176

NPS Form 10-900 (Rev. 8/86) Utah Word Processor Format (02731) (Approved 10/87)

United States Department of the Interior National Park Service MAR 0 8 1989

NATIONAL REGISTER

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in <u>Guidelines for Completing</u> <u>National Register Forms</u> (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries. Use letter quality printer in 12 pitch, using an 85 space line and a 10 space left margin. Use only 25% or greater cotton content bond paper.

1. Name of Property Upper	r American Fork Hydroeled	etric Power Plan	<u>nt Historic District</u>
historic name		Nan sy ang sa saga sa san sa sa san sa sa san sa	
other names/site number [	Jpper American Fork, Amer	rican Fork	ngana aga ana ang ang ang ang ang ang an
2. Location			
street & number State Hig	shway 92	<u>n/a</u>	not for publication
city, town Highland		<u></u>	vicinity
<u>state Utah code</u>	UT county Utah	code 049	zip_code_84003
3. Classification			
Ownership of Property	Category of Property	No. of Resour	cces within Property
<u>x</u> private	building(s)	contributing	noncontributing
public-local	<u>x</u> district	1	<u>1</u> buildings
public-State	site		sites
public-Federal	structure	_3	<u>1</u> structures
	object		objects
		_4	_2Total
Name of related multiple p		previously li	
Electric Power Plants of Utah		National Regi	ister 0

4. State/Federal Agency Certification	
As the designated authority under the Nati	ional Historic Preservation Act of 1966,
as amended, I hereby certify that this $\underline{x}$	
of eligibility meets the documentation st	andards for registering properties in the
National Register of Historic Places and m	
requirements set forth in 36 CFR Part 60.	In my opinion, the property <u>x</u> meets
does not meet the National Register cr	riteriaSee continuation sheet.
1.	
MayJan	1-31.89
Signature of certifying official	Date
UTAH STATE HISTORICAL SOCIETY	
State or Federal agency and bureau	
To many and a large star and a star	and wet the National Designation
In my opinion, the propertymeetsdo	des not meet the National Register
criteriaSee continuation sheet.	
Signature of commenting or other official	Date
State or Federal agency and bureau	
5. National Park Service Certification	
I, hereby, certify that this property is:	
entered in the National Register.	Bound miller and its in
See continuation sheet	Druce J. noble Ju. 4/20/89
determined eligible for the National	
Register See continuation sheet	
determined not eligible for the	
National Register.	
manual Course the National Dariston	
removed from the National Register.	
athem (armlaine)	
other, (explain:)	
anala 1970 a bar a a a a a a a a a a a a a a a a a	Signature of the Keeper Date
100 Level	Signature of the Keeper Date
Ŭ	
6. Functions or Use	
Historic Functions	Current Functions
(enter categories from instructions)	(enter categories from instructions)
(TILLE CAPODETED TTOW TUPPT MODIUM)	CHIEFE CALCOURSE FROM THEORMOOTONEY
Industry/Processing/Extraction:	Industry/Processing/Extraction:
energy facility	energy facility
an a	an an ann an Arthread ann an Arthread ann ann an Arthread ann an Arthread ann an Arthread ann ann ann ann ann a

7. Description	
Architectural Classification	Materials
(enter categories from instructions)	(enter categories from instructions)
	foundation concrete
Bungalow/Craftsman (power house)	walls brick, asbestos
Modern Movement (residence)	
	roof wood
	other n/a
Modern Movement (residence)	

Describe present and historic physical appearance.

(see continuation sheet)

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 7 Page 2

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

Built in 1906-1907, the Upper American Fork hydroelectric power plant consists of a dam, pipeline, penstock, powerhouse, and operator's residence. The plant, as a historic district, includes four contributing and two noncontributing features. Because it is of recent construction and because most of it lies underground, the pipeline has been excluded from the historic district. The boundaries of the historic district thus have been drawn as to create two discontiguous elements: the dam and the powerhouse site. Other than the replacement of the original pipeline, the Upper American Fork plant since its construction has sustained a few alterations, most prominently the construction of a new operator's residence. Overall, these changes do not overwhelm the plant's integrity of location, setting, design, materials, workmanship, feeling, and association. Upper American Fork Station is still an outstanding example of an early twentiethcentury, high-head hydroelectric power plant.

General Setting

The Upper American Fork Hydroelectric Power Plant is located in American Fork Canyon just east of Highland, Utah. The facility is approximately 1.5 miles east of the canyon mouth on state highway number 92. Within the Uinta National Forest along the American Fork River, the powerhouse site is about 1.5 miles west of the Timpanogos National Monument. Squeezed between the creek and highway to the south and steep canyon walls to the north, the powerhouse site consists of only the powerhouse, a single residence, garage and a small shed. Moving in a westerly fashion, American Fork Creek flows past the south side of the powerhouse where the tailrace enters it through a concrete retaining wall. The residence sits on the south side of the creek and is accessed from the powerhouse by a wooden bridge. To the west of the house is a garage which sits next to the driveway. Between the residence and creek is an open space filled with shade trees. Southeast of the residence is the intake structure to the Lower American Fork Plant, about two miles west and now demolished. The intake has been filled in and no longer diverts water from the creek.

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 7 Page 3

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

1. Powerhouse

Almost abutting the canyon wall, the powerhouse is a T-shaped, brick structure with a concrete foundation and a painted woodshingled, intersecting hip roofs. Underneath the broad, flared eaves are exposed decorative rafter ends, giving the building elements of the Craftsman architectural style. Pairs of 8-light casement windows with 8-light transoms rest on the foundation wall and exist in sets of two under a single concrete lintel. The north facade has a fixed 12-light window. All of the windows have heavy metal screening protecting them. The main entrance faces south onto the tailrace. It consists of double 12-light wooden doors and an 8-light transom under a concrete lintel. Above the lintel is a sign reading, "Upper American Fork Station/Utah Power & Light Co." Across the opening are gates of heavy metal screening. Another screened entrance with a single 12-light window under a concrete lintel in the rear of the building faces east.

The two penstocks enter the east and west wings of powerhouse on the north side of the powerhouse. The penstocks are laid in a poured concrete slab. Above the west penstock is an altered window with a screened 2-light slider. After leaving the powerhouse, the waste water exits through a segmental arched opening in the concrete retaining wall into American Fork Creek. The opening for the east tailrace has been filled in, but two concrete protrusions on the retaining wall mark the former outlet. The retaining wall wraps around the south, west and east sides of the powerhouse.

Power equipment in the Upper American Fork Plant consists of an impulse turbine, built by the Pelton Water Wheel Company, directly connected to a Westinghouse, 6,600 volt a.c. generator. A small 125 volt Westinghouse d.c. exciter is belt-driven from the main generator shaft. Water flow to the Pelton wheel is controlled by a Johnson valve and a needle valve. A hydraulic oil governor unit controls the turbine's speed. The Upper American Fork turbine-generator unit is rated at 865 kilowatts.

Other equipment inside the Upper American Fork powerhouse includes a 12 ton overhead traveling crane built by the Whiting Foundry Equipment Co., a modern control panel (with various switches, gauges, and an old rheostat), and transformers, located in the stem of this T-shaped building. In the very northeast corner of

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87 United States Department of the Interior National Park Service NATIONAL REGISTER OF HISTORIC PLACES

CONTINUATION SHEET
Section number 7 Page 4

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

the powerhouse is an old telephone booth. A small sound-proof office and a battery room are located in the east wing of the building.

Originally, the Upper American Fork powerhouse contained two turbine-generator units. One of these was dismantled during the 1950s. The area once occupied by the other generating unit is now empty.

The Upper American Fork Powerhouse has sustained some minor alterations, such as the removal of a turbine and a generator. Overall, the building is largely intact, and has changed little from its original appearance. The facade of the building in particular is in outstanding condition. Thus the Upper American Fork powerhouse retains integrity of setting, location, feeling, and association as well as design, materials, and workmanship. It contributes to the historic district.

## 2. Dam

The Upper American Fork Dam is located about 2 miles above the powerhouse, past Timpanogos Cave National Monument, in American Fork Canyon. The dam originally was a timber crib structure, but Utah Power and Light replaced this with a new reinforced concrete dam in 1914. The Upper American Fork dam has undergone some alteration, but it is substantially the same structure as was installed in 1914.

Upper American Fork Dam is a relatively small dam, about 110 ft. long and 10 ft. tall, that runs straight accross the American Fork River. The south end of the dam, about one quarter of the entire structure, is composed of earth-fill covered with smooth boulders. Adjacent to the earthen section is the central spillway portion of the dam.

The spillway consists of two concrete piers about 40 ft. apart with flashboards in between. The south pier actually consists of a reinforced concrete, covered outlet for water. A new concrete wing wall extends downstream from this structure. The north abutment is actually a reinforced concrete structure that houses a sluice gate used to flush the reservoir. The gate valve is

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 7 Page 5

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

roughly the same height as the dam and is raised and lowered by a hand-powered gear mechanism which sits on top of the dam. Between the north and south piers there is a system of flashboards resting on a low concrete wall. The flashboards are laid horizontally between inclined steel I-beams. Running across the top of the dam is a walkway supported by steel I-beams. Below the central spillway portion of the dam is a reinforced concrete apron.

The north side of the dam consists of the intake structure. The intake structure itself is rectangular in shape, made of reinforced concrete, and stands about as tall as the rest of the A trashrack on the upstream side of the intake prevents dam. debris from entering the conduit. In back of the trashrack is a small tainter gate, which when open allows water into the intake. A steel headframe-like structure standing over the tainter gate is used to raise and lower it. Behind the tainter gate is a small valve house, presumably housing valves for closing the conduit. The valve house (probably built in 1914) is a small, rectangular, wood frame building with a gable roof, exposed rafter ends, and with window openings covered with boards. The west end of the building has a set of double wood doors. The valve house sits on top of a reinforced concrete bulkhead, which comprises the downstream end of the overall intake structure.

The Upper American Fork Dam has undergone some modifications since its construction in 1914. Records indicate that the dam was repaired in 1984. The earth and rock portion of the dam appears to be of recent construction (perhaps covering an older earth structure), as does the small concrete wing wall described above. Aside from these modifications, parts of the dam have deteriorated. Most of the old concrete, for instance, is crumbling. Reinforcing bars in the apron are exposed and beginning to come loose. A pile of concrete rubble is lying on the apron, although it appears that this material is not from the Modifications and deterioration have compromised the dam. integrity of the Upper American Fork Dam, but major components of the dam are still intact. The intake structures, the spillway, the flashboards, and the apron still give this dam the appearance of an early twentieth-century structure. As well, the dam still functions according to its original design. The Upper American Fork Dam thus retains integrity of materials, design, workmanship,

 NPS Form 10-900a
 OMB No. 1024-0018

 (Rev. 8-86)
 Utah Word Processor Format (02741)

 Approved 10/87
 United States Department of the Interior

 National Park Service
 NATIONAL REGISTER OF HISTORIC PLACES

 NATIONAL REGISTER OF HISTORIC PLACES
 Upper American Fork Hydroelectric

 Section number
 7
 Page
 6

 Marican Fork, Utah County, Utah
 Marican Fork, Utah County, Utah

feeling, location, setting, and association.

3. Conduit

The conduit for the Upper American Fork hydroelectric plant consists of a 28 in. diameter welded steel pipeline about 2.25 miles long. The pipeline was installed in 1953, replacing the original wood stave pipeline. The current pipeline crosses the American Fork River twice and passes through twelve tunnels before meeting the penstock high above the powerhouse on the north side of American Fork Canyon. Where the pipe crosses the river there are no bridges; the pipe is laid directly over the river. About 60 percent of the pipe is underground. A small amount of additional water enters the pipe through a short 4 in. diameter line at Swinging Bridge Canyon.

Because the Upper American Fork conduit is of modern construction, it does not represent the historic associations of the Upper American Fork hydroelectric plant. For this reason, and because much of the conduit is buried, it is excluded from the historic district.

4. Penstock

The penstock is original. It consists of about 575 ft. of riveted steel pipe. The first 300 ft. of the penstock has a 36 in. diameter. The next 247 ft. of the penstock is made of 33 in. diameter pipe. Just above the powerhouse, the penstock reaches a Y-connection set in a heavy concrete block. From this Y two 20 in. pipes lead to the powerhouse. The easternmost branch of the penstock is no longer used, as the turbine it served has been removed. Each of the penstock branches is also anchored in a heavy concrete block.

The penstock retains integrity of setting, feeling, location, association, design, materials, and workmanship. It is a contributing feature in the historic district.

5. Operator's Residence

To the west and across the creek is the operator's residence.

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number \_\_\_\_ Page \_\_\_\_

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

Between the creek's southern retaining wall and the house is a lawn with shade trees. A sidewalk runs around the residence. This 1950s wood-frame dwelling is rectangular-shaped, one-story and has an asphalt-shingled gable roof. Resting on a concrete foundation, the house is clad in asbestos or hardboard siding and has one interior concrete chimney. The windows are 2-light sliders, fixed 2-lights, 1-light casement in the basement and fixed 1-lights with 1-light casement end windows on the east side. On the east and west sides are entrances which have concrete steps with an iron railing and an overdoor. The eastern door has a 1light window and 8-light storm door while the west door has stepped 3-light windows and an aluminum screen door. To the north of the residence, near the creek, is a wooden patio with a wooden balustrade. A metal pipe exits below the patio into the creek. Northeast of the house is a small shed, possibly a pump house, of wood frame construction with weatherboard (drop) siding, a woodshingled shed roof and two wooden doors facing southwest.

Facing the house on its west side is a two bay garage. A gravel driveway separates the two buildings. The garage is an asbestosor hardboard-sided, wood-frame structure with a concrete foundation and asphalt-shingled gable roof. The garage bays have modern wooden doors. Windows are 2-light and heavily screened. In the gable end, a sign warns, "Beware of Dog."

Because it is of relatively recent construction, the operator's residence does not contribute to the historic district.

6,7. Ancillary Structures

The Upper American Fork Station grounds also encompass the remains of the dam and intake structure (no. 6) for the now-demolished Lower American Fork plant. This dam/intake is located a few feet downstream from the tailrace of the Upper American Fork powerhouse. A low spillway is all that remains of the dam which diverted water into the intake of the Lower American Fork conduit. The intake is made of reinforced concrete and still has the old trashracks in place. In addition, a riveted steel headframe-like structure stands over the intake. This may have been used to raise and lower a gate, allowing water into the Lower American Fork conduit. The dam/intake structure has lost some integrity,

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 7 Page 8

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

but more importantly, because the Lower American Fork plant is gone the dam/intake no longer retains integrity of its historic associations. The structure does not contribute to the Upper American Fork Plant historic district.

At the Upper American Fork Plant, a foot bridge (no. 7) crossing the river provides access to the powerhouse. The exact date of construction for this structure is unknown, but records indicate that it was erected between 1926 and 1936. A simple structure, the bridge consists of a wood deck and railing built on top of stringers made of steel I-beams. The bridge retains integrity of design, setting, materials, workmanship, location, feeling, and association. It is a contributing structure in the historic district.

8. Statement of Significance		n magani ana amin'ny faritr'o ana amin'ny faritr'o ana amin'ny faritr'o amin'ny faritr'o ana amin'ny faritr'o a
Certifying official has considered the s other properties:nationally		-
Applicable National Register Criteria <u>x</u>	ABx CD	
Criteria Considerations (Exceptions)	_ABCD	EFG
Areas of Significance (enter categories from instructions) Industry Engineering	Period of Significance 1906-c.1936 Cultural Affiliation n/a	<u>1906, 1907, 1914,</u> <u>1926-c.1936</u>
Significant Person n/a	Architect/Builder Young, Willard and Kels Utah County Light and P	

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

(see continuation sheet)

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number <u>8</u> Page <u>2</u>

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

The Upper American Fork Plant is significant under Criteria A and C, within a local context. Under Criterion A, the facility is significant because of its associations with the development of hydroelectric power in northern Utah County. Constructed in 1906-1907 (with later additions), the plant was one of four electric generating stations built to supply power to the towns of American Fork, Lehi, and Pleasant Grove, as well as industries in the general vicinity. Of these four plants, only Upper American Fork still exists. The Upper American Fork Plant is also significant under Criterion C, because it embodies the distinctive characteristics of an early twentieth-century high-head hydroelectric power plant. Designed by engineers Willard Young and Frank Kelsey and built by the Utah County Light and Power Company, the Upper American Fork Plant features a simple design that is typical of plants built by Utah hydroelectric power companies during the early 1900s. High-head plants were the most efficient type of hydroelectric power technology for relatively small mountain streams, probably the most common type of waterway in Utah.

Utah County Light and Power Company was founded in 1899 as a joint venture between hydroelectric power developer Christian Garff and the small farming communities of Lehi, American Fork, and Pleasant Grove. Garff had previously been instrumental in introducing electricity to the city of Logan. In June of 1899, Garff approached officials of Lehi, American Fork, and Pleasant Grove and told them that he had filed on a power site in American Fork Canyon. He asked for their assistance in financing a hydroelectric plant which would serve their communities. The three towns accepted Garff's proposal. The Utah County Light and

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 8 Page 3

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

Power Company was formed on September 16, 1899. Each city purchased \$6,000 of stock in the company, while Garff took \$1,000 worth of shares.

In 1900-1901, Utah County Light and Power erected its first plant, at the mouth of American Fork Canyon. The rapidly-descending waters of the American Fork River provided an ideal opportunity for hydroelectric power development. Upon completion of the Lower American Fork station, electricity was transmitted to Lehi, American Fork, and Pleasant Grove as well as to a nearby brickyard, flour mill, and other operations that required the use of electric motors. This was probably the first use of electricity in the communities, at least on such an extensive basis.

Shortly after Utah County Light and Power completed its Lower American Fork Plant, demand for electricity exceeded the capacity of the station during periods of low water. In order to compensate, in 1904-1905 the company built a coal-fired steam plant at American Fork. Officials then discovered that in order to meet demand they would have to operate the steam plant continuously, yet the high price of coal prohibited such a measure. Instead of relying on the steam plant, Utah County Light and Power decided to build another hydroelectric power station further up American Fork Canyon.

Construction of the Upper American Fork Plant began in 1906 and was completed in 1907. Two engineers employed by Utah County Power and Light, Frank Kelsey and Willard Young, designed the facility. General manager J.H. Wootton oversaw all construction work. The company hired its own laborers. With its small timber crib dam upstream, wood stave pipeline, and penstock directing water at a high velocity to the Pelton wheels inside the powerhouse, the Upper American Fork Plant was typical of small hydroelectric power facilities built during the early 1900s.

Upon completion of the Upper American Fork Plant, Utah County Light and Power decided that its productive capacity would allow the company to expand its service. In 1908, the company initiated construction of a 42-mile transmission line to the Tintic Mining District, where electricity was needed for mining and smelting NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number \_\_\_\_\_ Page \_\_\_\_\_

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

operations. That same year, Utah County Light and Power began building a third hydroelectric plant at Alpine, a small community north of American Fork. Over the next several years, Utah Light and Power increased its service to the Tintic mines and made plans to extend its service to Eureka. Later, the company built a transmission line from the Alpine station to the towns of Draper and Midvale in Salt Lake County.

In January, 1912, Utah County Light and Power merged with the Knight Power Company, owned by noted entrepreneur J.C. Knight, to form the Knight Consolidated Power Company. A short time later, in 1913, the Utah Power and Light Company assumed outright control of the properties of the Knight Consolidated Power Company.

After its acquisition of the Upper American Fork Plant, Utah Power and Light made a variety of improvements to the facility. In 1914, UP&L rebuilt the Upper American Fork Dam, replacing an earlier timber structure with a more permanent one made of concrete. During the 1920s, the company erected a new operator's ccttage (since demolished). During the late 1920s or 1930s, UP&L installed a new footbridge across the American Fork River to the powerhouse. Such changes reflected UP&L's overall goal during the 1910s and 1920s of improving existing hydroelectric power plants so that each could be a more reliable, efficient component in a huge network of electrical-generating facilities. Other small improvements have been made to the plant over the years, such as the construction of a new operator's residence in 1955. The plant is still in operation.

Because of the improvements made to the Upper American Fork plant into the 1930s, the period of significance for the facility has been extended beyond the 1927 date designated in the multiple property nomination form. The post-1927 improvement to the Upper American Fork plant--the footbridge--did not substantially change the overall character of the facility, but it was important because it represented UP&L's continuing efforts to maintain a reliable, efficient network of hydroelectric plants.

Previous documentation on file (NPS):	<u>x</u> See continuation sheet		
preliminary determination of			
individual listing (36 CFR 67)			
has been requested			
previously listed in the National	Primary location of additional data: State Historic preservation office Other State agency Federal agency Local government University Other Specify repository: Utah Power and Light Company		
Register			
previously determined eligible by			
the National Register			
designated a National Historic			
Landmark			
recorded by Historic American			
Buildings Survey #			
recorded by Historic American			
Engineering Record #			
Acreage of property <u>1.5 acres</u>			
UTM References			
A 1/2 4/3/8/6/9/0 4/4/7/6/4/0/0	B 1/2 4/4/1/9/0/0 4/4/7/7/4/0/0		
Zone Easting Northing	Zone Easting Northing		
C / ///// //////	D / ///// /////		
	See continuation sheet		
Verbal Boundary Description			
	<u>x</u> See continuation sheet		
Boundary Justification			
	x See continuation sheet		
11. Form Prepared By			
name/title Mark Fiege/Janet Ore, Consult	ing Historians		
organization for Utah Power and Light Co.	date <u>November 1988</u>		
street & number <u>144 South 900 East #10</u>	telephone <u>(801) 532-5456</u>		
city or town <u>Salt Lake City</u>			

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87	OMB No. 1024-0018
United States Department of the Interior National Park Service	
NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET Section number $9$ Page $2$	Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

- Merill, A.P. "A Hydro-Electric Development in American Fork Canyon, Utah." The Engineering Record 57 (9 May 1908): 611-613.
- "Slides Kayo Sections of Am. Fork Pipe." The Circuit (July 1965): 9.
- Utah Power and Light Company, Cadastral Department. F.P.C. Renewals Files, File F.P.C. Project 696, American Fork, Exhibit L, "General Design Drawings of Upper and Lower American Fork Project of Utah Power and Light Company," 6 January 1926.

. F.P.C. Renewals Files, Upper American Fork: Project 696. Various drawings, dated 1926, 1940, 1951; and other information.

- Utah Power and Light Company, Engineering Files Department. Drawing No. UB-20168. February 1936.
- Utah Power and Light Company, Property Accounting Department. Expenditure Requisition History File, Upper American Fork Plant.
- Utah Power and Light Company. "Utah Power and Light Company, History of Origin and Development." Unpublished report prepared in connection with Federal Power Commission Request Order date May 11, 1937.

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 10 Page 2

Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

Verbal Boundary Description:

The Upper American Hydroelectric Plant Historic District powerhouse site is located in the southern half of section 28, T4S, R2E, on the USGS topo map labelled Timpanogos Cave, Utah. The dam component is located in the north half of section 26, T4S, R2E.

Powerhouse Component:

The historic district boundary begins at the point 10 ft. directly E of where the penstock enters the concrete abutment N of the powerhouse. The boundary proceeds E 50 ft., then turns S 154 ft. to the top of the river embankment, across the American Fork River to the N side of State Highway 92. The boundary the proceeds W along the N side of the highway for 276 ft., then travels N for 122 ft. to the south side of the American Fork River. The boundary follows the south side of the river embankment for 143 ft. to the point where the 6600 volt line crosses the river. The boundary then proceeds NE 117 ft. to within 10 ft. of the W side of the penstock as it enters the concrete abutment. The boundary parallels 10 ft. W of the penstock as it travels 147 feet N. The boundary thens cuts across the top of the penstock and parallels 10 ft. from the penstock as it travels S to the Point of Beginning at the concrete abutment. Acreage for this component is one acre.

Dam Component:

Beginning at a point on the south edge of Utah Highway 92, directly north of the northeast corner of the valvehouse building on the Upper American Fork Dam, proceed east-northeast 50 ft. along a line on the south edge of Utah 92, perpendicular to the axis of the Upper American Fork Dam, to a point; then proceed south-southeast 175 ft. along a line perpendicular to Utah 92 and paralleling the Upper American Fork Dam to a point on the south bank of the American Fork River; then proceed west-southwest 100 ft. along a line perpendicular to the axis of the Upper American Fork Dam to a point; then proceed north-northwest 175 ft. along a line parallel to the Upper American Fork Dam and perpendicular to

NPS Form 10-900a (Rev. 8-86) Utah Word Processor Format (02741) Approved 10/87

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

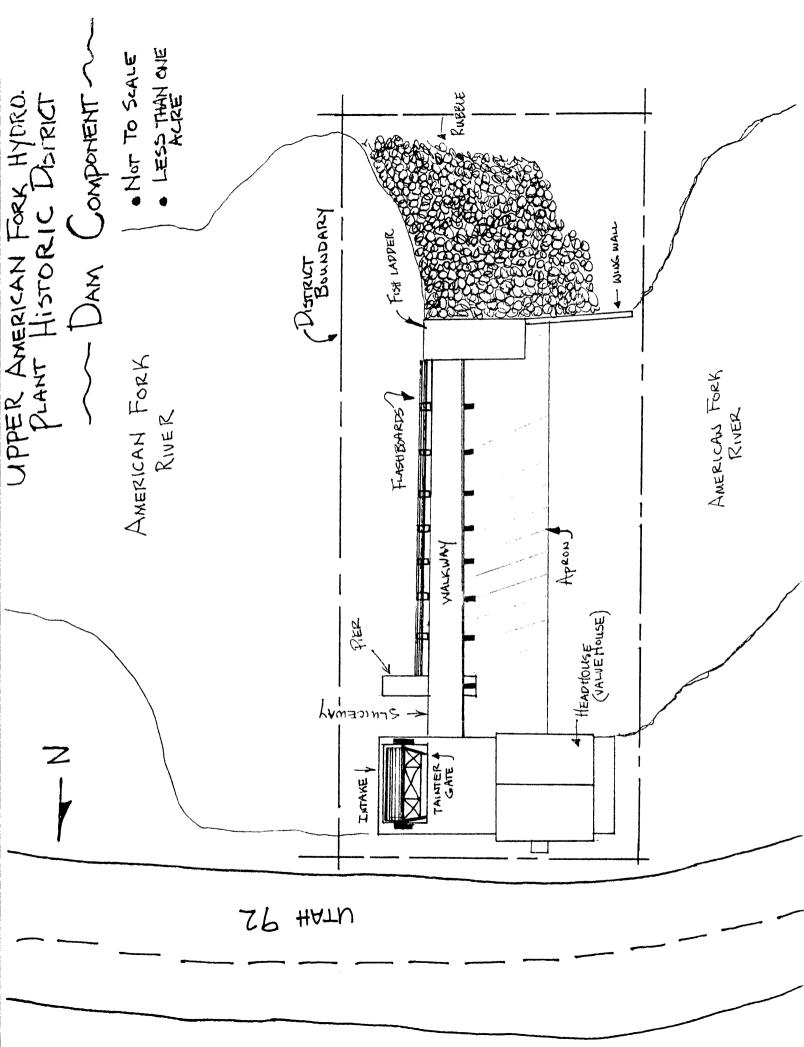
Section number <u>10</u> Page <u>3</u>

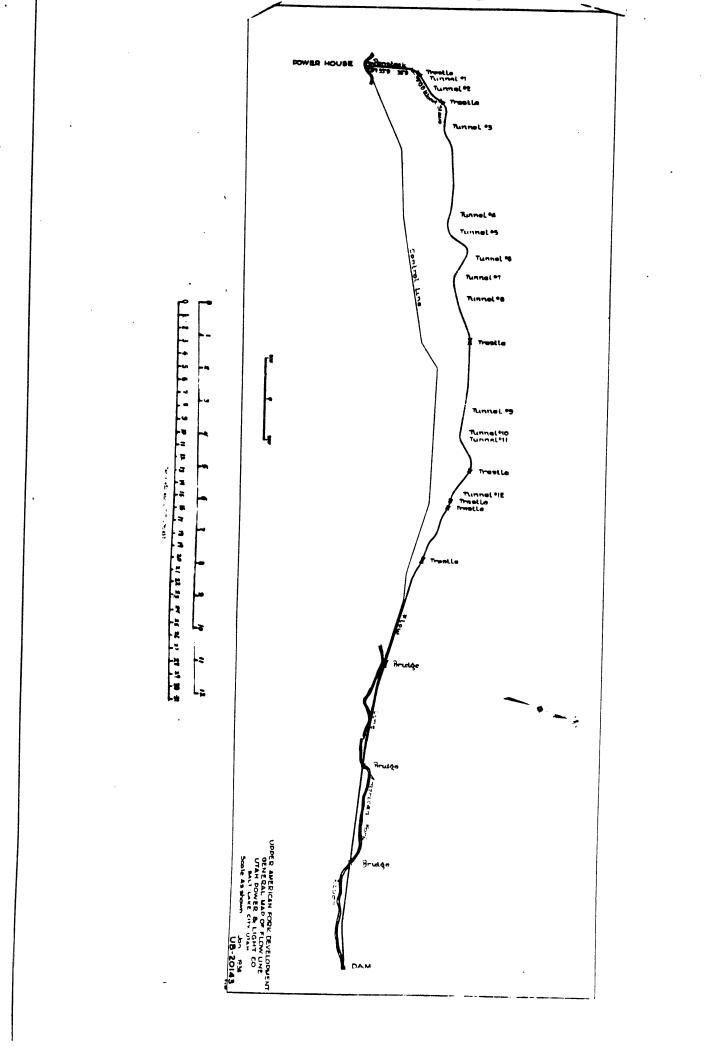
Upper American Fork Hydroelectric Power Plant Historic District American Fork, Utah County, Utah

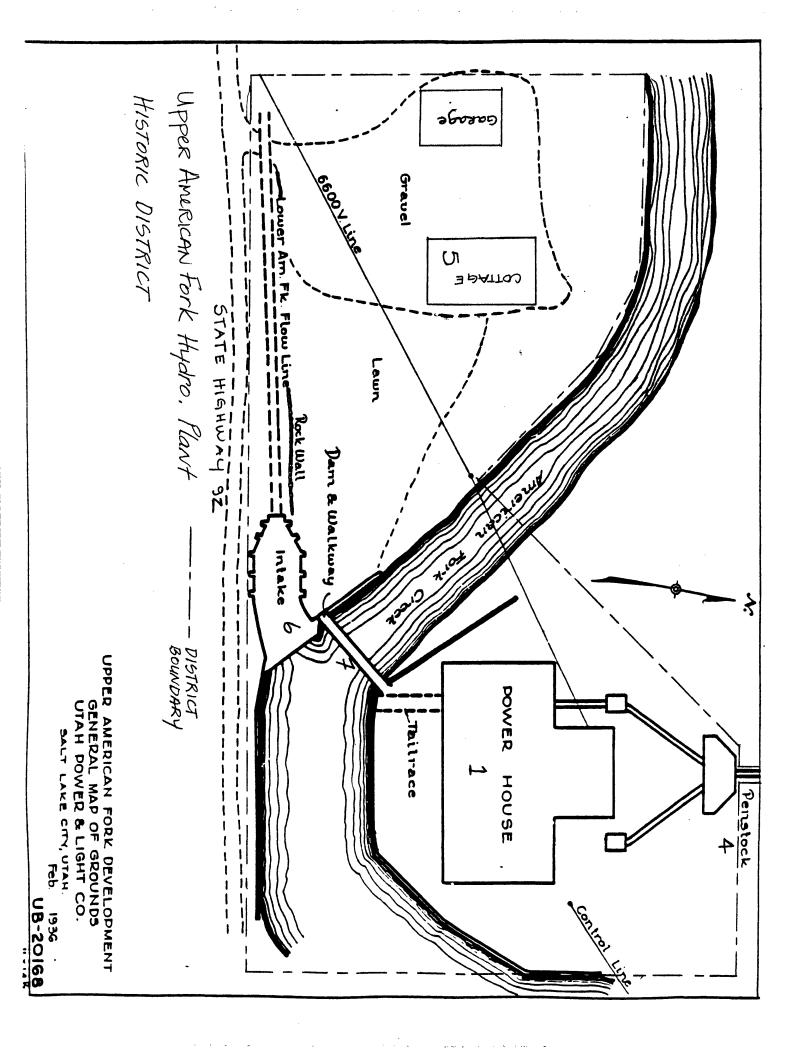
Utah 92 to a point on the north bank of the American Fork River and on the edge of Utah 92; then proceed east-northeast 50 ft. along the south edge of Utah 92 to the point of beginning.

## Boundary Justification:

The boundaries of the Upper American Fork Hydroelectric Plant Historic District have been drawn so as to include within the district those historic, intact, and visible structures which were and are associated with the operation of the facility. The conduit has been excluded from the district because it is of recent construction and also because much of the line runs underground, out of sight. Excluding the conduit from the district leaves two discontiguous elements, the dam and the powerhouse site. A discontiguous district is justified because the dam and the powerhouse are geographically separated, visual continuity is not a factor of historic significance, and the intervening space is not significant. The boundary of the powerhouse site was chosen to include the cleared, engineered ground upon which the powerhouse and associated structures are situated, as well as the penstock--visible on the side of the canyon--leading to the powerhouse. The boundary for the dam component was chosen because it encompasses the general setting of the dam in its position between the south bank of the American Fork River and Utah 92 on the north bank of the waterway.







American Fork Photograph Log:

Upper American Fork Hydroelectric Plant Historic District near Highland, Utah Mark T. Fiege, photographer July 1988 original negatives at Utah SHPO Photo #: 1. Powerhouse (no. 1), with footbridge (no. 7) on left, view to north. 2. Powerhouse (no. 1), footbridge (no. 7) on left, view to northeast. J. Powerhouse (no. 1) front entrance, view to north. 4. Powerhouse (no. 1) interior, showing turbine generator unit and overhead crane, view to west. 5. Penstock (no. 4), looking uphill, view to north. 6. Dam (no. 2), view to east. 7. Dam (no. 2), showing head house and intake structure, view to northeast.

3. Operator's residence (no. 5), view to north.