



Electrical equipment for the 13.2-kv main power busses and circuits consists of metal-enclosed prefabricated units, selected to provide safe reliable

Switchboards in the electrical control room are the enclosed cabinet type with instruments and controls on verti-

TURBINE-GENERATORS:

Main turbine-generators, 2.....Westinghouse Electric Corp.
150,000 kw; h-p element, 61,000; single-flow 1600-rpm; 4-p element,
85,000-kw double-flow 1600-rpm; 630-psi 60-c throttle steam;
maximum steam valve closed at crossover, 143-psi 320-p; two bleed points
per stage, 0-60-psi 13,000-c; 4-phase 60-c; 100-psi hydrogen-
cooled at 0.3 p.s.i.g. Direct-connected between main and pilot exhausts.
Auxiliary turbine-generators, 2.....Allis-Chalmers Manufacturing Co.
120 kw; 4-p at 6.8 psi, 4000-c; 4-phase 60-cycle 1600-rpm, air cooled, 100-psi
100-psi 60-c throttle steam, 4-p, 13,000-c; 4-phase 60-c.
Main condensers, 2.....Posterior Wheeler Corp.
79,000 sq ft, surface type, single pass, unidivided water box, Muntz
brine.
Auxiliary condensers, 1.....American Locomotive Co.
1150 sq ft, surface type, single pass
Main air ejectors, 3 per unit.....Posterior Wheeler Corp.
Twice element, 100-psi, saturated jet; 100-sq-ft Intercondenser, 104-sq-ft
aftercondenser, 400-psi saturated steam
Priming ejectors, 2.....Posterior Wheeler Corp.
Single stage, 3540 lb steam per hr at 400 psi
Oil purifiers, 4-600 gal per unit.....Do Laval Separator Co.
2-200 gal (for auxiliary units).....Do Laval Separator Co.

Condenser and heater tubes.....Phelps Dodge Copper Products Co.
Condensers: Admiralty B; No. 4 heaters: 80-20 cupro-nickel; other
heaters: Admiralty A
Condenser hotwell level control.....Bailey Meter Co.

PREDWATER HEATERS:

Heat exchangers, 2 sets per unit.....American Locomotive Co.
Drain cooler, 1st, 2nd, evaporator condensers, 3rd and 4th heat
ers. All vertical except drain coolers
Evaporators, 1 per unit.....Westinghouse Electric Corp.
1020 sq ft. horizontal, submerged bundle, thermal descaling, chemi-
cal copper tubes, steel tube sheets. 40,000 lb per hr evaporated
with 35-F MTD, 4500-lb-per-hr blowdown
Makeup desaler, 1 per unit.....Cochrane Corp.

STEAM-GENERATING EQUIPMENT:

Boiler, superheater and economizers, 4....The Babcock & Wilcox Co.
2 drum, open pass, continuous slag tap, pulverized-coal fired. Con-
tinuous output 850,000 lb per hr at 825 psig and 900 P; 935,000 lb

All auxiliary-power-supply equip.
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PRINCEPS

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DRINK.

Concrete circulating-water, 78-in. ID.....	Loch Joint Pipe Co.
Steel circulating-water.....	Tippett & Wood
Pressure and stock.....	Tippett & Wood
Low and intermediate pressure.....	Grinnell Co. Inc.
High pressure.....	M W Kellogg Co.
Welding and flange.....	D I Keatinge

VALVES

Butterfly, four 34-in.	Baldwin Locomotive Works
Wauwaton, four 16-in.	Schutte & Koerting Co.
	Crane Co.
Large steel gate and globe.	American Chain & Cable Co.
	Reading-Pratt & Cady Division
Large steel checks.	Malcraft Supply & Gasket Co. (Powell)

INSTRUMENTS.

Pressure gauges.....	Hajoca Corp. (U. S. Gauges)
Indicating.....	Manning, Maxwell & Moore, Inc. (Ascherott)
Draft gauges.....	Republic Flow Meters Co.
Tide gauge, screen differential alarm.....	Moore Products Co.
Barometers.....	Precision Instrument Mfg. Co.
Indicating thermometers.....	C. J. Tagliabue Manufacturing Co.
Pressure recorders.....	Bristol
Pressure and temperature recorders.....	Sherrin-Gross Co.
Liquid-level indicators, oil-storage tanks.....	Brown Instrument Co.
Potentiometer pyrometers.....	
Level recorders.....	
Mill (temperature) recorders.....	
Pressure recorders.....	
CO ₂ recorders.....	
Temperature recorders for hydrogen, bearing oil.....	Leads & Northrup Co.
Bellows-temperature recorders.....	
Portable potentiometers.....	
Flowmeters.....	Bailey Meter Co.
Flow-rate recorders.....	

ELECTRICAL EQUIPMENT:

12.2-kv switchgear including main bus.....	General Electric Co.
12.2-kv reactors.....	General Electric Co.
12.2-kv metal-enclosed loads.....	Railway & Industrial Engrg Co. ITS Circuit Breaker Co.
12.2-kv termination compartments with test and transfer bus.....	Railway & Industrial Engrg Co.
100,000-v 60-12.2-kv transformers.....	Westinghouse Electric Co.
4-kv metal-enclosed auxiliary generator leads.....	TS Circuit Breaker Co.
4-kv metallic switchgear.....	General Electric Co.
Unifactor substations, 4800-250 v.....	General Electric Co.
Unifactor substations, 4800-250 v.....	ITS Circuit Breaker Co.

MISCELLANEOUS:

		American Blower Co.	Buffalo Forge Co.
			Big Electric Ventilating Co.
	Vacuum tanks	W. P. Sturges & Co.	Elliot Co.
	Rotary steamers		
	River-water, 2, 3,000 gpm; hydrogen cooling-water, 2, 3,500 gpm		Hungerford & Terry, Inc.
	Water softeners, 2		
	14,000 KG hardness (3 units), 260 gpm with 2 units		
	Deadening system		
	Desludging automatic central, collection feed vacuum chlorinators, 600		W. S. & Tiersma
	gals per 24 hr each, fed by six 6,000-lb-per-24-hr electrically heated		
	evaporators		
	Revolving screens, intake water, 4		Link-Belt Co.
	80,000 gpm at 2.3 ft psi (clean with low-water level) 1.5-m motor		
	250-hp motor		
	Rubber-expansion joints		U. S. Rubber Co.
	Malsliya system		Orinell Co. Inc.
	Insulation		Keasbey
	Air compressors, 2		Jagersall-Bond
	65 cfm, 100 psi, 175 hp, water cooled		
	Air compressors, 2		Worthington Pump & Machinery Co.
	75 cfm, 80 psi, 15 hp, air cooled		
	Aftercooler for air compressors		Mallison Co. (R P Adams Co. Inc.)
	Steel tanks		Conners Construction Co.
	River water, condensate storage, flyash, oil pump, transit oil auger		
	fuel oil, compressed air, auxiliary condenser		hottwell
	Steel tanks		Crane-Kemper
	City water, treated-oil storage, chemical		
	Blowoff tank		Tipsett & W.
	Traveling crane, 3		Manning, Maxwell & Moore, Inc (Shaw-Buckley)
	110-115 ton, 100-ft span 70-ft lift; 30-10 ton, 20-ft span 70-ft lift		
	3 ton, 25-ft span		
	2 ton, 2, 3,500-hp span, 250 fpm		Westinghouse Electric Co.
	Elevator, 2000-lb cap, 50 fpm		Otis Elevator Co.
	Diesel-electric locomotive, 45 ton		General Electric Co.
	Structural steel		Academy Bridge
	Mill chutes, bulkheads		Fredrick Grundy Iron Works,
	Brickwork, cast stone and glass block		John B. Kelly,
	Wharf construction		Thomas Kie & Sons,
	Cofferdam for screening basin		E. B. Henshaw
	Floor Grating		{Blaw-Knox { W A Lubbock
	Louvers, dampers and operators		{Africite { Corcoran
	Precast concrete plank (turbine-room roof)		Concrete Plank
	Concrete-filled piles		Bethlehem Steel