

NPS Form 10-900
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Utah Word Processor Format (02731)
(Approved 10/87)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

MAR 08 1989

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

NATIONAL REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in Guidelines for Completing National Register Forms (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 Snake Creek Hydroelectric Power Plant Historic District

historic name

other names/site number n/a

2. Location

street & number State Highway 224 n/a not for publication

city, town Heber City x vicinity

state Utah code UT county Wasatch code 051 zip code 84032

3. Classification

Ownership of Property	Category of Property	No. of Resources within Property	
		contributing	noncontributing
<u>x</u> private	<u> </u> building(s)		
<u> </u> public-local	<u>x</u> district	<u>9</u>	<u> </u> buildings
<u> </u> public-State	<u> </u> site	<u> </u>	<u> </u> sites
<u> </u> public-Federal	<u> </u> structure	<u>2</u>	<u> </u> structures
	<u> </u> object	<u> </u>	<u> </u> objects
		<u>11</u>	<u>0</u> Total

Name of related multiple property listing:
Electric Power Plants of Utah

No. of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this x nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property x meets does not meet the National Register criteria. See continuation sheet.

Max J. E... 1-31-89
Signature of certifying official Date
UTAH STATE HISTORICAL SOCIETY
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. See 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. Bruce J. Noble, Jr. 4/21/89
 See continuation sheet
- determined eligible for the National Register. See continuation sheet
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain:) _____

for _____
Signature of the Keeper Date

6. Functions or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
<u>Industry/Processing/Extraction:</u> <u>energy facility</u>	<u>Industry/Processing/Extraction:</u> <u>energy facility</u>
_____	_____
_____	_____

7. Description

Architectural Classification
(enter categories from instructions)

Materials
(enter categories from instructions)

Late 19th/20th Cent. Revivals (Power
and Transformer houses)

foundation concrete

walls brick, wood

Bungalow/Craftsman (Residence)

roof asphalt

other n/a

Describe present and historic physical appearance.

(see continuation sheet)

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Snake Creek Hydroelectric Power
Plant Historic District, vac.
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Constructed in 1909-10, the Snake Creek Power Plant is located at the mouth of Snake Creek canyon on the east slope of the Wasatch Mountains. The plant consists of a powerhouse, transformer house, diversion dams, steel conduit, penstock, and operators' camp within which are nine structures including two residences and five ancillary structures. Of these features, eleven are included within the historic district. All eleven contribute to the Snake Creek Power Plant Historic District. The two remaining structures, conduit and penstock, for reasons that will be explained below, have been excluded from the historic district. Drawing the boundaries so as to exclude the penstock and conduit leaves the Snake Creek Hydroelectric Plant Historic District with three discontinuous elements--two dams and the powerhouse complex. Since its construction in 1909-10, the Snake Creek plant has sustained alterations, the most major being the removal of a third operator's cottage and replacement of the conduit. Despite these changes, the district retains its overall integrity of location, setting, design, materials, workmanship, feeling and association. The Snake Creek Power Plant continues to represent an early twentieth-century hydroelectric power station and camp.

General Setting

The Snake Creek Power Plant and its adjacent camp lies at the mouth of the Snake Creek Canyon in Wasatch County about six miles west of Heber City on state highway 224. Located on the east side of the Wasatch mountain range, the site is approximately forty miles northeast of Provo and twenty-five miles south by highway from Park City. Surrounding the camp and plant is the Wasatch State Park, which contains a twenty-seven hole golf course. The two-mile steel pipeline carrying water from an intake dam at the confluence of Snake and Lavina Creeks to the plant transects portions of the State Park.

Situated at the opening of Snake Creek Canyon, the power house and operator's camp are located on the south side of Snake Creek which flows in a southeasterly direction. Next to the creek is the road (state road 224) which continues northwest up the canyon to an historic mining district. This road provides access to the station's driveway and guest cottage and delineates the northeastern boundary of the power plant district. Within the

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plant complex among numerous shade trees are the nine structures. Adjacent to the road, are the powerhouse and transformer house.

1. Powerhouse

Constructed in 1909, the powerhouse (no. 1) is a T-shaped structure of buff-colored brick with a metal-covered roof of intersecting gables and a concrete foundation. Rising above the gable ends is a concrete-capped parapet wall which follows the gable end configuration. In the southwest and northeast gable ends are decorative circles of raised brick. Under the overhanging eaves are exposed rafter ends and decorative brackets. The windows have semi-circular arched corbelled brick lintels and contain either an 8-light semi-circular transom over a pair of 10-light casement windows or a 6-light transom and a 15-light casement window. All of the windows rest on the concrete foundation wall and are screened with heavy metal mesh. In the southeast facade is an entrance which contains a set of double doors, and an 11-light semi-circular arched transom window under a corbelled semi-circular brick lintel. Vines cover a portion of the southeast wall and a small sign reads "Snake Creek Plant Utah Power and Light Company." On the northwest wall under the gable end are two wood-shingled gabled hoods with decorative brackets that protect 2 sets of 3 round insulators set in square openings. The openings have a concrete lintel and brick sill. At ground level, on this facade, is a concrete box with metal manhole cover which protects transformer cables leaving the powerhouse.

The technology of the Snake Creek facility is typical of high-head hydroelectric power plants built in the American West to supply mining districts, cities, and towns with electricity. The generating technology of the Snake Creek plant includes two main components: first, the water delivery system (including diversion dams, intake structures, steel pipeline, penstock, tailrace); and second, the actual power generation equipment (including turbines, generators, exciters, control equipment), which is described here along with the rest of the powerhouse. Descriptions of the water delivery system are included below, under feature nos. 10-13.

The remaining important technological features of the Snake Creek plant sit inside the powerhouse. The interior of the powerhouse

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is divided into two portions. The main generator room of the powerhouse encompasses the turbines, generators, and an overhead travelling crane. An extension at the rear of the powerhouse, which gives the building its T shape, originally probably housed overhead bus and switching equipment. Because the cables leading from the generators to the transformers are now located underground, this old switch room is basically empty, except for odd materials and tools. In between the old switch room and the main generator room sits a switchboard with gauges and switches. Most of this switchboard is old. It is made of polished slabs of gray marble with old hand-operated switches and gauges flanked by ornate, pressed metal scrollwork. The marble switchboard is topped by a an old metal gauge housing with an ornate, hand-painted sign that includes the words "Safety First," and in smaller lettering, "UP & L Co." Connected to the old marble panel is a more modern, metal switchboard. In the generator room sit the machines that transform energy from water into electricity. There are two Pelton turbines made by the Doble Company. Water flow from the penstock branches to each turbine is controlled by a needle valve and a gate valve. The speed of each turbine is controlled by oil governor units that operate off a common oil tank that sits adjacent to turbine-generator unit no. 1, located in the south one-half of the powerhouse. Each turbine is direct-connected to a Westinghouse 590 kilowatt alternating current generator. Connected by belt to each turbine shaft is a Westinghouse 125 volt direct current generator-exciter.

In addition to generating equipment, the Snake Creek plant includes some ancillary equipment. Running the length of the generator room is an overhead travelling crane. This crane has a 10 ton capacity and was manufactured by the Whiting Foundry Equipment Company. The tracks for the travelling crane are set in ledges at the top of the powerhouse walls, at about the point where the walls intersect with the roof. The walls of the powerhouse interior are covered with plaster. In the northeast corner of the generator room is a small wood operator's booth, about the size of a telephone booth. In the early days of hydroelectric power plant operation, booths such as this provided operators with a place to temporarily escape the noise of the turbines and generators without actually leaving the interior of the powerhouse. Windows in the booth allowed the operator to

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keep watch on the equipment.

After exiting the turbines, wastewater passes through a central, concrete tailrace beneath the powerhouse floor. Just outside the front of the powerhouse, the tailrace divides. One branch of the tailrace runs due south, passes underneath the plant driveway and part of the lawn. Then it turns into an open creek which runs out of the Snake Creek power station grounds. The other branch of the tailrace runs due north, passes underneath state road 224, and empties through an old concrete weir into Snake Creek. At the point where the tailrace exits the powerhouse and then branches, the tailrace is open but covered by metal grates. A valve situated on the southerly branch of the tailrace, directly in front of the powerhouse, controls the flow of water into either the south or north tailrace branches. This valve is not controlled by UP&L. It is controlled by the Midway Irrigation Company, which owns the rights to water exiting the Snake Creek plant.

Virtually unaltered since construction in 1909, except for some interior changes, the powerhouse retains its integrity of location, setting, design, materials, workmanship, feeling and association and is a contributing building to the Snake Creek Power Plant Historic District.

2. Transformer House

The transformer house (no. 2), or substation building, lying directly northwest of the power plant, resembles the powerhouse in architectural style. A 1-story, buff-colored brick building with a sloped shed metal-covered roof, the transformer house has a concrete-capped parapet which rises above the roof on the southeast side. The windows have semi-circular arched corbelled brick lintels, with either an arched 6-light transom over a 6/6 double hung window or an 8-light transom over an 8/8 double hung. The windows rest on the concrete foundation wall and are screened with heavy mesh. The building has two entrances--a large entrance with a semi-circular arched brick corbelled lintel, 8-light arched transom over a large wooden door on the southwest side and a single door on the southeast facade with a shallowly-arched lintel and heavy screen door. Originally housing the transformers, this

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building has several openings for insulators. On the northeast wall are a series of square openings with concrete sills containing round insulators which are no longer used. The southeast wall, facing the powerhouse, also contains an opening with 3 unused insulators. At ground level below these insulators is a concrete box with a metal opening containing the cables leading to the new transformer housing--a metal box on the northwest side of the transformer house. Since the transformers have been moved out of the building, it is primarily used for an office and storage. It also contains computer monitoring equipment, batteries, and modern switch equipment.

The building was apparently originally designed with a gable roof with concrete-capped parapet identical to the powerplant. At some point, the roof was removed and replaced with the shed roof. To the north of the transformer house is a small wooden structure with a gabled, wood shingled roof which covers the valve from the penstock for the yard's fire and irrigation systems. Despite possible roof alterations and the fact that it no longer serves its original function, the transformer house retains the majority of its integrity of location, setting, design, materials, workmanship, feeling and association and is a contributing building in the Snake Creek Power Plant Historic District.

3-4. Operators' Camp

Directly adjacent to the powerhouse and transformer building is the camp containing housing for plant operators and their families. A driveway separates the powerhouse and the current operator's home (no. 3). Constructed 1909-10, the 1 and 1/2 story, rectangular shaped, wood-frame, front gabled building with a concrete foundation has bungalow elements including painted wood-shingled siding, overhanging eaves with exposed rafter ends, triangular knee braces and multipaned 12/1 double hung windows. In the south corner of the building are two pairs of 12-light casement windows. The southeast gable end contains an 18-light window. The front entrance on the southeast facade has concrete steps and an aluminum screen door covering a door with a 16-light window. Above the entrance is a metal roofed gabled hood with decorative brackets. The rear entrance faces northeast onto a concrete patio. It contains a 9-light door, covered by a metal

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awning which extends over the adjacent pair of 3-light windows. Next to the rear entrance is a raised patio with a concrete foundation and a wooden balustrade. A hot tub has been sunk on the west side of the patio.

Other than this addition, the removal of one of the chimneys and the replacement of the wooden shingled roof with a metal one, the residence appears much as it did in 1910. Because it retains the majority of its historic integrity of location, setting, design, materials, workmanship, feeling and association and alterations have not obscured its original style, this residence is a contributing building in the Snake Creek Power Plant Historic District.

Built in 1920, a second operator's residence (no. 4) lies at the northeastern edge of the camp. Now used as a guest cottage, this structure is a 1 story, rectangular shaped, wood-frame building with drop siding, a concrete foundation and a metal-covered hipped roof. Bungalow elements include wide overhanging eaves with exposed rafter ends and a cutaway porch facing northeast. The porch has wooden steps, railing and paneled balustrade. Porch supports are square and grouped in a set of three. Two entrances open onto the porch. Each has a door with a 1-light window and a screen door. The home has 1/1 double hung windows with 3-light hopper windows in the basement. On the southwest side is a screened cutaway porch with wooden steps and a screen door over a 1-light door. Substantially unaltered since construction, this house retains its integrity of location, setting, design, materials, workmanship, feeling and association and is a contributing building in the Snake Creek Power Plant Historic District.

Just to the north of this building is the concrete foundation of a third operator's cottage constructed in 1917 which Utah Power and Light retired in 1930. Very similar to the guest cottage, the building was moved from the site into the town of Midway in about 1930.

5-9. Ancillary Structures

Between the two residences are five outbuildings. Along the

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northwestern boundary of the camp are the three biggest ancillary structures including the barn. Constructed in 1923, the barn (no. 5) is a rectangular-shaped, 2-story structure sided with board and batten siding and a metal-covered gable roof. Double doors and a single entrance face the northeast. Openings to the hay loft appear in the north and south gable ends. Adjacent and to the north of the barn is a garage of corrugated metal (no. 6) which has a corrugated metal shed roof with exposed rafter ends. Two double doors open on the northeast side. Window openings are empty of glass. To the north of this shed is a smaller wooden shed (no. 7) which has drop siding and a wood shingled gable roof. A door faces the northeast side. The shed and garage were built before 1936. Both of these buildings and the barn retain their integrity of location, setting, design, materials, workmanship, feeling and association and are contributing elements to the Snake Creek Power Plant Historic District.

Across the yard from these buildings, near the powerhouse, are two other sheds. Just north of the operator's house is a drop-sided structure (no. 8) with a rolled-asphalt covered gable roof. Around the southwest side is an extension made of wire. Constructed before 1936 as a coal shed and now used for storage, the building was once used for a sauna. Despite this alteration, the building retains the majority of its integrity of location, setting, design, materials, workmanship, feeling and association and is a contributing building.

At the head of the driveway, west of the powerhouse, is a corrugated metal building (no. 9) with a corrugated metal shed roof and brick chimney, constructed before 1936. Windows are fixed 4-lights. Two doors and a window face the southeast side. This building may be the original shop and may have been moved a few feet east after 1936. But because the spacial relationship to the powerhouse and other structures is replicated and the move occurred within the camp, the building retains the majority of its integrity of setting, design, materials, workmanship, feeling and association. It is a contributing building.

10. Lavina Creek Dam

The diversion dam for Snake Creek is a simple reinforced concrete

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gravity dam built in 1914. During the 1910s and 1920s, Utah Power and Light undertook to improve all of its small hydroelectric plants in order to make them more efficient components in its regional network of generating facilities. The Lavina Creek Dam probably reflects UP&L's effort to upgrade plants such as Snake Creek.

The Lavina Creek Dam is a small structure approximately 20 feet long and about 5 feet high. From west to east, the dam consists of the following elements: first, a low reinforced concrete section that serves to impound water and that also apparently serves as a spillway; second, a small wood sluice gate for draining the water behind the dam; and third, a large reinforced concrete intake structure and headworks that extends about 20 feet south of the rest of the dam. This latter structure includes a large headgate and other valves. Two small sheds, one of wood and the other of concrete, are located on top of the intake structure. Located on top of the dam is a walkway made of wood resting on heavy wood posts, which in turn rest on top of the dam. Next to the walkway on the east side of the dam is a structure made of heavy wood beams which stabilizes worm gear mechanisms for raising and lowering the sluice gate and the head gate.

The Lavina Creek Dam is in a seriously deteriorated condition. Part of the dam is reinforced with sandbags. Concrete on both the dam and the intake structure is crumbling. The downstream side of the dam appears to be undermined slightly. The walkway crossing the dam is rotting and hazardous. The bottoms of the posts supporting the walkway have rotted to the point that they are no longer secured. The intake structure is also in bad shape. Besides crumbling concrete, the concrete shed is listing and the shed made of wood is badly weathered.

In spite of the dam's compromised material condition, the dam still retains enough material integrity to reflect its original design and function. The Lavina Creek Dam, although deteriorated, still retains integrity of design, materials, workmanship, location, setting, feeling, and association. It contributes to a historic district.

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11. Snake Creek Dam

Like the Lavina Creek Dam, the Snake Creek Dam was also built in 1914. The structure is located on Snake Creek approximately one quarter mile northwest of Lavina Creek Dam. Water from Snake Creek Dam is diverted into a pipeline which carries the water to the Lavina Creek Dam.

Snake Creek Dam is a small dam about 8 ft. tall and 25 ft. across. Part of the dam consists of a reinforced concrete diversion/intake structure on the east side of the creek. This part of the dam includes intake screens and hand-operated gates and a hand-operated sluice gate. A second portion of the dam consists of a concrete spillway and apron, which carries the overflow of Snake Creek. The third part of the dam, located along the west bank of the creek, consists of an abutment and a wing wall extending downstream.

Materially and structurally, Snake Creek Dam is in better condition than the Lavina Creek Dam. Snake Creek Dam retains integrity of design, materials, workmanship, location, setting, feeling, and association. It contributes to the historic district.

12. Conduit

Exiting the concrete intake structures of both Lavina Creek and Snake Creek dams are lengths of welded steel pipeline several feet in diameter that run down Snake Creek Canyon and along the north side of the canyon for approximately one and one-half miles. One section of the pipe, much of it underground, runs between Snake Creek Dam and Lavina Creek Dam. The second section of pipeline lies between Lavina Creek Dam and the penstock. The welded steel pipeline is of modern construction (less than fifty years old). Originally, water for the Snake Creek plant was carried through a wood stave pipeline held together by metal hoops and resting on steel or iron cradles. Piecemeal, Utah Power and Light has replaced the original wood stave pipeline with sections of steel pipe welded together. Crumpled remains of the original conduit lie adjacent to the steel pipeline. About two-thirds of a mile

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above the powerhouse, the Snake Creek canyon widens. At this point, on a ridge overlooking Snake Creek, Wasatch State Park, the golf courses, and the Snake Creek Plant, the steel pipeline heads downward approximately 20 ft. until it connects with the penstock. There is no surge tank at this point. Should the penstock suddenly be closed at the power house, resulting pressure on the penstock and pipeline (caused by water violently backing up into the penstock and pipeline) is relieved through valves situated on the welded steel pipeline. Because the original conduit has been replaced outside the period of significance, it is a noncontributing feature. Therefore it has been left out of the historic district.

13. Penstock

The penstock, original to the Snake Creek facility, is a riveted metal structure made of either steel or wrought iron. About 4,000 ft. in length, the penstock runs straight down the side of the canyon. In the bottom of the canyon the penstock is buried except for where it crosses Snake Creek. Portions of the penstock on the side of the canyon are also underground. When the penstock reaches the Snake Creek Plant grounds, approximately underneath the old transformer house, it divides into a wye. Each branch of the wye leads to a turbine inside the powerhouse. The very top of the west branch of the penstock wye is visible above ground for about 1 ft. before it enters the powerhouse. The 4,000 ft. penstock gives the Snake Creek plant a total head of approximately 700 ft. Of original construction, the penstock retains its historic integrity of location, setting, design, materials, workmanship, feeling and association. However, most of the penstock is buried. It is not an important visual element to the Snake Creek facility overall. For instance, the penstock is not visible from the powerhouse site. Because most of the penstock is buried, and because of the difficulties involved in determining the proper boundaries for a buried structure not necessarily meant to be seen from the surface of the ground, the penstock is excluded from the historic district.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: ___ nationally x statewide ___ locally

Applicable National Register Criteria ___ A x B x C ___ D

Criteria Considerations (Exceptions) ___ A ___ B ___ C ___ D ___ E ___ F ___ G

Areas of Significance

(enter categories from instructions)

Industry
Engineering

Period of Significance

1909-1936

Significant Dates

1909-1910, 1914,
1920, 1923, 1936.

Cultural Affiliation

n/a

Significant Person

Knight, Jesse

Architect/Builder

Allen, James E./unknown

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

(see continuation sheet)

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The Snake Creek Power Plant District is eligible for the National Register of Historic Places under Criterion B within a statewide context and Criterion C within a local context. Although somewhat compromised by the loss of an operator's cottage, the site is significant under Criterion C because it embodies the distinctive characteristics of an early twentieth-century, high-head hydroelectric power station. Situated in the Snake Creek canyon of the Wasatch Range, the Snake Creek Power Plant's engineering features were ideally suited to its mountainous setting. Power companies built numerous high-head plants in Utah during the late nineteenth and early twentieth centuries. They were the most efficient type of hydroelectric technology for generation power on Utah's relatively small mountain streams. Constructed by the Snake Creek Power Company, which was controlled by Jesse Knight, the plant has statewide historic significance under Criterion B because of its association with Knight. A prominent Utah entrepreneur, Knight was very influential in the development of Utah agriculture, mining and power. Knight Consolidated Power Company, of which Snake Creek Power was a part, became a major contributor in the formation of Utah Power and Light in 1913. The Snake Creek Power Company supplied needed, inexpensive power to Knight's mining properties in Park City, a major silver mining district, allowing for expansion of Knight's mining operations.

Local residents of Heber City, Utah first recognized the potential for hydroelectric power from Snake Creek waters in 1907. In that year, Joseph R. Murdock acquired water rights from the Wasatch Development Company with the idea of erecting a plant to supply electricity to Heber City. As the site lay roughly halfway

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between Heber City and Park City, then a thriving silver mining district, the project gained the notice of Jesse Knight. Knight, president of Knight Investment Company, owned promising mining property in Park City and he realized the advantage of bringing cheap power to his mining activities. Apparently, Knight gave some financial backing to the Heber City residents' project. In the panic of 1907-8, however, the local venture failed due to lack of finances. After considering the advantages of the site, Knight stepped in and obtained control of the Snake Creek Project.

In 1909, the Snake Creek Power Company was incorporated with Jesse Knight, president and Joseph Murdock, vice-president. Several of Knight's relatives, among others, also served as directors, such as, his son-in-laws, R.E. Allen and W. Lester Mangum and his son, J. William Knight. Jesse Knight retained control over the operation by owning the majority of the shares issued. Construction of the facility began the same year. A small diversion dam directed water from the confluence of Snake and Lavina Creeks into a two-mile wood-stave pipeline. At the plant site, obtained from Bishop Jacob Probst, the company erected a two-unit powerhouse, a transformer house and an operator's residence.

The architect for the project was a Provo, Utah man, James E. Allen. The son of a self-taught architect and carpenter from Coalville, Allen moved to Provo in 1909. Hired in that year by the Snake Creek Power Company, Allen designed a small, but unusual powerhouse incorporating elements of the Italian Renaissance style. It is possible that Allen also designed the operator's residence, a simple cottage with craftsman detailing. Allen remained in Provo until his death in 1956. During his career, he designed numerous church and business structures, including the Provo Congregational and Community Church--which exhibited a "Mediterranean style"--the Western Utah Stake House, and the Richfield National Guard Armory.

In 1910, construction of the Snake Creek plant was complete. Two generators, rated at 1180 kilowatt, produced 6600 volts of 60 cycle alternating current, which a 11,000 volt transmission line carried over the mountains to Park City. Virtually all electricity produced went to the mines near Park City, such as the

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Daily Judge Mine and Mill, to power machinery. By this time, Heber City had erected its own power plant and no longer needed Snake Creek electricity.

Although the Snake Creek Power Company existed as a separate corporation, in fact it was only a component of the vast Knight Investment Company controlled by Jesse Knight. One of Utah's early capitalist, Knight was influential in the development of the state's agriculture, industry and finance. Although he gained the most recognition for his mining ventures, Knight was also involved in irrigated farming in both Utah and Canada, sugar factories and mills, banking, and woolen production. While ranching near Payson, Knight had discovered the lucrative mining district at Tintic. To develop his mining claims, Knight and members of his family organized the Knight Investment Company in 1906. The articles of incorporation provided for not only mining and agricultural ventures but also for acquiring water rights for hydroelectric power and the construction of power plants and electric light distribution systems. Apparently Knight initially considered power development only in relation to his mining operations. However, by 1912, he controlled one of Utah's largest power companies which was a major predecessor to the Utah Power and Light Company.

The Investment Company intensively developed its thirty-two mining claims in the Tintic District which required electrification. In 1908, the firm constructed a smelter at Silver City and contracted with Utah County Light and Power Company of American Fork to furnish electricity. Another contract with the Telluride Power Company of Provo guaranteed that the smelter would have uninterrupted generation. Soon, however, Knight realized that these power sources were inadequate and began investigating sites for his own plant. In 1909, the Investment Company began construction of a power station in the Santaquin Canyon and a transmission line connecting it with the Tintic district. Upon completion in 1910, Knight declared that the Santaquin plant was meant solely for his own enterprises and would not compete with other electric companies.

When the Investment Company moved to improve its mining properties at Park City in 1908, it faced the same problem of gaining access

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to inexpensive power. This motive impelled the firm to develop the Snake Creek power station. But, as at Tintic, the Snake Creek plant failed to meet knight's needs in Park City. In 1910, the company began construction of a site on the Provo River to augment Snake Creek generation which was named the Murdock plant.

As work at Murdock proceeded throughout 1910, the Knight Investment Company became interested in the holdings of the Mill Creek Power Company. Organized in 1906, this firm had acquired water rights on Mill Creek, east of Salt Lake City, and commenced construction of the Upper Mill Creek plant in 1907. Power from the station was sold almost exclusively to the Salt Lake Pressed Brick Company. In 1910, Mill Creek Power began a second plant--the Lower Mill Creek station--to supply the U.S. Smelter at Midvale, but before its completion, the company passed control of its power holdings to Jesse Knight. While these transactions were occurring, Knight and his associates moved to segregate their power holdings, including the Snake Creek Power Company, from the knight Investment Company.

With the addition of the Mill Creek Power Company, a new company was formed in 1910 called the Knight Power Company with Jesse Knight as president. By that time, Knight had clearly moved beyond developing power solely for his own use and was becoming a major competitor in the electric power field. Power from the Snake Creek, Murdock, Santaquin, Upper and Lower Mill Creek supplied not only knight mines and smelters but also other smelting and industrial ventures in Tintic, Park City and Salt Lake City. Excess electricity was sold to the Progress Company of Murray, an electric utility.

The Knight Power Company entered domestic electrification in 1912 through yet another consolidation when it merged with the Utah County Light and Power Company. This firm operated three hydroelectric plants--two in American Fork Canyon and one at Alpine--which provided power to the communities of Lehi, American Fork and Pleasant Grove, a large pumping plant near Lehi, the Tintic mining district, and had entered Midvale and Murray. Jesse Knight retained control of the new Knight Consolidated Power Company.

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With this merger, the knight power interests and their eight power stations became the third largest power company in Utah. Their 44,000 volt transmission line which connected a widespread system of plants and industrial and domestic customers, was the second largest in the state. knight Consolidated's nearest competitor was the Telluride Power Company, also of Provo, and a bitter rivalry existed between the presidents of the two companies--Jesse Knight and L.L. Nunn. However, the competition did not last long. In 1913, Utah Power and Light Company combined the largest electricity producers in Utah, including both Knight Consolidated and Telluride, to effectively dominate the state's power industry until the present day.

Although the Snake Creek station was only a component of this larger transaction, the merger affected the physical appearance of the site. In an effort to increase efficiency, Utah Power and Light made improvements to its power facilities. At Snake Creek, it added two operators' cottages, one in 1917 and the other in 1920. These wood-frame, hip roofed dwellings differed somewhat from the residence designed by Allen but were similar to houses the company constructed at other camps. In 1923, a barn was erected which sheltered the horses used to patrol the pipeline. The firm also probably built the four other sheds sometime before or around 1936. The additions to the Snake Creek facility did not change the overall characteristics of the plant, but they were important because they reflected the efforts of Utah Power and Light to upgrade its facilities in the interests of creating an efficient network of power plants. Therefore, the period of significance of the Snake Creek Hydroelectric Plant Historic District is extended beyond the period outlined in the multiple property nomination.

Today, the Snake Creek power station, virtually unaltered since its period of significance, clearly provides an excellent example of a small, early twentieth-century, hydroelectric plant.

9. Major Bibliographical References

Previous documentation on file (NPS): x See continuation sheet
 preliminary determination of individual listing (36 CFR 67) has been requested
 previously listed in the National 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 #

Primary location of additional data:
 x State Historic preservation office
 Other State agency
 Federal agency
 Local government
 University
 x Other
Specify repository:
Utah Power and Light Company

10. Geographical Data

Acreeage of property 1.74 acres

UTM References

A	<u>1/2</u>	<u>4/5/7/4/2/0</u>	<u>4/4/8/8/1/9/0</u>	B	<u>1/2</u>	<u>4/5/5/3/8/0</u>	<u>4/4/8/9/8/8/0</u>
	Zone	Easting	Northing		Zone	Easting	Northing
C	<u>1/2</u>	<u>4/5/5/1/0/0</u>	<u>4/4/8/9/9/4/0</u>	D	<u>/</u>	<u>/ / / / /</u>	<u>/ / / / / /</u>

 See continuation sheet

Verbal Boundary Description

 x See continuation sheet

Boundary Justification

 x See continuation sheet

11. Form Prepared By

name/title Mark Fiege/Janet Ore, Consulting Historians
organization for Utah Power and Light Co. date November 1988
street & number 144 South 900 East #10 telephone (801) 532-5456
city or town Salt Lake City state Utah zip code 84102

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- Cole, Brad, and Johnson, Mike. Utah State Historic Preservation Office, Structure/Site Information Form. "Snake Creek Power Site." N.D.
- Dastrup, Boyd L. "Electrification of Utah, 1880-1915." M.A. thesis, Utah State University, 1976.
- Desert News, 14 March 1921 (Jesse Knight obituary).
- Salt Lake Tribune, 8 June 1937 (Inez Knight Allen obituary); 22 November 1956 (James Allen obituary).
- Engineering and Mining Journal, 4 June 1910, 14 May 1910.
- Utah Power and Light Company. Engineering Files Department. Drawings No. UB-20209, dated March 1936 and No. UC-2056, no date.
- . Cadastral Department. File #2318, Snake Creek Project.
- . "The knight Consolidated Power Company." Unpublished report prepared in connection with Federal Power Commission Request Order dated May 11, 1937.
- . Property Accounting Department. Expenditure Requisition History File, Snake Creek Plant.
- . "Snake Creek Power Company." Unpublished report prepared in connection with Federal Power Commission Request Order dated May 11, 1937.
- . "Wasatch Development Company." Unpublished report prepared in connection with Federal Power Commission Request Order dated May 11, 1937.

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Verbal Boundary Description:

The Snake Creek Hydroelectric Plant Historic District powerhouse and operators' camp components are located in the west half of section 21, T3S, R4E, on USGS Quad labelled Brighton, Utah.

The Lavina Dam component is located on the west edge of section 17, T3S, R4E, and the Snake Creek Dam component in the east half of section 18, T3S, R4E.

The historic district boundary at the powerhouse site begins 10 ft. directly W from the SW corner of the guest cottage (no. 4 on map). The boundary then proceeds SW 79 ft., then takes a right-angle to proceed 360 ft. SE (following a line 10 ft. behind the garage) to the fence line 50 ft. SE from the operator's cottage (no. 3 on map), then the boundary takes a right angle and proceeds NE 175 ft. to the south edge of State Highway 220. The boundary then follows the south edge of the highway for 375 ft., then takes a right angle and proceeds SW towards the guest cottage 100 ft. to the Point of Beginning, 10 ft. from the cottage's SW corner. Total acreage is 1.65 acres.

The historic district boundary around the Snake Creek Dam (no. 11 on map) generally follows the FERC project boundary lines (see map). Beginning at a point 6.25 ft. directly N of the northernmost projection of the dam. From that point proceed 62.5 ft. SE, then make a right-angle and proceed 37.5 ft. SW. After a right-angle turn, proceed 62.5 ft. NW, make a right-angle turn NE and proceed 37 ft. to Point of Beginning. Total acreage is .054 acres.

The historic district boundary around the Lavina Creek Dam (no. 10 on map) also follows portions of the FERC project boundary lines (see map). Beginning at a point 10 ft. N from the NW corner of the dam, proceed E 12 ft., then make a right-angle and proceed S 31.25 ft. The boundary makes a jog W 6 ft. then proceeds 6 ft. SE. After another right-angle turn, the boundary proceeds W for 25 ft. to the intersection of the dam and pipeline. The boundaries then proceed 6 ft. N, then 6 ft. W and then turn 90 degrees and travel 37.5 ft. After another 90 degree angle, the boundary proceeds E for 25 ft. to the point of beginning. Total

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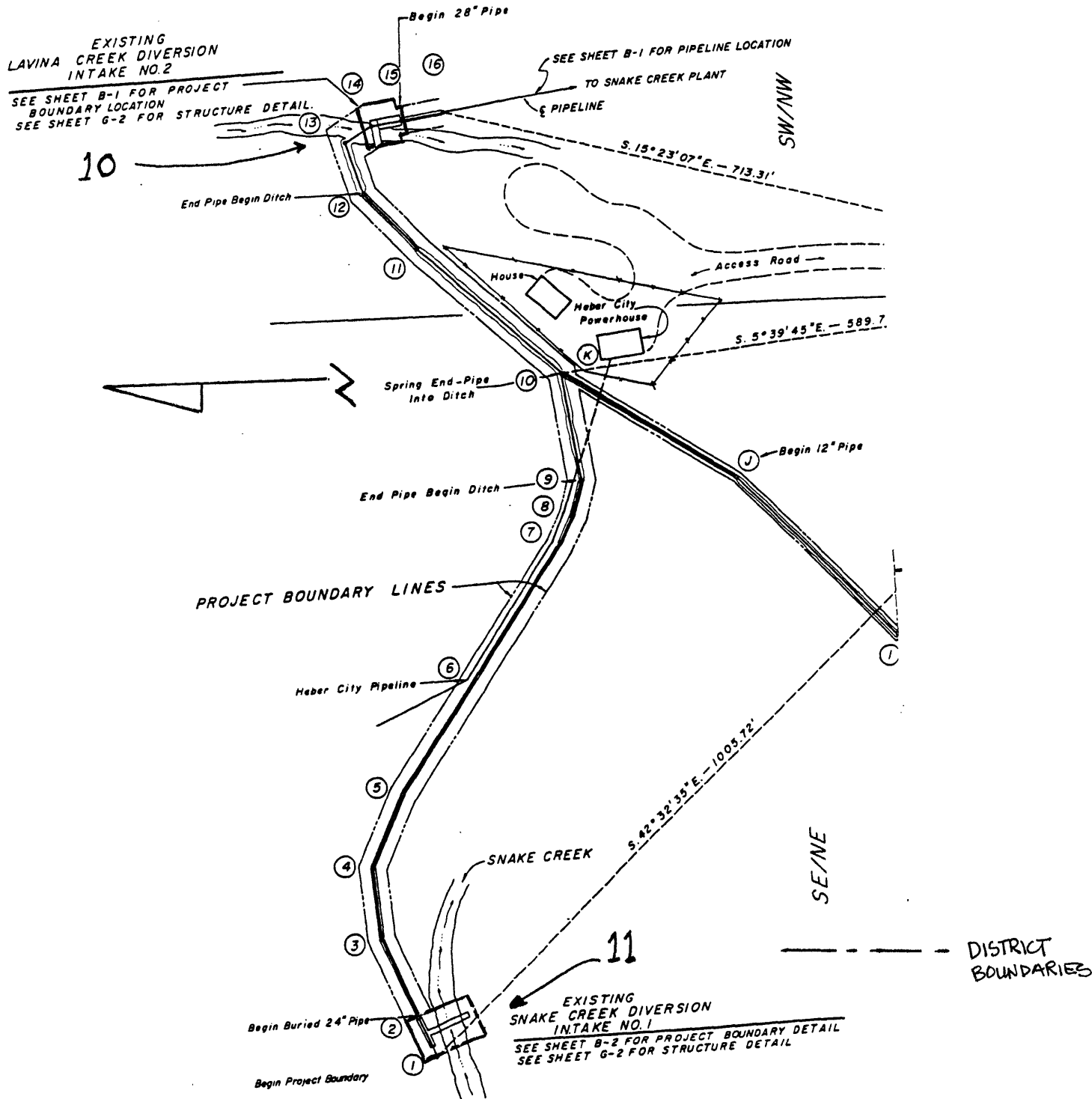
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acreage totals .032 acres.

Boundary Justification:

The boundary of the Snake Creek Hydroelectric Plant Historic District encompasses those historic, intact, and visually prominent structures associated with the operation of the facility. The conduit and the penstock for the plant was excluded from the district because it either lacks integrity, is not historic, or is mostly underground. Thus the district includes three discontinuous components, two dams and the powerhouse site. A discontinuous district is justified in this case because visual continuity is not a factor in historic significance, the dams and the powerhouse site are geographically separated, and the intervening space lacks significance. The boundaries for the Snake Creek and Lavina Creek dams were chosen because they encompass the general setting of each dam as it spans its respective waterway. The boundary for the powerhouse site was chosen because it encompasses the cleared area upon which the powerhouse and associated buildings sit. This cleared area, planted in grass, is distinguishable from the surrounding woods, fields, and golf courses.



Snake Creek Hydro. Plant
 Historic District
 Lavina Creek Dam Component
 Snake Creek Dam Component

Snake Creek Photograph Log:

Snake Creek Hydroelectric Plant Historic District Photographs
Midway, Utah

Mark T. Fiege, photographer

July 1988

original negative at Utah SHPO

1. Powerhouse (no. 1), view to north.
2. Same, view to southeast.
3. Same, view to east, showing details on rear of building.
4. Transformer building (no. 2), view to northeast.
5. Operator's residence (no. 3), view to north.
6. Operator's residence (no. 4), view to northwest.
7. Ancillary structures (nos. 5, 6, 7, left to right), view to southwest.
8. Lavina Creek Dam (no. 10), view to northwest.
9. Snake Creek Dam (no. 11), view to northwest; photograph by Jim Burruss, November 1988.