37/3/12

Facilities and Services
Operation and Maintenance Division
Abbott Power Plant Photographs, 1934-1975

Box 1:

Sub-series 1: Laying of steam tunnels on campus, 8/10 negatives and prints

File #	Photo	Neg	Description	Date
1	Y	N	Tunnel to Busey & Evans Halls	11-2-1934
2	Y	N	Tunnel to Busey & Evans Halls	11-2-34
3	Y	N	Tunnel to Busey & Evans Halls	11-5-34
4	Y	N	Tunnel to Busey & Evans Halls	11-5-34
5	Y	N	Tunnel to Busey & Evans Halls	11-23-34
6	Y	N	Tunnel to Busey & Evans Halls	11-23-34
7	Y	N	Tunnel to Busey & Evans Halls	1-24-35
8	Y	N	Tunnel to Busey & Evans Halls	1-24-35
9	Y	N	Tunnel to Busey & Evans Halls	1-24-35
10	Y	N	Tunnel to Busey & Evans Halls	1-24-35
11	Y	N	Tunnel to Busey & Evans Halls	1-24-35
12	Y	N	Six (6) photos of laying of steam tunnels on campus	circa 1934-35
13	Y	N	Three (3) photos of failed cables and pipes [tagged with location of failure]	10-1937

Sub-Series 2: Construction of Abbott Power Plant, 8 x 10 negatives and prints

File #	Photo	Neg	Description	Date
14	Y	Y	Exterior - Metal Framework	5-14-40
15	N	Y	Exterior	5-14-40
16	Y	Y	Exterior – Metal Framework	5-21-40
17	N	Y	Exterior	5-21-40
18	Y	Y	Exterior	5-28-40
19	Y	Y	Exterior	5-28-40
20	Y	Y	Exterior	6-5-40
21	Y	Y	Exterior	6-5-40
22	Y	Y	Exterior	6-11-40
23	Y	Y	Exterior	6-11-40
24	Y	Y	Exterior	6-19-40
25	Y	Y	Exterior	6-19-40
26	Y	Y	Exterior	6-26-40
27	N	Y	Exterior	6-26-40
28	Y	N	Exterior	7-2-40

File #	Photo	Neg	Description	Date
29	Y	N	Exterior	7-2-40
30	N	Y	Exterior	7-2-40
31	Y	Y	Exterior – east elevation	7-10-40
32	Y	Y	Exterior – south elevation	7-10-40
33	Y	Y	Exterior – south elevation	7-18-40
34	N	Y	Exterior – east elevation	7-18-40
35	Y	Y	Exterior – south elevation	7-24-40
36	Y	Y	Exterior – east elevation	7-24-40
37	Y	Y	Interior	8-3-40
38	Y	Y	Interior	8-3-40
39	Y	Y	Interior	8-10-40
40	Y	Y	Interior	8-10-40
41	Y	Y	Exterior	8-17-40
42	Y	Y	Exterior	8-17-40
43	Y	Y	Coal Storage sealing	?
44	Y	Y	Coal storage sealing	?
45	N	Y	Coal storage sealing	?
46	Y	Y	Interior	8-24-40
47	N	Y	Interior	8-24-40
48	Y	Y	Interior	8-31-40
49	Y	Y	Interior	8-31-40
50	Y	Y	Interior	9-7-40
51	Y	Y	Interior	9-7-40
52	N	Y	Exterior	4-3-41
53	Y	N	Turbo-generator No. 2 (overhaul) – Spindle	8-1942
54	Y	N	Turbo-generator No. 2 (overhaul) – Stationary diaphragms	8-1942
55	Y	N	Turbo-generator No. 2 (overhaul) – Admission valves	8-1942
56	Y	N	Turbo-generator No. 2 (overhaul) – Upper casing	8-1942
57	Y	Y	New tunnel looking west from Loop Vault No. 1	9-28-42
58	Y	Y	Top – Loop Vault No. 1	9-28-42
59	Y	Y	Loop Vault No. 1	9-28-42
60	Y	Y	Pump vault south of Abbott Power Plant	9-28-42
61	Y	Y	Chimney – application of Dum-Dum to power plant stack by Heine Chimney Co.	7-13-43
62	Y	Y	Chimney showing crack after application of Dum-Dum and painting	1-19-44
63	N	Y	Interior of Power Plant - completed	8-26-44
64	Y	Y	Turbo-generator No. 1 (overhaul)	12-19-44
65	Y	Y	Turbo-generator No. 1 (overhaul)	12-19-44
66	Y	Y	Turbo-generator No. 1 (overhaul)	12-19-44
67	Y	Y	Turbo-generator No. 2 (overhaul)	8-6-45

File #	Photo	Neg	Description	Date
68	Y	Y	Turbo-generator No. 2 (overhaul)	8-6-45
69	N	Y	Exterior	5-19-47
70	N	Y	Exterior	5-19-47
71	Y	Y	Exterior of Plant with Cooling Towers 1 & 4 0 exterior from NE	
72	Y	Y	4 turbines1953 Facing SW	1953
73	N	Y	Interior – 4 turbines	1953
74	Y*	Y	Interior – 4 turbines	1953
75	N	Y	Exterior – 2 stacks	no date
76	N	Y	Turbines 1 & 2 when new	circa 1940
77	N	Y	Unidentified photo	no date
78	Y	N	Turbines 1 & 2 Boilers 1 , 2 & 3 Original “on line” equipment at Abbott Power Plant	circa 1940
79	Y	Y	Boilers 1, 2 & 3	circa 1940
80	Y	N	Cooling Tower Substructure North side of cooling towers 1 & 2 and construction of Cooling towers 3 & 4 facing south	circa late 40s/early 50s
81	Y	N	Cooling Tower substructure Construction of north cooling Towers 3 & 4 from SE corner facing NW Harlan E. Moore Building in background	circa 1954
	Y**	N	Turbine from power plant Prior to Abbott**	ca 1920s/ 30s?

* hand-colored prints
** for history on the power plants in operation at The University of Illinois, please see *A History of The College of Engineering of the University of Illinois 1868-1945 Part II* by Ira O. Baker and Everett E. King.

Box 2:

Sub-series 3: Photos of specific equipment and specialized subjects 3½ x 4½ Negatives. (Film, flash and exposure information for these photographs is provided at the end of the finding aid.)

File #	Neg #	Photo	Neg	Description	Date
1					
2	1	Y	Y	Data report B No. 1 S unit	2-13-1953
3	2	Y	Y	Data report B No. 2 S unit	2-13-53
4	N/A	N	Y	Compressor #4	5-14-53

File #	Neg #	Photo	Neg	Description	Date
5	N/A	N	Y	Compressor #4, showing air discharge piping for bids on pulsation damper	5-15-53
6	N/A	Y	Y	Compressor #3 to show air discharge piping for bids on pulsation damper	5-15-53
7	N/A	Y	N	Manhole that collapsed south of Nevada Street property and west of Beta House (Lincoln Avenue)	5-26-53 9am
8	N/A	Y	N	Same as 7	Same as 7
9	N/A	Y	N	Same as 7	Same as 7
10	N/A	N	Y	Black line print [data report} in Wilson & Anderson report on distilled water B U of I campus	6-4-53
11	N/A	N	Y	Black line print [data report] in Wilson & Anderson report on distilled water B U of I campus	6-4-53
12	N/A	N	Y*	Yearly report of electrical energy to Campus 1952-1953	7-23-53
File #	Negative # in sequence	Photo	Negative	Description	Date of Photo
13	N/A	N	Y	Yearly Report of Steam to Heat B 1952-53	7-23-53
14	N/A	N	Y*	Yearly Summary of Electrical Energy by Feeder	7-24-53
15	N/A	N	Y*	Same as 14	Same as 14
16	N/A	N	Y*	Same as 14	Same as 14
17	N/A	N	Y	Top of car of coal from V-Day showing amount which leaked out	10-15-53
18	N/A	N	Y	Yearly Power & Light Demands B KWH by Feeder B 1952-53	10-15-53
19	N/A	N	Y	Same as 18	Same as 18
20	N/A	N	Y	Same as 18	Same as 18
21	N/A	N	Y	Exhaust Hood Turbine #3 (interior, bottom half, north side), showing streak of corrosion B erosion from condensate from last stage	12-29-53
22	N/A	N	Y	Bent blades on Rotor #3 Turbine from s.side	12-29-53

File #	Neg #	Photo	Neg	Description	Date
				looking toward generator	
23	N/A	N	Y	440 Main Distributor Board B Abbott Plant for Monroe B S & L	4-8-54
24	N/A	Y	Y	Looking northwest from corner [of] Oak & Armory	May 1954
25	N/A	Y	Y	Return of contractor's privy after U of I Police found it	5-16-54
26	N/A	Y	N	A.P.P. B Unit 5 # 53	6-8-54
27	N/A	Y	Y	Looking NW at Diesel House	6-1954
28	N/A	Y	Y	Record Summary B Electric Power & Light Demands by Feeder B 1953-54	8-4-54
29	N/A	Y	Y	Same as 28	Same as 28
30	N/A	Y	Y	Same as 28	Same as 28
31	N/A	Y	Y	Same as 28	Same as 28
32	N/A	Y	Y	Northbound Freight Train just north of A.P.P.	10-22-54 9:30 am
33	N/A	Y	Y	Northbound Freight Train just north of A.P.P.	10-22-54 9:30 am
34	N/A	Y	Y	Northbound Freight Train just north of A.P.P.	10-22-54 9:30 am
35	N/A	Y	N	Installation of Turbine # 5 B A.P.P.	1-11-55
36		Y	Y	Plat form for indicator for shaft	5-2-55
37	1	Y	Y	Same as 1a B different view	5-2-55
38	3	Y	Y	Rubber exp/ joint off #3 condenser elev. pump	5-2-55
39	5	Y	Y	Close up of fine coal - Murdock	5-2-55
40	6	Y	Y	Tunnel picture for GVC	5-2-55
41	8	Y	Y	Tunnel picture for GVC	5-2-55
42	11	Y	Y	New louvers in #3 and #4 cooling towers	5-2-55
43	12	Y	Y	Cooling Towers and bridge	5-2-55
44		Y	Y	#4 condenser tube ends B north end, lower west quadrant to show corrosion on tube ends.	
45		Y	Y	Same as 44	
46		Y	Y	#4 Condenser Tube ends B north end B upper west quadrant to show corrosion on tube ends	8-17-55
47		Y	N	#4 Condenser Tube ends B south end B upper west quadrant to show electrolysis on tube sheet	8-17-55
48		Y	Y	#4 Condenser Tube ends B north end B upper west quadrant to show corrosion on rolled ends of	8-17-55

File #	Neg #	Photo	Neg	Description	Date
				tubes	
49		Y	Y	#4 Turbogen overhaul - 13th stage bottom	12-1-55
50	N/A	Y	Y	#4 Turbogen overhaul B 3rd stage packing (label wrong) B bottom shows rubbing	12-1-55
51	N/A	Y	Y	#4 Turbogen overhaul B 11th stage B top packing shows wear from rubbing	12-1-55
52	N/A	Y	Y	#4 Turbogen overhaul B top half #1 bearing #4 Turbine B shows bearing wiping on generator side; also deposit of metal beyond metal dam	12-1-55
53	N/A	Y	Y	#4 Turbogen overhaul B O.B. bearing on gor. drive. Shows wiping of bearings enough to plug oil grooves	12-1-55
54	N/A	Y	Y	#4 Turbogen overhaul B bottom half #1 bearing #4 Turbine	12-1-55
55	N/A	Y	Y	#4 Turbogen overhaul B O.B. worn bearing on gov. drive. Shows wiping of bearing enough to plug oil grooves	12-1-55
56	N/A	Y	Y	#4 Turbogen overhaul B upper half of casing on right hand side. Arrow shows where 1st row band rubbed on nozzle block. Also spill strips on intermediate nozzle show rubbing	12-1-55
57	N/A	Y	Y	#4 Turbogen overhaul B bottom half #1 bearing #4 Turbine. Shows wiping and shows Babbitt piled up at end of land	12-1-55
58	N/A	Y	Y	#4 Turbogen overhaul B top half #1 bearing #4 Turbine. Shows bearing wiping on generator side (this is also turbine side on #1 Bld)	12-1-55
59	N/A	Y	Y	#4 Turbogen overhaul B lower half casing left hand side (looking in direction of steam flow). Rubbing on 1st and second stage and nozzle blocks.. Picture shows rust which was not of any consequence.	12-1-55
60	13	Y	Y	H.P. shaft packing bottom B shows rubbing #4 Turbogen overhaul	12-1-55
61	N/A	N	Y	View of A.P.P. east of #1 Cooling Tower	12-6-55
62	N/A	N	Y	Same as 61	Same as 52
63	N/A	N	Y	Work Schedule B last of 1955/First of 1956	Circa 12-55
64	N/A	N	Y	Same as 63	Same as 54
65	N/A	Y	Y	Bolt extensiometer used on Overhaul of #5	Circa

File #	Neg #	Photo	Neg	Description	Date
				Turbine B 1956 B Rented from G.E. Co. B Sam Boutin, Stevens & Rymer & Gwinn	1956
66	N/A	Y	Y	Same as 65	Same as 56
67	N/A	N	Y	Work Schedule B May, June, July & August 1956	Circa 5-1956
68	7	Y	Y	Show[s] debris left in steam tunnel as a result of construction of sanitary manhole about 4/22/57 at 1st St. & Greg[ory] Drive. Lots of rain caused sewage to leak into tunnel. (x-ref 70-74) After tunnel dried out and sludge dried up & stench blew away B sweage flowed clear to Abbott Power Plant end of tunnel	4-22-57 (manhole constructi on) Pictures taken 5-3-57
69	8	Y	Y	Same as 68	Same as 68
70	9	Y	Y	Same as 68	Same as 68
71	10	Y	Y	Same as 68	Same as 68
72	11	Y	Y	Same as 68	Same as 68
73	12	Y	Y	Same as 68	Same as 68
74	N/A	Y	Y	Top half hor. Joint Turbine #2 (x-ref 76) B showing steram leak before cleaning joint	7-16-57
75		Y	N	Same as 74	7-16-57
76	N/A	Y	Y	Same as 74 - Closer view	7-16-57
77		Y	Y	Boiler drum	Late 50s/early 60s
78		Y	Y	Plant addition B front of power plant	1950s
79		Y	Y	Plant addition B front of power plant	1950s
80		Y	Y	Plant addition B front of power plant	1950s
81		Y	Y	Plant addition B front of power plant	1950s
82		Y	Y	Boiler drum B aerial view	Early 1960s
83		Y	Y	Plant addition B front of power plant	1950s
84		Y	Y	Plant addition B front of power plant	1950s
85		Y	N	Plant addition B front of power plant	1950s
86		N	Y	Unidentified negative	
87		Y	Y	Plant addition B front of power plant	1950s
88		Y	Y	Plant addition B front of power plant	1950s

File #	Neg #	Photo	Neg	Description	Date
89		Y	N	Putting up coal	mid 1950s
90		Y	Y	Site prep for new construction	mid-1950s
91		Y	Y	Unidentified equipment piece	?
92		Y	Y	No. 2 Turbine showing worn buckets	?
93		Y	Y	No. 2 Turbine showing worn buckets	?
94		Y	Y	Turbine overhaul (inside)	?
95		Y	Y	Steam turbine grid valve	?
96		N	Y	Unidentified negative (looks like worn buckets closeup)	?
97		Y	Y	Steam drums on Boiler 6	?
98		Y	Y	Air heater going in on Boiler 6	?
99		Y	Y	West elevation rear addition B Boiler 6 going in	Late 60s/early 70s
100		Y	N	Boiler 6 Foundation	Late 60s/early 70s
101		Y	Y	Boiler 6 Foundation	Late 60s/early 70s
102		Y	N	Boiler 6 Foundation	Late 60s/early 70s
103		Y	Y	Boiler 6 Foundation	Late 60s/early 70s
104		Y	Y	Boiler 6 Foundation	Late 60s/early 70
105		N	Y	Flash picture of front and back of back door of cubicle for #3 Gen[erator] on main switchboard for W.W. Hinshaw for S & L before installation of #5 Gen[erator].[Panel to go in for electrical distribution]	?
106		N	Y	Same as 107	?
107		N	Y	Installation of car puller [for coal delivered by rail]	?
108		N	Y	Same as 109	?
109		N	Y	Cooling water pump in basement	?
110		Y	Y	Turbine buckets [individual] forming turbine	?

File #	Neg #	Photo	Neg	Description	Date
		(3 copies)		blades [buckets combined]	
111		Y (2 copies)	Y	Same as 110	?
112		Y (2 copies)	Y	Same as 110	?
113		Y (2 copies)	Y	Same as 110	?
114		Y	N	Old chiller	?
115		Y	Y	Foundation prep B crusher buidling	mid 1950s
116		N	Y	Marked AFoam Coal Tower 4 & 5 on start up@	?
117				[Unidentified negatives]	
118					
119-126		Y (some have 2 prints)	Y	Site Prep for addition	6-8-56

Sub-series 4: 3 x 4 in photos, 1939-40. (168 Photos in chronological order, sleeved in groups of 10. Identification on back of each photo.)

Sub-series 5: Duplicate and Unidentified photos. In groups of 10 in sleeves.

Appendix: Film, Flash and Exposure Information for 3 ½ by 4 ½ negatives:

File #	Neg #	Film/Exposure information
1		
2	1	N/A
3	2	N/A
4	N/A	Exposure: f22 B on Kodak Contrast process panchromatic film B time

File #	Neg #	Film/Exposure information
		exposures B 2 B for full flash with 2 Sylv[ania] Press 40 bulbsDevelopment 5 min.@ 70E F in Universal MQ Tray
5	N/A	Exposure: f7 B on Kodak Contrast process panchromatic film 2 time exposures for full flash with 2 Sylv[ania] Press 40 bulbsDevelopment 5 min.@ 70E F in Universal MQ Tray
6	N/A	Exposure: f7 B one time exposure for full flash with 1 Sylv[ania] Press 40 bulb on Kodak Contract Process Panchromatic FilmDevelopment: 5 min. @ 70E F in Universal MQ Tray
7	N/A	Exposure: f4.5 1/10 sec. In dense shade B good sunshine in open B on Kodak Plus-X Film PackDevelopment and Printing by U of I Photo Dept.
8	N/A	Same as 7
9	N/A	Same as 7
10	N/A	Exposure: 1/10 sec @f16 bright sun outside B taken in office, with light from south window on Kodak Contrast ProcessPanchromatic process Development: not enough exposure
11	N/A	Exposure: 1/25 sec @ f11. Bright sun outside B taken in office, with light from window. On Kodak Contrast Process PanchromaticDevelopment B not enough exposure
12	N/A	Exposure: 1 second @ f11. Bright sun outside B taken in office with light from window on Kodak Contrast Process Panchomatic Development: by TAB, fresh MQ B 4 minutes (plenty black)*tape on negative
13	N/A	Exposure: 1 second @ f11. Bright sun outside B taken in office with light from window on Kodak Contrast Process PanchomaticDevelopment: by TAB, fresh MQ B 4 minutes (plenty black)
14	N/A	Exposure: 1 second @ f16, 11 AM. Bright sun outside B taken in office with light from window on Kodak Contrast Process PanchomaticDevelopment: by TAB, fresh MQ B 4 minutes
15	N/A	Same as 14
16	N/A	Same as 14
17	N/A	Exposure: 1/50 sec @ f11 in bright sunlight on Superpan Press Development: 4 min. in Universal by TAB
18	N/A	Exposure: 1 second @ f16 in office with light from windows @ 1 pm on Kodak Contrast Process Panchromatic Development by TAB with Universal
19	N/A	Same as 18
20	N/A	Same as 18
21	N/A	Exposure: f 11 @ 1/50 sec. With sync. Flash about 4 ft. B Press 40 bulb on Contrast Panchromatic Film Development: by TAB - Universal
22	N/A	Exposure: f 16 @ 1/50 sec. With Press 40 bulb (underexposed) on Contrast Process Panchromatic Film Development: by TAB - Universal
23	N/A	Exposure: 4.5 1/5 sec sync flash Press 40 on Plus X Film Pack Development: Hamm

File #	Neg #	Film/Exposure information
24	N/A	N/A
25	N/A	N/A
26	N/A	N/A
27	N/A	Exposure: 1/50 sec B f16 per printed guide for filmFilm: Super XX Kodak PakDeveloped and printed by Twin City Blue Print Co.* tape on negative
28	N/A	Exposure: 2 sec. @ f16 B in office B bright sun outside 2 pm B light from window. Film: Super XX Kodak Film Pack Developed, Printed & enlarged by Twin City Blue Print Co B Urbana (60 cents ea. 8 x 10; 60 cents for pack of negative; 10 cents each contact prints)
29	N/A	Same as 28
30	N/A	Same as 28
31	N/A	Same as 28
32	N/A	On Super XX Film Pak Development: U of I Photo Lab
33	N/A	Same as 32
34	N/A	Same as 32
35	N/A	N/A
36		Flash B 40 bulb Sl under 300 for factor F5.6 @ 1/50 sec.
37	1	Same as 36
38	3	Same as 36
39	5	Same as 36
40	6	Same as 36
41	8	Same as 36
42	11	Same as 36
43	12	Same as 36
44		Exposure: 3 or 4 sec. @ f8 B 150 w light bulbDevelopment: U of I Photo LabFilm: Kodak Super XX
45		Exposure: Flash; Development: U of I Photo LabFilm: Kodak Super XX
46		Exposure: 3 or 4 sec@ f8150 watt bulbDevelopment: U of I Photo LabFilm: Kodak Super XX(moved camera B no good)
47		Exposure: FlashDevelopment: U of I Photo LabFilm: Kodak Super XX
48		Exposure: FlashDevelopment: U of I Photo LabFilm: Kodak Super XX
49		Super XX Film Pack5 sec exposure 100 watt bulbf4.5Development: Techniprint Film Lab
50	N/A	Super XX Film Pack5 sec exposure 100 watt bulbf4.5Development: Techniprint Film Lab
51	N/A	Super XX Film Pack5 sec exposure 100 watt bulbf4.5Development: Techniprint Film Lab
52	N/A	150 w bulb4 sec. Time exposuref8Panatomic X FilmDevelopment: Twin City Blue Print Co.
53	N/A	150 w bulb 4 sec. Exposuref8Panatoni X filmDevelopment: U of I Photo Lab
54	N/A	150 w bulb 4 sec. Time exposure B f8Panatomic X Film Development B Twin City Blue Print Co.

File #	Neg #	Film/Exposure information
55	N/A	150 w bulb 4 sec. Time exposure B f8Panatomic X Film Development B Twin City Blue Print Co.
56	N/A	Flash exposure Super XX Film PackDevelopment: Techniprint Film Lab
57	N/A	150 w bulb 4 sec. Time exposure B f8Panatomic X Film Development B Twin City Blue Print Co.
58	N/A	150 w bulb 4 sec. Time exposure B f8Panatomic X Film Development B Twin City Blue Print Co.
59	N/A	Flash exposure Super XX Film PackDevelopment: Techniprint Film Lab
60	13	
61	N/A	Panatomic XC Cut Film 1/25 sec. @ f11 B sunlightDevelopment: TAB
62	N/A	Same as 61
63	N/A	N/A
64	N/A	N/A
65	N/A	N/A
66	N/A	N/A
67	N/A	N/A
68	7	N/A
69	8	N/A
70	9	N/A
71	10	N/A
72	11	N/A
73	12	N/A
74	N/A	Verichrome Pan Film flash F 32 @ 8 ft. 1/50 sec.
75		Same as 74 B [Lighter exposure]
76	N/A	Same as 74The following photos were not labeled, but were identified by plant personnel with a general description and circa date.
77		N/A
78		N/A
79		N/A
80		N/A
81		N/A
82		N/A
83		N/A
84		N/A
85		N/A
86		N/A
87		N/A
88		N/A
89		N/A
90		N/A
91		N/A
92		N/A
93		N/A

File #	Neg #	Film/Exposure information
94		N/A
95		N/A
96		N/A
97		N/A
98		N/A
99		N/A
100		N/A
101		N/A
102		N/A
103		N/A
104		N/A
105		Contrast film B no good!
106		Same as 105
107		N/A
108		N/A
109		N/A
110		F 4.5 1/50 Flash BulbSuper X
111		N/A
112		N/A
113		N/A
114		N/A
115		N/A
116-18		N/A
119-126		N/A

Box 3:

Abbott Power Plant Coal Conversion Construction Photo Album, Jan. 1986-Jan. 1989
Photos, Retubing Boiler 3, 1981