texas Utilities Co	Abilene, Texas	Abilene	Sargent & Lundy	7–48	600	825	1	100	BW	2 1	8 3	4 3	31.0
Menasha Elec & Water Util	Menasha, Wis		Laramore & Douglass	2–49	600	750	2	60	Wi		8 2	2.9	
599 PSI AND BELOW													
✓El Paso Electric Co	El Paso, Texas	Rio Grande	Stone & Webster	5–49	450	750	1	185	BW	4 2	12 0	8.5	29.8
✓Provo City	Provo, Utah	Provo City	Burns & McDonnell	12–48	450	750	1	125	RS	2.0	11 2		
✓City of Crawfordsville	Crawfordsville, Ind	Crawfordsville	Comm Testing & Engrg Co	12–48	450	750	1	90	BW		9 6	3 3	
✓Montana-Dakota Utilities Co	Acme, Wyo	Acme		2–48	450	750	1	45	BW	1 5	5 0	5 4	
Public Utilities Commission	New Ulm, Minn		J T Rynda, Jr	5–48	450	750	1	80		2 5	10 7	3.6	
				12–48	450	750	1	80		2 5	10 6	3.0	
✓Village of Winnetka	Winnetka, Ill	Winnetka	Sargent & Lundy	10–48	435	750	1	60	BW	3 3	14 0	2.3	35.2
✓Florida Power & Light Co	Lake Monroe, Fla	Sanford	Ebasco Services	12–47	425	750	1	125	CE	2 5	12 5	5 8	27.5
Dept of Utilities	Fremont, Nebr		Lutz & May	1949	460	825	1	75					
Southwestern Public Service Co	Denver City, Texas	Denver City		3–48	450	750	2	150	CE	2 1	12 9	6.5	34.4
✓City of Rocky Mount	Rocky Mount, N. C		W C Olsen	1948	450	750	1	150	BW		17 0		
Board of Public Works	Poplar Bluff, Mo		Rogers Schmidt	4–48	450	750	1	40	Vo		5 7	1.8	
✓Southwestern Electric Service Co	Jacksonville, Texas	Jacksonville	D C Pfeiffer	7–48	450	750	1	60	BW		6 2	5 0	
✓Water & Electric Dept	McPherson, Kan	McPherson		6–48	450	750	1	100	RS	1 5	10 6	5 2	25.0
City of Fairbury	Fairbury, Nebr		Black & Veatch	12–48	450	750	1	60	EM	1 5	7 0		
✓Greenwood Elec Lt & Water	Greenwood, Miss			9–48	450	750	1	110	BW		11 3		
✓Town of Wilson	Wilson, N. C		W C Olsen	4–48	450	725	1	100	BW	1 4	9 8		
✓City of Thomasville	Thomasville, Ga	Thomasville		9–47	450	725	1	50	BW		6 4	2 4	27.0
City of Hagerstown	Hagerstown, Md		A C Wood & Assoc	7–49	450	715	2	70	EC		6 0	2 8	
✓City of Hastings	Hastings, Nebr		Black & Veatch	1948	425	825	1	70	BW	2 7	6 6	5 0	19.6
Greenwood County Elec Pwr Comm	Chappells, S. C	Buzzards Roost	G Hill	8–48	425	725	1	130	BW		10 4		29.3
Manitowoc Public Utilities	Manitowoc, Wis			4–48	425	700	1	120	Wi	14 2	17 0	5.6	
Water & Light Dept	Virginia, Minn		Laramore & Douglass	11–48	425	760	2	60	EM	1 1	8 5	2 7	
✓Borough of Vineland	Vineland, N. J		H A Kuhlman	1948	420	750	1	105	BW	3 0	9 3	4 2	24.8
✓Public Service Dept	Moorehead, Minn		Helmick, Edeskuty, Lutz	8–47	420	750	1	55	BW		6 7	2 8	11.3
✓City of Kansas City	Kansas City, Kan	Quindaro	Burns & McDonnell	4–48	410	750	1	200	BW		19 5	16 2	20.3
Municipal Light & Water	Clay Center, Kan		A C Kirkwood	12–48	400	750	1	40					
✓City of Wilmar	Wilmar, Minn	Wilmar	Pfeifer & Speitz	12–48	400	750	1	55	BW			4	
✓Municipal Utilities	Sleepy Eye, Minn		Pfeifer & Speitz	5–48	400	750	1	40	BW	2 5	6 6	2 4	25.9
Mt Carmel Public Utility	Mt Carmel, Ill	Mt Carmel		10–47	400	750	1	60	Vo		11 1		
✓City of Gainesville	Gainesville, Fla		Robert & Co		400	750	1	65	BW		7 5	3 5	29.0
City of Carlyle	Carlyle, Ill			1949	400	750	1	37	EC		7 1	1 9	
Austin, Minn	Austin, Minn		Edeskuty	5–48	400	750							36.6
Algona, Iowa	Algona, Iowa		Stanley Eng Co	5–48	400	750	1	55	MI	1 0	5 9		
✓Board of Public Works	Alexandria, Minn		Pfeifer & Speitz	5–48	400	750	1	50	BW			2 0	
City Light & Water Office	Kalamazoo, Mich		Bechtel Eng Co	12–47	400	750	1 1/2	40	Wi		4 5	4 8	33.4
Missouri Power Service Corp	Clinton, Mo	Clinton	Burns & McDonnell	5–48	400	750	1	110	BW		12 4		
Missouri Power Service Corp	Sedalia, Mo	Sedalia	Burns & McDonnell	5–49	400	750	1	100					
✓Otter Tail Power Co	Devils Lake, N. D	Devils Lake		11–47	400	750	1	75	RS		10 0	3 4	32.5
The Western Coal and Power Co	Durango, Colo	Durango		10–48	400	750	1	57	FI		5 5	4 3	17.5
City of Lebanon	Lebanon, Ind		Emery, Marker & Emery	4–48	400	725	2	110	BW		13 5	5 0	28.5
✓City Water & Light	Jonesboro, Ark		N B Driver	1–49	400	700	2	55	BW				
Sioux City Gas & Electric Co	Sioux City, Iowa	Big Sioux	J F Pritchard	10–48	360	750							23.2
✓Consolidated Edison Co of N Y	Long Island City, N. Y	Ravenswood	Fred A White Eng Corp	1–47	325	Sat	3	275	BW	0	35 7	17 1	17.1
✓Consolidated Edison Co of N Y	Manhattan, N. Y	59th Street	Bibber & Spencer	2–48	325	Sat	1	275	BW	0	3 1	17 1	
✓Southwestern Gas & Elec Co	Karnack, Texas	Karnack	Sargent & Lundy	6–48	290	585	4	100	CE				
✓Puerto Rico Power & Light Co	Portland, Ore	Beach	Ebasco Services	1–48	185	525	1	150	BW	0 6	13 5	6 4	32.5
[illegible]	Rochester, Minn	Silver Lake	Laramore & Douglass	12–47	175	550	1	55	Wi	0 5	6 0	1 9	32.0
✓[illegible]	[illegible] Mass	[illegible]		12–47	175	Sat	1	50	BW	0	7 1	1 9	

A — Air cooled
AAUBr — Aluminum alloy and brass
AAA — [illegible]
Ab — [illegible]
Ab — [illegible]
AC — [illegible] Stoker Co
Ad — [illegible]
ADa — [illegible]
ADu — [illegible] automatically
Ae — [illegible]
AF — [illegible]
Ah — [illegible]
Bal — [illegible]
C — [illegible]
CA — [illegible]
CB — [illegible]
Ce — [illegible] Engineering Co
CF — [illegible]
Ch — [illegible]
Ch — [illegible] Steam Turbine Co
Cl — [illegible]
Cl — [illegible] Iron Works
Co — [illegible]
Cr — [illegible] Iron Works
Cr — [illegible] Power Corp
Cy — Natural gas
CyE — General Electric Co
Cyl — Cylinder
D — [illegible] pressure
Dg — [illegible] equipment
Dr — Engine
M — Motor drive
Mg — Magnetic coupling
MI — Murray Iron Works Co
Mp — Two motors per fan
MT — Motor and turbine drive
Mw — Multivane motor
O — Oil
P — Outward-discharge fans
PAl — Phosphorized admiralty
Pl — Plate
R — Regulator
RB — Red brass
Re — Regenerative
RS — Riley Stoker Corp
S — Speed control
SHAG — Smith, Hinchman and Grylls
SS — Spreader stoker
ST — Stag cup
Su — Superior
T — Turbine drive
TG — Traveling-grate stoker

d Municipal Power-Plant Installations cont'd

Boiler, 1000 sq ft	F-D FANS		I-D FANS			FUEL			FEED PUMPS		TURBINES					CONDENSERS			Total Boiler Capacity, Fuel Now Units, 1000 lb	Total Generator Capacity, Fuel Now Units, 1000 kw
	Air-Heater Type	Drive	Air-Volume Control	Drive	Gas-Volume Control	Firing	Type	Heating Value, 1000 Btu per lb	Ash-Fusion Temperature, F	Drive	Flow Control	Capacity, 1000 kw	Speed, rpm	Manufacturer	Back pressure, psia	No. of Bleed Points	Generator Cooling	Surface, 1000 sq ft	No. Water Passes	Tube Material		
0		M	V	M	V	TG,561	CB, GT	12,274[31]	2576	3T	R	7.5	3600	WE	200	0	A	..	..	..	604	7.5
..		T	S	T	S	G, G	O, G	1000[13]		1T	S										3550	108.5
1.8	Re	M	Ma	M	Ma	TG,672	CA	11.4	2900	1M, 1T, 1MT	R	30	3600	GE	0.75	4	H	23.0	2	Ads	800	60
2.0	Tu	M	Ma	M	Ma		CA	11.5	1950	3M	S	25	3600	WE	0.75	3	H	18.0	2	..	550	42
2.8	Re	M	Hy	M	Hy	P	C	13.3	2100	3M	R	15	3600	WE	0.75	5	A	14.0	2	Ad	500	42
2.0	Re	M	V	Mp	D	P	C	13.3	2100	3M	R	15	3600	WE	0.75	5	A	14.0	2	Ad	660	57
2.0	Re	M	V	Mp	D	P	C	13.3	2100	3M	R	15	3600	WE	0.87	3	H	30	2	AsCu	640	48
2.0	Re	M	V	M	D	O, G	O, G	1013[13]	..	2M	..	25	3600	WE	0.87	3	H	30	2	AsCu	640	48
5.0	Re	M	D	M	D	SS,244	C	12.0	2230	1M, 1T	R	7.5	3600	WE	1.25	3	A	8.5	2	Ad	90	7.5
5.4	Tu	M	V	M	Hy	SS,244	C	7.0	2200	1M, 1T	S	7.5	3600	AC	1.0	3	A	7.5	2	.....	225	15
4.5	Tu	M	D	M	D	TG,180	L	..	..	..	..	11.5	3600	..	1.0	4	A	10.0	2	.....	325	26
3.0	Tu	M	V	M	Hy	O, G	O, G	..	..	1M, 1T	R	30	3600	WE	1.25	4	H	32.5	2	.....	900	80
3.6	Re	M	V	M	D	O, G	O, G	1000[13]	..	2M, 1T	..	25	3600	GE	1.0	4	H	22.5	2	AAd	530	40
13.6	Re	M	D, V	M	D	O, G	O, G	1000[13]	..	3M	..	37.5	3600	GE	1.0	4	H	37.5	2	AAd	955	72.5
..	Re	M	V	M	D	O, G	O, G	1000[13]	..	2M, 1T	..	15	3600	AC	1.0	4	H	20.0	2	AAd	280	25.0
10.3	Re	M	D	M	V	G	G	1050[13]	..	2M, 1T	R	12.5[14]	3600	EI	1.75	4	A	11.0	2	AsCu	300	25
10.3	Re	M	D	M	V	G	G	1050[13]	..	2M, 1T	R	12.5[14]	3600	EI	1.75	4	A	11.0	2	AsCu	600	50
..																						
10.3	Re	M	V	M	V	G	G	1050[13]	..	1M, 1T	R	12.5	3600	EI	1.75	4	A	11.0	2	..	376.4	23.4
10.3	Re	M	V	MT	Hy	P	C, G	10.3	1900	1M	R	35	3600	WE	0.75	6	H	32.5	1	AsCu	1835	146.5
15.0	Re	MT	V	M	Hy	SS,246	C, G	10.4	1990	1M, 1T	..	7.5	3600	GE	1.0	3	A	9.5	2	Ad	100	7.5
9.0	Tu	M	V	M	Hy	SS,246	C	10.4	1990	1M, 1T	..	7.5	3600	GE	1.0	3	A	9.5	2	Ad	100	7.5
9.0	Tu	M	V	M	Hy		C	..	..	2M, 1T	..	7.5[14]	3600	GE	0.75	3	A	8.0	2	Ad	180	15
10.1	Tu	M	D	M	D	G	G	1100[13]	..	1M	R	20	3600	GE	1.0	4	H	16.0	2	Cu	600	40
19.6	Re	Mp	V	Mp	V	O	O	18.5	..	2M	R	11.5	3600	GE	0.75	2	A	12.0	2	...	465	38
16.2	Tu	M	V	M	D	G, O	G, O	1060[13]	..	2M	R	6	3600	GE	0.75	2	A	7.9	2	.....	340	26
2.5	Tu	M	V	..	..	G, O	G, O	1060[13]	..	f	R	7.5	3600	DL	1.0	3	A	11.0	2	Ad	10	19
11.0	Pi	M	V	M	V	G, O	G, O	1000[13]	..	2M	R	7.5	3600	AC	0.75	3	A	11.0	2	Ad	90	7.5
5.4	Tu	M	V	Mp	S, D	SS,244	C	9.5	..	1MT	R	7.5	3600	EI	1.0	3	A	8.0	2	Ad	260	12.5
10.3	Tu	M	V	M	V	G, O	C, G, O	1050[13]	..	1M, 1T	R	7.5	3600	EI	1.0	3	A	8.0	2	Ad	120	10
3.6	Tu	M	D	M	D	SS,132	C	11.5	..	1M, 1T	R	4.4[14]	3600	Wo	1.0	3	A	4.0	2	Ad	..	..
..																						
34.0	Re	M	D, V	Mp	S, V	G, O	G, O	1100[13]	..	2M, 1T	..	20.0	3600	GE	0.75	4	H	19.0	1	Ad	740	69
..	Tu	M	V	M	V	SS,272	C, O	12.0	2000	2M	R	9.4	3600	EI	0.75	3	A	9.0	2	CuNi	205	14
..		MT	..	MT	S, V	TG,224	C	11.3	2100	2M, 1T	S, R	7.5	3600	WE	1.0	3	A	10.0	2	Ad	205	18
..	..	..	..	..	..	SS,160	C	8.9	..	1M, 1T	..	3	3600	WE	0.6	2	A	3.5	2	.....	121	7.0
..	a	Mp	D	Mp	D	SS,195	C, O, G	11.5	..	2M, 1T	R	.....	..	..	....	..	..	....	..	.....	....	..
..	Tu	M	Hy	M	Hy	SS,150	C	12.0	2400	1M, 1T	..	..	..	..	..	..	..	..	..	.....	....	..
..	Tu	M	Hy	M	Hy	SS,150	C	11.6	2200	2M, 1T	R	5	3600	WE	0.5	3	A	6.0	2	AsCu	140	10.5
5.2	Tu	M	D	M	D	TG,207	C	18.3	..	3M, 1T	S	15	3600	WE	1.12	3	H	15.0	1	Ad	325	27
11.0	Tu	M	V	M	D	O	O, C	12.5	2200	1M	R	10	3600	GE	1.0	4	A	10.0	3	Ad	295	21
5	..	..	..	..	..	..	G, O	1255[13]	..	1M, 1T	R	20	3600	GE	1.0	3	H	20.0	2	AAd	600	37.5
0	..	M	D	M	S	G, O	G, O	13.5	2100	2T	R	15	3600	AC	1.0	1	A	17.0	1	Mu	330	30
19.2	Tu	MT	D	MT	D	P	C	11.7	2158	1M, 1T	S	3	3600	WE	1.0	2	A	4.5	2	Ad	100	6
0	..	M	D	Mp	D	SS,122	C	..	..	1M, 1T	R	5	3600	WE	1.0	2	A	5.0	2	..	170	11
..	..	M	V	M	D	G, O	G, O	1000[13]	..	3M, 1T	R	7.5	3600	EI	1.0	3	A	11.0	2	PAd	200	20
..	..	..	..	..	..	..	G	1020[13]	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10.6	Tu	MT	V	MT	Hy, D	G	C, G, O	..	..	1M	R	4	3600	EI	1.0	2	A	6.0	2	Mu	145	8.5
9.7	Tu	M	D	M	S	P, G, O	G, O	1000[13]	..	1M, 1T	R	7.5	3600	WE	..	3	A	8.0	2	Cu	210	15.5
13.4	Tu	T	V	T	V	G	C, O	11.0	..	2MT	..	12.5	3600	WE	..	..	A	..	..	..	440	25
.....	Re	MT	V	MT	D	P	C	12.5	2400	1M, 1T	R	5	3600	WE	1.25	3	A	5.5	2	Ad	125	10.5
..	Tu	Mp	V	Mp	D	P	C	13.4	2350	1M, 1T	R	5	3600	Wo	0.5	2	A	6.2	2	..	310	18
..	Tu	M	D	M	D	SS,138	C	13.4	..	..	..	6	3600	GE	1.0	3	A	9.0	2	RB	137.5	12.5
3.7	Tu	M	D	M	S	G, O	G, O	1000[13]	..	.....	..	10	3600	WE	1.0	3	A	13.0	2	.....	210	16
10.0	Tu	Mp	S	Mp	D	P	C	14.6	..	2M	R	10	3600	AC	0.5	1	A	..	2	.....	330	30
20.0	Tu	M	V	M	D	UF,310	C	12.0	2200	1M	R	5	3600	EI	15	1	A	..	..	....	370	10
0	..	M	V	MT	D	SS,140	C	12.8	2400	1M, 1T	S	5	3600	EI	1.0	1	A	7.6	2	Ad	249	17
3.6	Tu	MT	V	M	D	UF,236	C	14.0	2700	1M	R	5	3600	GE	1.0	2	A	3.8	2	Ad	80	7
..	..	M	D	M	D	SS,132	C	7.0	2220	1M	R	..	..	..	..	..	..	..	..	..	800	99
7.6	Tu	MT	S, V	MT	Ma	SS,132	C	11.4	1950	2M, 1T	S	..	..	..	..	..	..	..	..	..	..	..
47.6	Tu	M	Hy	M	Hy	P	..	1000[13]	..	1M, 1T	..	5	3600	GE	..	2	A	..	..	..	100	6
.....	..	M	..	M	..	G	G	11.8	1870	1M, 1T	S, R	4	3600	GE	0.5	2	A	6.0	2	Ad	110	8
.....	Tu	T	S	M	D	SS,124	C	12.1	2200	1M, 1T	R	2	3600	EI	1.0	1	A	3.0	2	Ad	70	3.7
2.5	Tu	M	V	M	V	SS,107	C	11.0	..	1M, 1T	R	4	3600	AC	1.0	4	A	6.8	2	Ad	130	6
0	..	M	D	M	D	TG	C	18.5	..	1M, 1T	R	5	3600	WE	1.0	3	A	8.0	2	..	145	9
.....	Tu	M	V	M	V	G	C	10.5	..	1M, 1T	R	3	3600	WE	1.0	..	A	4.5	2	Ad	57	4.5
0	..	M	V	M	V	TG,127	C	..	..	..	..	7.5	3600	WE	0.75	2	A	9.5	2	Mu	285	16
.....	..	..	..	..	..	..	..	..	..	..	..	3.5	3600	GE	0.5	2	A	5.0	1	Ad	105	6.25
0	..	M	D	M	Hy	G, O	G, G	1000[13]	..	1T	S	3	3600	GE	..	2	A	..	2	..	117	5.25
.....	Tu	T	S	M	D	P	C	11.8	2200	1M, 1T	R	3.5	3600	AC	0.75	2	A	3.8	1	..	..	8
3.2	Tu	M	V	Mp	S, Da	SS,164	C	11.6	2000	1M	R	2.5	3600	GE	1.0	3	A	12.0	2	A-Cu	280	155
0	..	M	S, D	M	S, D	SS,252	C	11.0	..	1M, 1T	S, R	7.5	3600	GE	1.0	3	A	10.0	..	A-Cu	110	11
.....	..	..	..	..	..	..	C, G	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.7	Tu	M	Hy	M	Hy	TG,248	C	11.5	2300	2M, 1T	..	5	3600	GE	0.75	3	A	7.0	2	AnAd	75	5
16.3	Re	M	V	M	D	P	C	13.0	2700	1M, 1T	R	3.5	3600	GE	0.75	2	A	4.0	2	AAd	117	5.5
0	..	MT	V	MT	V	SS,252	C	11.1	2000	1M, 1T	R	10	3600	EI	1.0	4	A	10.0	2	Ad	333	19.5
.....	..	..	..	..	..	..	C, O	..	..	.....	..	7.5	3600	WE	1.25	3	..	..	..	..	170	15
.....	..	..	..	..	..	..	..	..	..	..	..	10	3600	GE	0.75	3	A	13.0	2	PAd	580	40
0	..	T	S	T	S	G, GT	G, GT	18.4	..	3T	S	..	..	..	..	..	..	..	..	..	825	0
0	..	T	S	T	S	G	G	..	..	2T	S	..	..	..	..	..	..	..	..	..	59	0
0	..	T	S, D	T	S, D	G	G	1000[13]	..	3T	S	10	1800	WE	1.0	0	A	20.0	2	.....	400	10
..	..	..	..	..	..	..	..	..	..	..	..	0.25	1800	GE	1.0	0	A	9.35	2	.....	400	16
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	275	..
0	..	T	D	T	D	G	G	18.0	..	.....	..	..	..	..	..	..	..	..	..	..	70	0
0	..	M	V	MT	D	SS,120	C	14.0	2200	2T	S	..	..	..	..	..	..	..	..	..	112	0
0	..	MT	D	MT	D	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

- —Stear
- Steel stoker
- Iron Works
- e contro
- ary Vogt Machine Co
- ickes Boiler Co
- —Westinghouse Electric Corp
- —Worthington Pump & Mach Corp
- —Stoker grate area, sq ft
- heat to 1000 F
- heater surface, 36,200 sq ft
- tubes per boiler
- 6—12,000 to 14,000 Btu per lb
- 7—2000 to 2900 F
- 8—Bleed at 400 psia
- 9—1 motor, 1 turbine 2 fans, 1 shaft
- 10—Use to feed point for extraction steam
- 11—12,000 to 13,400 Btu per lb
- 12—Gas, 1015 Btu per cu ft
- 13—Superheater surface, 9500 sq ft
- 14—Generator rating, 75,000 kw max
- 15—Btu per cu ft
- 16—2 turbines being installed
- 17—Extraction at 200 psig for industrial sales
- 18—600,000 lb per hr with 12,040-Btu subbituminous coal
- 19—Floating power plant
- 20—Bought in 1946, built in 1943
- 21—2 units of 1 motor driving one i-d, one f-d fan
- 22—Cupronickel in top rows of condenser
- 23—Gas-fired 30,350 Btu oil
- 24—All i-d and f-d fan driven by one motor
- 25—Gas-fired, 29,900 Btu oil
- 26—Reheat to 855 F
- 27—Radiant reheater, 2964 sq ft
- 28—Reheat to 900 F
- 29—Radiant reheater, 3414 sq ft
- 30—12,350 to 14,400 Btu per lb
- 31—2045 to 2800 F
- 32—12,416 to 14,066 Btu per lb
- 33—Coke breeze, gas tar 165,000 Btu per gal
- 34—Started operation Jan 1948
- 35—h-p element 3600 rpm, l-p element 1800 rpm
- 36—See also 1949 unit at 650 psi