

# HISTORIC AMERICAN ENGINEERING RECORD

## INDEX TO PHOTOGRAPHS

Bonneville Power Administration  
South Bank Substation  
Interstate Highway 84,  
south of Bonneville Powerhouse  
Bonneville  
Multnomah County  
Oregon

HAER No. OR-4

HAER  
ORE,  
26-BONV,  
1-

Harvey S. Rice and Craig Holstine, Photographers June 1987

- OR-4-1 SOUTH END AND EAST SIDE, SHOWING BONNEVILLE DAM POWERHOUSE IN BACKGROUND TO RIGHT
- OR-4-2 EAST SIDE, TRANSMISSION TOWER IN REAR
- OR-4-3 EAST SIDE AND NORTH END, DISTANT VIEW
- OR-4-4 EAST SIDE AND NORTH END, CLOSE VIEW
- OR-4-5 EAST SIDE AND SURROUNDINGS, TRANSMISSION TOWER IN REAR
- OR-4-6 Photocopy of Location, Site & Wall Sections drawing (from the Bonneville Power Administration Engineering Vault, Portland, Oregon, Drawing C13-J2-342-D1, Sheet 1, 13 March 1939)
- OR-4-7 Photocopy of Elevations drawing (from the BPA Engineering Vault, Drawing C13-J2-342-D1, Sheet 3, 13 March 1939)
- OR-4-8 Photocopy of Station Grounding drawing showing floor plans (from the BPA Engineering Vault, Drawing 005319, 3 May 1939)
- OR-4-9 Photocopy of Reinforced Concrete Details drawing (from the BPA Engineering Vault, Drawing C13-J2-342-D1, Sheet 6, 13 March 1939)
- OR-4-10 Photocopy of Miscellaneous Details drawing showing door, window, louvre, stairway, roof and other detailing (from the BPA Engineering Vault, Drawing C13-J2-342-D1, Sheet 4, 13 March 1939)
- OR-4-11 METAL-CLAD CONTROL PANELS AND CABINETS, MAIN FLOOR LOOKING NORTH

(continued)

- OR-4-12 CONTROL PANELS, WEST SIDE (LEFT & RIGHT), MAIN FLOOR:  
CENTER OF CLUSTERS, TOP BOX: MEGAWATT METER  
CENTER OF CLUSTERS, LOWER THREE BOXES: AMPERE METERS  
LEFT SIDE OF CLUSTERS: VOLTAGE CHART RECORDER  
RIGHT SIDE OF CLUSTERS: RECLOSE RELAY  
CENTER UNDER CLUSTERS: TESTING SWITCHES  
BELOW TESTING SWITCHES: BREAKER SWITCHES
- OR-4-13 POWER CIRCUIT BREAKER, RECESSED IN CABINET BEHIND HINGED METAL DOOR (SHOWN OPEN), WEST SIDE, MAIN FLOOR
- OR-4-14 CONTROL PANELS, EAST SIDE, MAIN FLOOR:  
TO LEFT (ORIGINAL EQUIPMENT): UPPER FOUR GLASS BOXES ARE OVERCURRENT PROTECTIVE RELAYS; MIDDLE FOUR GLASS BOXES CONTAIN TESTING SWITCHES; LOWER TWO BOXES ARE DG1 METERING CHART RECORDERS  
TO RIGHT (MODERN EQUIPMENT): UPPER FOUR BLACK BOXES ARE PROTECTIVE SERVICE RELAYS; MIDDLE FOUR BOXES CONTAIN TESTING SWITCHES; LARGE BOX BELOW HOUSES REMOTE METERING SYSTEM  
METAL CABINETS (LABELED L-2 & L-4) BELOW CONTAIN ORIGINAL POWER CIRCUIT BREAKERS
- OR-4-15 ELECTRICAL REACTOR SHELVES, CONSTRUCTED OF CONCRETE IN THE BASEMENT ALONG EAST WALL, WITH REACTOR PADS BEHIND FRAMED AND SCREENED CAGE, AND PORCELAIN-LINED CABLE DUCTS VISIBLE IN WALL NEAR FLOOR AT REAR
- OR-4-16 CONCRETE PAD ON WHICH AN ELECTRICAL REACTOR WAS MOUNTED, IN THE BASEMENT, EAST WALL
- OR-4-17 Photocopy of photograph showing excavation of South Bank Substation site, 15 May 1939 (from the BPA Photo Archives, Portland, Oregon, Negative No. 345), LOOKING WEST
- OR-4-18 Photocopy of photograph showing foundation framing of South Bank Substation, 11 June 1939 (from the BPA Photo Archives, Negative No. 347), LOOKING NORTH WITH THE BONNEVILLE DAM POWERHOUSE IN BACKGROUND
- OR-4-19 Photocopy of photograph showing framing of concrete walls of South Bank Substation, 18 July 1939 (from the BPA Photo Archives, Negative No. 365), LOOKING NORTHWEST WITH THE BONNEVILLE DAM POWERHOUSE IN BACKGROUND
- OR-4-20 Photocopy of photograph showing the completed South Bank Substation, 4 November 1939 (from the BPA Photo Archives, Negative No. 6556), LOOKING NORTHWEST WITH THE BONNEVILLE DAM POWERHOUSE AND TRANSMISSION TOWERS IN BACKGROUND