NPS Form 10-900

United States Department of the Interior National Park Service

National Register of Historic Places Registration Form



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

historic name Alton Gas & Elec	tric Power Hou	se				
other names/site number	Alton Light & I	Power House	Abbott Machin	e Compar	лу	
Name of Multiple Property Listing (Enter "N/A" if property is not part of a mult	ame of Multiple Property Listing n/a nter "N/A" if property is not part of a multiple property listing)					
2. Location						
street & number _700 W. Broadv	vay			[not for publication	
city or town Alton				[vicinity	
state Illinois	county Mad	dison	zip code	62002		
3. State/Federal Agency Certifica	ation					
As the designated authority under	the National Hist	oric Preservati	on Act, as amend	led,		
I hereby certify that this <u>X</u> nominegistering properties in the Nation set forth in 36 CFR Part 60.	nation reques nal Register of Hi	st for determina storic Places a	ntion of eligibility in the pro	meets the d cedural and	locumentation standards for d professional requirements	
In my opinion, the property <u>&</u> m be considered significant at the fo	eets does no llowing level(s) of	t meet the Nati significance:	onal Register Crit	teria. I reco statew	ommend that this property vide <u>ک</u> local	
Applicable National Register Crite	ria: XA _	в_с	D			
Brital. ant			07.09.19			
Signature of certifying official/Title: Deput	y State Historic Prese	rvation Officer	Date			
Illinois Department of Natural Res State or Federal agency/bureau or Tribal	ources - SHPO Government	-				
In my opinion, the property meets	_ does not meet the N	National Register c	riteria.			
Signature of commenting official			Date			
Title		State or Fede	al agency/bureau or	Tribal Govern	ment	
4. National Park Service Certifi	cation					
I hereby certify that this property is:						
entered in the National Register		-	determined eligible	for the Nationa	al Register	
determined not eligible for the Na	ational Register	-	removed from the N	ational Regist	er	
ether (explain:)	Λ			_		
Dabua (Aya	all		9-28	-19		
Signature of the Keeper			Date of A	ction		

Alton Gas & Electric Power House

Name of Property

5. Classification

Х

Ownership of Property

(Check as many boxes as apply.)

private

public - Local

public - State

public - Federal

Madison County, Illinois

County and State

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Number of contributing resources previously listed in the National Register

0

6. Function or Use **Historic Functions**

(Enter categories from instructions.)

INDUSTRY / Energy Facility

building(s) Х district

Category of Property

(Check only one box.)



Number of Resources within Property

(Do not include previously listed resources in the count.)

Contributing Noncontributing 1 1 buildings 0 0 site 0 0 structure 0 0 object 1 1 Total

Current Functions (Enter categories from instructions.)

INDUSTRY / Processing Site

7. Description

Architectural Classification (Enter categories from instructions.)

NO STYLE

Materials

(Enter categories from instructions.)

foundation: concrete

walls: Brick, concrete, metal

roof: asphalt

other:

2

Alton Gas & Electric Power House

Name of Property

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity).

Summary Paragraph

The Alton Gas & Electric Power House is located at 700 W. Broadway in the City of Alton (Madison County), Illinois (**Figure 1**). The property is situated within an industrial sector of the City, northwest of downtown. Two parcels comprise the property supporting the power house (**Figure 2**). The two parcels consist of approximately 3.75 acres that support the 1913-1914 **power house (Contributing)** and a prefabricated metal **warehouse** constructed in 1991 and enlarged in 1997 (**Non-Contributing**) northwest of the power house (**Figure 3**). The property is bounded on the southwest by a road, W. Broadway, also known as McAdams Parkway and the Great River Road. This route parallels railroad tracks and the Mississippi River, both of which extend southwest of the property. Limestone bluffs flank the property on the north and west. An adjacent industrial property, currently operating as a quarry, bounds the southeastern edge of the property.

Narrative Description

Setting

The Alton Gas & Electric Power House is, as noted, situated within an industrial area northwest of downtown Alton, Illinois. The power house and non-contributing warehouse are on an asphalt and gravel-covered parcel. The site is largely characterized by the limestone bluff that flanks the north and west sides of the parcel. The property is void of sidewalks with vehicular access at the southeast and northwest ends of the property via W. Broadway. The southeast vehicular entry leads to a customer parking area, which is paved with asphalt (**Photos 1, 8**). Twelve parking spaces are marked by paint. The lot covers approximately 868 square feet. The northwest vehicle entry is used primarily for trucks and larger vehicles. This area is paved with asphalt and provides access directly to the warehouse. The northwest lot covers approximately 1,380 square feet (**Photos 6, 7, 10**). The southwest elevation of the power house is flanked by W. Broadway. A metal guardrail separates the power house from the highway. The Mississippi River and railroad tracks border the southwest side of W. Broadway.

Exterior Description - Power House (Contributing)

Property Overview

The Alton Gas & Electric Power Plant at 700 W. Broadway consists of a large brick industrial building composed of three sections. The brick pier and spandrel construction power house (constructed in 1913) consists of two large sections at the southeast end of the parcel. The two sections of the power house are similar in size – each is 2.5-stories in height. The building components are centrally joined by a shared brick wall. The northeast section is slightly set back, creating an uneven façade. The rear two-story addition was originally detached, constructed as a transformer house for the power plant in 1913-1914. The power station and transformer house have steel truss roofs. A one-story small connector addition was constructed c. 1920, attaching the rear (northwest) elevation of the 2.5-story southwest section to the transformer house. Unless noted otherwise below, windows throughout the power house and transformer wing are multi-light original steel sash.

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All of the power house components constructed in 1913-1914 are constructed of brick and supported by concrete foundations. At the central roofline of the 2.5-story building is an original concrete and steel smokestack, 159 feet in height (**Photo 1, Figure 6**). The smokestack bears the current business name associated with the property, "Abbott Machine Co." The southwest 2.5-story area of the power house has an original gable monitor roof and clerestory steel sash windows (**Photos 1, 4, 20**). The northeast 2.5-story portion of the power house mimics the aforementioned roof plan but does not include a gable monitor. The southeast and northwest walls rise above the roofline, mimicking those on the southwest **Photo 2**). The rear two-story transformer house has a steel truss roof. The one-story c. 1920 connector addition has an asphalt covered roof (**Photo 5**). At the northwest corner of the complex are two one-story c. 1925 additions with shed roofs (**Photos 2-4**). The property also features two paved parking areas (northwest and southeast) and a prefabricated warehouse (**Photos 6-7**) constructed in 1991 and enlarged in 1997. The warehouse is situated immediately north of the power house.

Southeast Elevation

The primary elevation (**Photo 1**) of the power house faces southeast toward the aforementioned customer parking lot. As noted above, the southeast elevation of the northeast 2.5-story primary building is slightly set back. From the position of the southwest projecting elevation, the northeast elevation supports a one-story shed addition constructed in 1950. The shed addition holds a pedestrian/customer entrance (southeast end) consisting of a single-light aluminum and glass door offset by a single-pane commercial style window. The remainder of the shed addition's southeast elevation is filled with a band of 10 large single-sash aluminum frame windows. Shed metal awnings extend above the entry and windows on the shed addition, creating a porch that rests on a concrete block base. Above the shed addition, the northeast primary elevation features stepped headers that outline the bays. Engaged brick pilasters/buttresses embrace either end of the upper brick wall that extends above the roofline. The northeast end of the upper elevation holds an original window with brick headers and a concrete sill. The window is covered with corrugated plastic and partially filled with a louvered metal vent (**Photo 2**). At the north end of northeast elevation is a one-story corrugated metal shed addition. The addition's southeast elevation holds a garage bay with an overhead track door (**Photo 2**).

The southeast elevation of the 2.5-story southwest section (adjacent to the road) is similar in appearance to the northeast section (**Photo 1**). Differences are the southwest gable monitor/clerestory windows – these do not exist on the northeast portion of the power plant (**Photos 4, 9**). Like the northeast section, engaged brick pilasters/buttresses embrace both ends of the east elevation. All original bays on the southeast elevation are intact but filled, consisting of a loading bay (northeast end), pedestrian door with attached metal awning (southwest end) and an original window situated above the loading bay. This window has likewise been covered by corrugated plastic.

Southwest Elevation

The southwest elevations of the power plant complex face the road, railroad tracks and river (**Photo 9**). Building sections that compose the southwest elevation include the 2.5-story southwest original section of the power house, the one-story connector addition and rear two-story transformer house.

The southwest elevation features seven bays filled with large windows (lower) and small windows above each of the large windows (**Photo 4**). All of the bays are original, covered with corrugated plastic. Windows have original concrete sills and flat brick headers. The window bays are divided by brick buttresses. Between

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the buttresses and above the small upper windows, the elevation's brick is stepped. Visible above the roofline is a gable monitor filled with original multi-sash steel windows.

A one-story brick addition connects the 2.5-story section to the rear two-story transformer house (**Photo 5**). The one-story brick connector has two small windows near the roofline, both of which are covered with corrugated plastic. The windows have brick sills.

The southwest elevation of the transformer house consists of four bays divided by brick buttresses (**Photo 4**). Corbeling is noted at the top of each bay. Three of the bays hold overhead track doors – those in the center of the elevation are larger than the bay opening at the northwest end of the elevation. These bays are capped with concrete below brick headers. The bay at the southeast end of the elevation has been filled with brick, creating a pedestrian door and window – both openings are covered with corrugated plastic. Above the lower doors, each bay holds a smaller window covered with corrugated plastic. All windows have original brick headers.

Northwest Elevation

The portions of the power house complex that have northwest exposed elevations include the 2.5-story power house southwest section, the rear transformer house and two one-story additions at the north corner of the complex.

The northwest elevation retains an original loading bay on the first-floor level filled by a replacement overhead track steel door (**Photos 4, 9, 10**). Offsetting the overhead track door is an original multi-sash window partially covered by the one-story gabled addition. The upper elevation of the addition holds large original window bays covered with corrugated plastic. The bays are divided by brick buttresses. Upper sections of the bays have original corbeling.

The northwest elevation of the transformer house addition has three bays divided by brick buttresses with corbeling within the upper elevation (**Photos 4, 10**). Two original window bays are noted centrally and at the southwest end of the elevation. The northeast bay is infilled with brick and holds a pedestrian door with a metal landing/ladder. The lower elevation has openings in the central and northeast bays, which hold paired pedestrian doors with brick headers. All of the windows and doors on the rear addition's northwest elevation are covered with corrugated plastic.

The building's north corner one-story addition has a northwest elevation composed of two garage bays, offset on the northeast by a solid pedestrian door (**Photos 3, 4, 10**). The southwest garage bay is filled with corrugated metal siding. The northeast bay is partially filled with similar material, creating a wall that holds the pedestrian door. The open garage bay offsets the pedestrian door, supporting an overhead track door. A shed metal roof extends above the elevation, supported by exposed metal.

At the northwest end of the power house (north elevation) is a one-story corrugated metal addition with a shed roof. The northwest elevation of the addition is void of fenestration (**Photo 3**).

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Northeast Elevation

The portions of the power house complex that have northeast exposed elevations include the 2.5-story power plant, the rear transformer house and two one-story north additions.

The northeast elevation of the 2.5-story area holds six bays divided by brick pilasters/ buttresses (**Photo 2**). The upper part of each bay is capped with corbeled headers. The lower level of the elevation holds four large loading bays that have been partially infilled with synthetic and plywood materials. Two of the bays have added (non-original) windows (interior view, **Photo 23**); the remaining two bays have overhead track (non-original) doors. Offsetting these bays on the southeast and northwest ends of the elevation are smaller fenestrations. The southeastern most bay is filled with synthetic siding; the northwestern most bay is partially infilled and holds a contemporary pedestrian door. The upper elevation wall holds six original windows with concrete sills and brick headers. All of the upper windows are covered with corrugated plastic.

The northeast elevation of the rear two-story brick addition features brick buttresses and headers (**Photo 3**). The elevation has no fenestration. An original metal ladder leading to the roof is attached to the elevation near the east end.

The lower level of the transformer house's northeast elevation is obscured by the one-story addition noted earlier (**Photo 3**). The northeast elevation of the addition is metal. A central bay is filled with wood siding. A louvered vent is situated within the wood filled area. The one-story addition attached to the northeast elevation of the 2.5-story power house holds two louvered openings (**Photo 2**).

Warehouse (Non-Contributing)

North of the power plant is a large prefabricated metal warehouse constructed in 1991 and enlarged in 1997 (**Photos 6, 7, 10**). The warehouse has a flat roof, exterior corrugated metal walls and two narrow shed additions – one at the north end of the rear (northeast) elevation and one on the primary (southwest) elevation. The southwest elevation has four garage bays with overhead track doors. The shed addition is near the center of the elevation – the addition's shed roofline is lower than the remaining warehouse. The addition has solid pedestrian doors at the north and south ends of the southwest elevation. The addition's northwest elevation has a garage bay with an overhead track door. The addition has no fenestration on the southeast elevation. The southeast elevation of the main warehouse holds a garage bay with an overhead track door.

Interior Description - Power House

The interior power plant and transformer house retain original concrete floors, steel beam supports, steel sash windows, original wood panel doors, brick walls and concrete ceilings. Original floor plans are intact. The shed additions have concrete floors, exposed metal and brick walls and metal ceilings.

Administrative Addition (1950)

The administrative area at the southeast end of the 2.5-story northeast power plant has epoxy-coated floors, dropped ceilings with fluorescent lighting and walls composed of gypsum (drywall). This addition holds a reception area, offices, a conference room, restrooms and a storage area. The administrative addition appears to have been recently updated (c. 2015). The reception area (**Photo 11**) is directly accessible via a pedestrian

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entry (southeast wall) that leads to/from the customer parking area. A small entry hall separates the reception area from the door leading outside. Offsetting the entry area on the southeast wall is a fixed sash window (**Photo 12**). The reception area has a solid door on the southwest wall, leading to the 2.5-story southwest section of the power house (**Photo 12**). At the northeast end of the reception area are doors leading to a storage area (northwest) and a hall (northeast) (**Photos 11, 13**). The southeast side of the hall has a door leading to a small office. The northeast end of the hall leads to a larger administrative office (**Photo 15**). The southeast walls of offices are comprised of large fixed windows. The northwest side of the hall leads to short intersecting hall providing access to restrooms (southwest), a conference room (northeast) (**Photo 14**), and the 2.5-story northwest section of the power house.

2.5-Story Northwest Power House Section (1913)

As noted, the 2.5-story northeast area of the power house has a concrete floor, exposed brick walls and a concrete ceiling. At the southeast end is a partitioned area that holds two single-light doors leading to the administrative addition (southeast) and a small office (southwest) (**Photo 22**). The partitioned area walls do not extend to the ceilings. Partition walls are wood. Metal steps northeast of the partitioned area lead to a mezzanine. The remainder of the area is open in plan. Large openings with overhead track doors lead to the 2.5-story southeast section of the power house (northeast wall) (**Photo 21**). A similar opening provides access to the corrugated metal one-story addition (northwest wall). Some garage bay openings retain original multi-light transoms. Fenestrations on the northeast wall are partially filled with plywood and corrugated siding (**Photo 23**). The upper portions of these bays hold small non-original windows. The bays that are not infilled support overhead track doors.

2.5-Story Southwest Power House Section (1913)

The 2.5-story southwest area has a concrete floor, exposed brick walls and a concrete ceiling. Visible on the upper southwest wall are the gable monitor's steel sash windows (**Photos 19, 20**). Southwest wall windows are covered with corrugated plastic. Within this area is an original crane (**Photos 18, 19**). On the northeast wall is an original arched opening/hearth used to burn coal (**Photo 17, Figure 7**). Original metal stairs and mezzanines (**Photo 18**) are intact at the southeast end. The northwest end has an overhead track door/bay that leads outside (**Photo 16**). On the northeast wall are the aforementioned open bays (with sliding and overhead track doors) that provide access to the northeast area mentioned above.

1.0-Story Connector Addition (c. 1920)

The single story brick connector addition, which links the 2.5-story power house to the transformer house, has brick walls, a concrete floor and exposed wood beam ceiling with dropped original lighting (**Photo 33**). Original paired four-light wood panel doors on the southeast and northwest walls lead to the adjoined components of the building. There are two fixed sash windows on the upper southwest wall.

2.0-Story Transformer House (1913-1914)

The power house has an original two-story transformer house addition. This open plan area has a concrete floor, exposed brick walls and a concrete ceiling with steel reinforced supports. On the upper southwest wall are original large metal "bolts" placed within brick arched openings (**Photo 30**). The southeast and northwest walls retain original steel sash hopper windows (**Photos 31, 32**). At the northeast end of the addition is an

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area with a dropped original arched concrete ceiling supported by steel beams (**Photos 28, 29**). This area holds an original steel staircase. An opening at the north end of the addition leads to the single-story addition noted below (composed of brick and concrete). Two sets of original paired four-light wood paneled doors lead to the exterior (northwest end) (**Photo 27**).

Two 1.0-Story Shed Additions (c. 1925)

At the north end of the transformer house is a bay with an overhead track door that leads to a one-story shed addition. The addition has a concrete floor, wood ceiling with exposed metal beams, brick (southwest) and concrete (northeast) walls (**Photo 24**). Steel sash windows on the northeast wall are intact but not visible from the exterior, which is clad with synthetic and metal materials (**Photo 25**).

Accessible via the 2.5-story northeast power house area is a corrugated metal one-story addition with metal walls and a concrete floor (**Photo 26**). The addition has an overhead track door on the southeast elevation. On the northeast wall are two original fans. The ceiling retains original dropped light fixtures.

Historic Integrity Overview

Changes to the property since the power house (1913) and transformer house (1914) were completed include the following:

- (1) A detached two-story brick transformer house was connected to northwest elevation of the main power house by a small one-story gabled connector addition constructed c. 1920 (**Photo 5**).
- (2) Two small shed additions were added to the north corner of the brick power house c. 1925 (Photo 3).
- (3) An original metal coal ash bin/structure on the site of the two c. 1925 additions was removed prior to construction of the additions (**Figure 4**).
- (4) The building's primary one-story shed addition on the southeast elevation was constructed in 1950 (Photo 1).
- (5) Windows were covered after the power house discontinued its operation in 1937. Coverings, however, did not remove original windows (**Photo 32**).
- (6) Some garage bays on the northeast elevation of the power house were filled with wood and/or synthetic siding after 1937. Original bay fenestrations are visible. Infill is not permanent (i.e., not brick or concrete) (**Photo 2**).
- (7) Some bays on the rear transformer house addition have been infilled. Two bays have been filled with brick one on the southwest elevation and one on the northwest elevation. Remaining filled bays are covered with impermanent materials (**Photo 4**).
- (8) Interior modifications include modern finishes within the office/reception area (1950 southeast addition), including updated restrooms. The southeast corner of the 2.5-story northeast power house addition was enclosed with frame walls to create a small office area (c. 1950). Of note is that these walls do not attach to the ceiling of the addition (**Photo 22**).
- (9) The aforementioned warehouse was added to the property in the 1990s (Photos 6-7).

The power house remains in its original location and the site has not been significantly altered since the power house complex was completed in 1914. The setting includes the features historically associated with the property including a limestone bluff (north and west) (Photo 8, Figure 5) and railroad tracks, river and highway (southwest) (Photo 9, Figure 4). Parking (southeast) and delivery lots (northwest) are original features of the property. The lots have been resurfaced in recent years (Photos 6-8, 10). Site features are

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otherwise unaltered from the parcel's development and use as a power house complex during the **period of** significance, 1913 – 1937.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in	one or more boxes	for the criteria	qualifying the	property
for National	Register listing.)			

x	А
x	

В

D

Property is associated with events that have made a significant contribution to the broad patterns of our history.

Property is associated with the lives of persons significant in our past.

С	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack
	individual distinction.

Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance

(Enter categories from instructions.)

Industry

Period of Significance

1913 - 1937

Significant Dates

1913-1915

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

A	Owned by a religious institution or used for religious purposes.

B removed from its original location.

- C a birthplace or grave.
- D a cemetery.
 - E a reconstructed building, object, or structure.
 - F a commemorative property.
 - G less than 50 years old or achieving significance within the past 50 years.

Significant Person

(Complete only if Criterion B is marked above.)

Cultural Affiliation (if applicable)

Architect/Builder

Clarke, E.W. & Co. / Builder

Decatur Bridge Company / Builder

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Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations).

The Alton Gas & Electric Power House meets National Register of Historic Places (NRHP) **Criterion A: Industry**. The property is an excellent example of an early twentieth-century electrical power plant. The property was constructed in 1913-1914 as a substation for Keokuk, Iowa's hydroelectric system developed in 1910-1913. Alton's substation began to receive and produce power in 1915, providing electricity for the City of Alton and the surrounding area for the next 13 years. Alton's power plant incorporated the most up to date equipment and was considered cutting edge in terms of its capacity to produce hydroelectricity for residential, commercial and industrial customers. In 1925, Union Electric Company merged with the Mississippi River Power Company, which owned Keokuk's dam/hydroelectric system. A period of improvements ensued that led to reassignment of the power plant in 1928 as an emergency station. In 1937, the plant was permanently closed. The Alton Gas & Electric Power House is **locally significant**. The recommended **period of significance** extends from **1913** – when the station's construction began through **1937** – the year that the power plant was closed as an electrical distributing station.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

Historical Overview

The Alton Gas & Electric Power House is located in Alton, Illinois at 700 W. Broadway, just west of downtown Alton. The power station was constructed in 1913-1914 and operated as a substation for the Keokuk (Iowa) hydroelectric power system developed in the early 1910s. Keokuk was "the largest privately owned and operated dam and hydroelectric generating plant on the Mississippi River."¹ Alton's power plant was a distribution point for Keokuk which produced electricity for residents, commercial businesses and industries in Iowa, Illinois and Missouri.² The power plant in Alton served the city as a whole, as well as Illinois communities on the east side of the Mississippi River. The plant produced coal-powered and hydroelectric energy – considered groundbreaking for the time.³ It was this latter capacity that was most unique. Water as a primary source of electrical power was new for Alton's customers. The city's first power plant was coal powered, constructed in 1855 at 727 Belle Street by Alton Gas & Electric Company (not extant).⁴ Over the following two decades, the plant was expanded to serve Alton's industrial, commercial and (to a lesser degree) residential customers (**Figure 8**). By 1897, Alton Gas & Electric had constructed a new power station at the southwest corner of Piasa and W. 6th Streets (extant) for the power company's owner, Alton Railway and Illuminating Company (**Figures 9 and 10**). The new facility on Piasa Street only generated electricity for streetcars.⁵

¹ Kent Martin, "Keokuk Energy Center: Harnessing the Power of the Mississippi," *Hydro Review* (7 November 2013). Available at: <u>https://www.hydroworld.com/articles/hr/print/volume-32/issue-9/articles/keokuk-energy-center-harnessing-the-power-of-the-mississippi.html</u> (Access date: 17 September 2018).

² Eric A. Lof, "The Mississippi River Hydro-Electric Development at Keokuk, Iowa," General Electric Review (January 1914), 85.

 ³ Chester H. Jones, "Power Systems of the North Central States," *Chemical and Metallurgical Engineering* (15 September 1919), 346.
 ⁴ "Alton Gas & Electric," Ameren Electric Q&A Sheet (undated). Unpublished material in flat file collection for Alton Gas & Electric, Hayner Public Library, Alton, Illinois.

⁵ Sanborn Fire Insurance Maps, Alton, Illinois (Madison County), 1885, 1892, 1897. Available at Library of Congress: <u>https://www.loc.gov/collections/sanborn-maps/?all=true&fa=location:illinois%7Clocation:madison+county</u> (Access date: 30 January 2019

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Incorporated in 1895, the Alton Railway and Illuminating Company was acquired by Alton Railway Gas & Electric Company in 1899. In turn, Alton Railway Gas & Electric became a subsidiary of Alton Light & Traction Co. in 1903.⁶ In 1904, Alton Light & Traction Co. merged with Alton, Granite & St. Louis Traction Company. This latter action placed the company's utilities under direct management of the Alton Gas & Electric Company. Railway and transportation activities remained under jurisdiction of Alton Granite & St. Louis Traction Company.⁷

In 1911, a representative from Keokuk Power Company, Henry Lewis, arrived in Alton to solicit partnerships with power suppliers such as Alton Gas & Electric.⁸ It was an offer too good to pass up. Alton was within the direct path of Keokuk's hydroelectric system that was intended to reach St. Louis by 1913. Hydroelectricity would reduce Alton's already low utility costs and encourage major manufacturers to build in Alton.⁹ While it was known by 1911 that the City of Alton had signed a contract to receive power via Keokuk's system, it was not known that Alton Gas & Power would own the new substation. In 1912, a newly formed Piasa Power and Light Company announced plans to construct a power house in Alton. In an effort to prevent competition, Alton Gas & Electric Company immediately disclosed plans for a power plant "twelve times" larger than Piasa's proposal.¹⁰ This was the plant that would – it was soon learned – receive power from Keokuk dam. In the meantime, Piasa and Alton Gas & Electric struck an agreement whereby the latter would sell power to Piasa so the new company could fulfill its contract to power commercial lighting downtown.¹¹

Site plans for the new power house were announced in January 1913 – a former quarry just west of downtown. The streetcar plant on Piasa Street (Figure 10) would be closed for public use once the new facility began operating and used by Duncan Foundry and Machine Works, which occupied the parcel immediately south (extant, 575 Piasa Street).¹² The quarry site of the new power house had been owned by Henry Watson (1836-1909), an "Englishman" who moved to Alton in 1860 and established Alton Lime and Cement Company.¹³ In addition to his work as a stonecutter, Watson was a real estate speculator and contractor who became involved with the development of several regional utility projects including Alton's Water Works constructed in 1875.¹⁴ The quarry site was favored because of its high limestone bluffs, which would assist in buffering noise and smoke produced by the power house (Figure 11). Another important feature was the site's direct access to transportation. Flanking the quarry on the south were a major east/west highway, the Chicago, Peoria and St. Louis Railroad and the Mississippi River (Figure 12).

Construction expectations were ambitious – plans were to complete the power plant's construction within six months (by June 1913). The project had a number of contractors, including E.W. Clarke & Co. of Philadelphia and Decatur (Illinois) Bridge Company.¹⁵ Prior to beginning construction, laborers had to dig a tunnel through

⁶ Bill Vandervoot, "East St. Louis Transit History," Chicago Transit & Rail Fan Website (Available at:<u>https://www.chicagorailfan.com/eslhistm.html</u> (Access date: 1 February 2019). ⁷ "Formal Transfer of Public Utilities," *Alton Evening Telegraph* (24 September 1904), 1.

⁸ "Seeking Electric Power Patrons," *Alton Evening Telegraph* (16 June 1911), 1.

⁹ "Keokuk Power Co. May Enter Alton," Alton Evening Telegraph (29 August 1911), 1.

¹⁰ "Trying to Solve Secret," Alton Evening Telegraph (17 April 1912), 1; "New Equipment," Power (25 June 1912), 49; "Contracts for Power House Let," Alton Evening Telegraph (21 December 1912), p.1.

¹¹ "Will Use Old Arc Circuit," *Alton Evening Telegraph* (19 August 1913), 1.

¹² "New Power House Watson Quarry Site." 1913; Sanborn Fire Insurance Map, 1915.

¹³ "H. Watson's Identity," *Chicago Tribune* (6 April, 1893), 1; Harry Watson, Records search at Ancestry.com (Available at:

https://www.ancestry.com/search/?name=henry_watson&event=_alton-madison-illinois-usa_38025) Access date: 11 November 2018; McCoy's Alton City Directory, 1901, 11.

 ¹⁴ "H. Watson's Identity," *Chicago Tribune* (6 April, 1893), 1.
 ¹⁵ ""Finishing 160 Foot Stack," *Alton Evening Telegraph* (1 August 1913), 1; Source for steel contractor, Decatur Bridge Company comes from the back of historic photo, collection of Robert Abbott.

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limestone to hold pipes used to transfer water from the river (Figure 13).¹⁶ Three large transformers weighing 31 tons each had to be shipped to the plant via barge on the Mississippi River then elevated to the river's bank and transported by rollers 1.4 miles to the power house (Figure 14). The final transformer did not arrive until mid-August 1913, months behind schedule.¹⁷ Further difficulties arose in July 1914 when residents opposed installation of electrical poles on their property, making right-of-way acquisition nearly impossible.¹⁸ Once the machinery and supporting systems were finally installed, testing had to take place to insure that the electrical current was being properly received and sufficient to power all customers. Not until 1915 was everything in place for the new plant to begin distributing electricity for its customers.¹⁹

From 1915-1928, the Alton Gas & Electric Power House on W. Broadway served as the primary electrical distributing station for Alton and the surrounding area. In 1925, the Union Electric Company (owned by North American Company) merged with Keokuk Dam (owned by Mississippi River Power Company).²⁰ The merger led to reorganization of Alton's power and traction companies in 1926. In relation to the city's electrical system, Alton Gas & Power Company reorganized as Alton Light & Power Company (which operated the electrical plant on W. Broadway) and Alton Gas (which operated the gas plant on Belle Street).²¹ To supply the region's increasing demands for electricity, Union Electric began to construct new power lines and substations during the mid-1920s.²² In 1928, Union Electric purchased the "old steam plant under the bluffs on the river," and relegated it to "an emergency station."²³ The power house closed completely in 1937, remaining vacant until October 21, 1949, when purchased by William (Bill) Abbott, owner of Piasa Tool & Die Company.²⁴ In addition to utilizing the property for his tool & die business, Mr. Abbott used the building to display his vintage automobile collection and for a brief time, operated a dealership in the building. In 1950, Abbott constructed the one-story addition on the façade as an automobile showroom. The addition currently supports administrative activities for Abbott Machine Company.²⁵ Other than this addition and the construction of a detached warehouse (for shipping/receiving) in the 1990s, the property has not been significantly altered since it discontinued distributing electricity in 1937.

Statement of Significance Criterion A: Industry

The Alton Gas & Electric Power House, constructed in 1913-1914, is significant for its industrial associations (Criterion A). Unlike most power plants of its age, the facility had the capability to produce local (coalpowered) and remotely received (water-powered) electricity via Keokuk Dam, Iowa. The property is Alton's first power plant to generate hydroelectricity, providing electrical power to industrial, commercial and residential customers living in Alton and its surrounding communities. In 1928, the property's ownership transferred to the Union Electric Company, which downgraded the plant to an emergency use facility. In 1937, Union Electric permanently closed the substation.²⁶ The power house is an excellent example of an early

¹⁶ "Quarrying Out Power House Site," *Alton Evening Telegraph* (20 March 1913), 1.

¹⁷ "Shipped the Last Transformer," *Alton Evening Telegraph* (18 August 1913), 8. ¹⁸ "Power House Being Delayed," *Alton Evening Telegraph* (17 June 1913), 4.

¹⁹ "Smoke Makers to Suspend at Once," Alton Evening Telegraph (3 May 1915), 1.

²⁰ "Keokuk Dam Merged with the Union Electric Co." *St. Louis Post-Dispatch* (4 October 1925), 1.

²¹ "Tells Rotary Club Story of Utilities," Alton Evening Telegraph (9 October 1930), 2.

²² "Alton Utilities Equipped for City's Growth," Alton Evening Telegraph – Manufacturer's Section (15 September 1928), pages not numbered.

²³ Ibid; "A History of Union Electric Company," Union Electric Company, Brochure, Available at Hayner Public Library, Alton (Flat Files, Alton Gas & Light).

²⁴ "Alton Gas & Electric," Ameren Electric Q&A Sheet (undated), Available at Hayner Public Library, Alton (Flat Files, Alton Gas & Light); "Drain Pond to Obtain Tons of Coal Buried Under Water," Alton Evening Telegraph (21 January 1950), 1.

Interviews with Bob Abbott, (Ruth Keenoy), 8 August and 18 September, 2018.

 ²⁶ "Alton Utilities Equipped for City's Growth," 1928; "Alton Gas & Electric," Ameren Electric Q&A Sheet (undated).

Alton Gas & Electric Power House

twentieth-century hydroelectric substation. Its era of development occurred during a period of time (1895-1915) that the power industry underwent "rapid changes."²⁷ These changes impacted power house designs that prior to 1915, did not follow standardized plans.²⁸ Alton's power plant on W. Broadway served as a primary substation for the Keokuk Power Company's hydroelectric system – it was a necessary component of the transmission corridor erected to provide service to St. Louis, Missouri – the system's southern terminus. The buildings, machinery and methods used to produce electricity from Alton's power house were cutting edge at the time. Although the building's service was relatively short-lived, it reflects an important period of Alton's early twentieth-century prominence as a modern industrial city.

Keokuk's hydroelectric power system developed in 1910-1913 was a significant development that emerged following the example of Niagara Falls, home of the nation's first successful hydroelectric power plant developed in 1895.²⁹ Interests in developing the Des Moines Rapids near Keokuk, Iowa as a source of electrical power emerged in the 1830s. It took 70 years, however, before the project came to fruition.³⁰ Slow progress in developing hydroelectricity was based on the fact that it took powerful machinery to produce electricity using water. Electrical motors sufficient for the task were not developed until the 1870s.³¹ Keokuk's hydroelectric system was one of the nation's largest when constructed. The system extended along the Mississippi River from Burlington, Iowa (north) to St. Louis, Missouri (south), serving a 200-mile radius (**Figure 15**).³² St. Louis was the first city to heavily invest in the development and for this reason, early construction plans focused on reaching this viable market. The plan led Keokuk's investors directly to Alton – just north of St. Louis – to secure an agreement in which Alton would construct a substation sufficient to power customers on both sides of the Mississippi River in southern Illinois.³³

Alton was a well-established manufacturing city by the late nineteenth century. Ready access to the river, rail, coal, oil and other raw materials fed the city's industrial growth after the Civil War (**Figure 16**). By the early 1900s, manufacturers were building most factories outside of the city's limits.³⁴ In response Alton annexed industrial sectors such as the Manufacturing Company Addition, established c. 1900 just west of downtown (**Figure 17**) – this was where the Alton Gas & Electric Company decided to construct its new power house in 1913 (**Figure 18**).³⁵ The city tagged its "manufacturing district" as a broad area by the early 1900s – much of which was outside of the city's limits.³⁶ By 1911, Alton's manufacturing district supported 102 industrial tenants, including the Federal Lead Company and Standard Oil's refinery in Wood River.³⁷ With ready access to highways, the Mississippi River and the railroad, the incorporation of low-cost hydroelectricity was a boon for attracting manufacturing. The city's industrial prominence was no doubt a primary reason why Keokuk Power Company sought Alton as one of its distribution partners.³⁸

³⁷ Ibid.

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 ²⁷ "Hydropower Program – The History of Hydropower Development in the United States," *Bureau of Reclamation* (Available at: https://www.usbr.gov/) Access date: 5 February 2019.
 ²⁸ Ibid.

²⁹ John Aiken and Richard Aiken, *Power the Gift of Niagara* (Buffalo and Erie County Historical Society: [New York, 1962], 7-8;

[&]quot;Niagara Falls/Niagara Power" collection, Brock University Archives (St. Catharine, Ontario), Available at:

http://dr.library.brocku.ca/bitstream/handle/10464/2692/power.pdf (Access date: 12 February 2019).

³⁰ Martin, 2013.

³¹ Dan Ketchum, "Importance of the Michael Faraday Invention of the Electric Motor," *Sciencing*, 25 April 2017, Available at: <u>https://sciencing.com/importance-michael-faraday-invention-electric-motor-7630.html</u> (Access date: 12 February 2019). ³² Lof, 86.

³³ Ibid; "Signed the Water Power Contracts," *The Daily Gate City* (27 October 1908), 1.

³⁴ James Allan Reid, *Reid's Brochure of a Notable American City: Alton Illinois* (St. Louis: Self-published,1912),16.

³⁵ Sanborn Fire Insurance Maps, Alton (Madison County) 1915.

³⁶ "Burlington Service to be Brought Back," *Alton Evening Telegraph* (7 December 1911), 1.

³⁸ "Keokuk Power Company May Enter Alton," *Alton Evening Telegraph* (29 August 1911), 1.

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Alton Gas & Electric Power House

In January 1913, Alton Gas & Electric Company formally announced its construction plans for the new power plant on W. Broadway.³⁹ A number of things were remarkable about the new substation, including its site. The plant's condensing machinery was inserted into hollowed areas below the limestone bluff flanking the property, shielding nearby residents from noise and smoke. Smoke reduction was further enhanced by the use of modern machinery and automatic stokers.⁴⁰ The power plant's machinery was further innovative in terms of its capacity to produce coal-generated and hydroelectric power. The combined effort could not be undersold in terms of its affordability to manufacturers and residential customers. The engineering world was equally enamored of the station's dual production capabilities, which provided useful data for designing electrical stations.⁴¹

Alton's power station was a "high tension" distribution point for the Keokuk system, receiving maximum power and redistributing it at a lower voltage level for customers. In this respect, Alton's power plant was on par with Keokuk's substation in St. Louis – the area's two largest power plants.⁴² In addition to the notable scale of the buildings comprising Alton's power plant, the facility supported a massive smokestack (extant) constructed of reinforced concrete and steel, measuring 159 feet in height with an outer diameter of just over 14 feet (**Figure 6**). The smokestack included a "smoke consuming device" that eliminated "clouds of soot and smoke," generated by coal.⁴³ The Alton Gas & Electric Power House supported the "most compact, powerful" turbine system in existence at the time.⁴⁴ The plant's innovative machinery was designed to pump an average of 10 million gallons of water per day, all of which came from the Mississippi River.⁴⁵ The machinery shipped to the new plant was not only massive in scale, it was highly explosive and dangerous to those involved in the process of transportation and installation.⁴⁶

For more than a decade, the substation on W. Broadway served to power Alton and its neighboring communities' industrial, commercial and residential concerns. Considered one of the region's most powerful and largest power plants in 1915, the facility's effective role in boosting industry and growth ironically led to its decline. By 1928, the plant was no longer considered viable for providing electricity sufficient to support local industry and/or residential customers – both of which expanded rapidly after World War I. The decade between 1910 and 1920 was Alton's most aggressive period of growth to date, requiring upgrades to the city's utility system.⁴⁷ In 1928, the "old steam plant under the bluffs" was retired and Alton's electrical needs were met via new transmission towers connecting the city with Cahokia, Illinois' "giant" coal-powered station constructed in the 1920s.⁴⁸

The power plant in Alton has changed little since 1937 when closed by Union Electric, clearly illustrating Alton's early twentieth-century industrial prominence. The power house is significant under Criterion A (Industry) for its ability to illustrate this era of industrial importance through the power house site (located in one of Alton's early manufacturing additions), setting (large limestone bluffs utilized to buffer industry from residential sectors and access to river, rail and roads) and building composition. The complex in some respects

³⁹ "Keokuk Power for Alton," Alton Evening Telegraph (22 January 1913), 5.

⁴⁰ "New Power House Watson Quarry Site," 1; "Finishing 160 Foot Stack," *Alton Evening Telegraph* (1 August 1913), 1.

⁴¹ Jones, 346.

⁴² Jones, 346.

⁴³ "Finishing 160 Foot Stack," Alton Evening Telegraph (1 August 1913), 1; "Smoke Makers to Suspend at Once."

⁴⁴ "Keokuk Power Arrives in Alton," *Alton Evening Telegraph* (10 September 1913), 1; "Big Power House Ready for Testing;" "Keokuk Power for Alton," *Alton Evening Telegraph* (22 January 1913, full page advertisement), 5.

⁴⁵ "New Power House Watson Quarry Site," 1.

⁴⁶ "Shipped the Last Transformer," 8.

⁴⁷ World Population Review, Alton, Illinois, Available at: <u>http://worldpopulationreview.com/us-cities/alton-il-population/</u> (Access date: 14 February 2019).

⁴⁸ "Alton Utilities Equipped for City's Growth," 1928; "Built St. Louis, The Industrial City, Sauget, The Power Plants," Available at: <u>https://www.builtstlouis.net/industrial/cahokia.html</u> (Access date: 14 February 2019).

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was experimental – constructed when hydroelectricity was an innovative power supply and prior to the incorporation of standardized building plans for power stations. The property is additionally significant for its ability to produce coal and water powered electricity – a feature that no previous power plant in Alton had provided. The building's significance is local, relating to its service area. The years 1913 – 1937 incorporate the property's construction (1913) and use as an electrical power plant.

Alton Gas & Electric Power House

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Abbott, Bob (Robert). Interviews with Ruth Keenoy. 8 August and 18 September, 2018.

- Aiken, John and Richard Aiken. *Power the Gift of Niagara*. Buffalo and Erie County Historical Society: [New York, 1962].
- Alton Gas & Electric," Ameren Electric Q&A Sheet (undated). Unpublished material in flat file collection for Alton Gas & Electric, Hayner Public Library, Alton, Illinois.
- "Alton Utilities Equipped for City's Growth," *Alton Evening Telegraph Manufacturer's Section* (15 September 1928), pages not numbered.
- "Big Power House Ready for Testing," Alton Evening Telegraph. 9 December 1913: 1.
- "Built St. Louis, The Industrial City, Sauget, The Power Plants." Available at: <u>https://www.builtstlouis.net/industrial/cahokia.html</u> (Access date: 14 February 2019).
- "Burlington Service to be Brought Back," Alton Evening Telegraph. 7 December 1911: 1.
- "Contracts for Power House Let," Alton Evening Telegraph. 21 December 1912: 1.
- "Drain Pond to Obtain Tons of Coal Buried Under Water," Alton Evening Telegraph. 21 January 1950: 1.
- "Contracts for Power House Let," Alton Evening Telegraph. 21 December 1912: 1.
- "Finishing 160 Foot Stack," Alton Evening Telegraph. 1 August 1913: 1.
- "Formal Transfer of Public Utilities," Alton Evening Telegraph. 24 September 1904: 1.
- Google Maps. Available at: Google.com (Access date: 9 January, 2019).
- "H. Watson's Identity," Chicago Tribune. 6 April, 1893: 1.
- "A History of Union Electric Company," *Union Electric Company*. Brochure. Available at Hayner Public Library, Alton (Flat Files, Alton Gas & Light).
- "Hydropower Program The History of Hydropower Development in the United States," *Bureau of Reclamation*. Available at: <u>https://www.usbr.gov/</u> Access date: 5 February 2019.
- Jones, Chester H. "Power Systems of the North Central States," *Chemical and Metallurgical Engineering* (15 September 1919: 342-347.
- "Keokuk Dam Merged with the Union Electric Co." St. Louis Post-Dispatch. 4 October 1925: 1.
- "Keokuk Power Arrives in Alton," Alton Evening Telegraph. 10 September 1913: 1.

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"Keokuk Power for Alton," Alton Evening Telegraph. 22 January 1913: 5.

"Keokuk Power Co. May Enter Alton," Alton Evening Telegraph. 29 August 1911: 1.

- Ketchum, Dan. "Importance of the Michael Faraday Invention of the Electric Motor," *Sciencing*. 25 April 2017. Available at: <u>https://sciencing.com/importance-michael-faraday-invention-electric-motor-7630.html</u> (Access date: 12 February 2019).
- Lof, Eric A. "The Mississippi River Hydro-Electric Development at Keokuk, Iowa," *General Electric Review*. January 1914: 85-391.
- Madison County, Illinois GIS Viewer. Available at: <u>https://maps.co.madison.il.us/madco/gisviewer/index.html</u> (Access date: 9 January 2019).
- Martin, Kent. "Keokuk Energy Center: Harnessing the Power of the Mississippi," *Hydro Review* (7 November 2013). Available at: <u>https://www.hydroworld.com/articles/hr/print/volume-32/issue-9/articles/keokuk-energy-center-harnessing-the-power-of-the-mississippi.html</u> (Access date: 17 September 2018).
- McCoy's Alton City Directory. 1901: 11.
- New Equipment," Power. 25 June 1912: 49.
- "New Power House Watson Quarry Site" Alton Evening Telegraph. 22 January 1913: 1.
- "Niagara Falls/Niagara Power" collection. Brock University Archives (St. Catharine, Ontario). Available at: <u>http://dr.library.brocku.ca/bitstream/handle/10464/2692/power.pdf</u> (Access date: 12 February 2019).
- "Power House Being Delayed," Alton Evening Telegraph. 17 June 1913: 4.
- "Quarrying Out Power House Site," Alton Evening Telegraph. 20 March 1913: 1.
- Reid, James Allan. Reid's Brochure of a Notable American City: Alton Illinois. Self-published: St. Louis, 1912.
- Sanborn Fire Insurance Maps, Alton, Madison County, Illinois: 1885, 1892, 1897, 1902 and 1915. Available at Library of Congress: <u>https://www.loc.gov/collections/sanborn-maps/?all=true&fa=location:illinois%7Clocation:madison+county</u> (Access date: 30 January 2019).
- "Seeking Electric Power Patrons," Alton Evening Telegraph. 16 June 1911: 1.
- "Shipped the Last Transformer," Alton Evening Telegraph. 18 August 1913: 8.
- "Signed the Water Power Contracts," The Daily Gate City. 27 October 1908: 1.
- "Smoke Makers to Suspend at Once," Alton Evening Telegraph. 3 May 1915: 1.

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"Tells Rotary Club Story of Utilities," *Alton Evening Telegraph.* 9 October 1930: 2. "Trying to Solve Secret," *Alton Evening Telegraph.* 17 April 1912: 1.

Vandervoot, Bill. "East St. Louis Transit History," *Chicago Transit & Rail Fan Website*. Available at:<u>https://www.chicagorailfan.com/eslhistm.html</u> (Access date: 1 February 2019).

Watson, Harry. Records search at Ancestry.com. Available at: https://www.ancestry.com/search/?name=henry_watson&event=_alton-madison-illinois-usa_38025 (Access date: 11 November 2018).

"Will Use Old Arc Circuit," Alton Evening Telegraph. 19 August 1913: 1.

World Population Review. Alton, Illinois. Available at: <u>http://worldpopulationreview.com/us-cities/alton-il-population/</u> (Access date: 14 February 2019).

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Name of Property

Previous documentation on file (NPS):

- _____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 #_____
- recorded by Historic American Landscape Survey # _____

OMB No. 1024-0018

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Primary location of additional data:

- x State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- **x** Other Abbott Machine Company, Alton, IL (current owner) Name of repository:

Historic Resources Survey Number (if assigned):

10. Geographical Data

Acreage of Property Approx. 3.75 acres

(Do not include previously listed resource acreage; enter "Less than one" if the acreage is .99 or less)

Latitude/Longitude Coordinates

Datum if other than WGS84: (enter coordinates to 6 decimal places)

1	38.894464 Latitude	-90.195990 Longitude	3 Latitude	Longitude
2	Latitude	Longitude	4 Latitude	Longitude

Verbal Boundary Description (Describe the boundaries of the property.)

The property boundary encompasses two parcels identified in Madison County, Illinois, number as follows: 23-1-07-11-17-301-004 (eastern half of property) and 23-1-07-10-20-401-009 (western half of property). The parcels are featured in Figure 2. The boundary, which follows the definitions of these two tax parcels, follows the bluffs surrounding the property and the road bounding the south end of the property. The boundary includes all of the area historically associated with the Alton Gas & Electric Power House. The two parcels encompass approximately 3.75 acres.

Boundary Justification (Explain why the boundaries were selected.)

The boundaries were selected because this area is historically associated with the Alton Gas & Power House. The boundaries include the original parcel associated with the power house during the period of significance, 1913 - 1937.

11. Form Prepared By				
name/title	Ruth Keenoy	date _07/07/2019		
organization	Keenoy Preservation	telephone 314-637-6441		
street & numb	er 5229 Oleatha Avenue	email <u>rdkeenoy@gmail.com</u>		
city or town	St. Louis	state MO zip code 63139		

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Additional Documentation

Submit the following items with the completed form:

- GIS Location Map (Google Earth or BING) (Figure 21)
- Local Location Map (Figures 1 and 2)
- Site Plan (Figures 3, 19)
- Floor Plans (As Applicable) (Figure 20)
- Photo Location Map (Figures 19-20) (Include for historic districts and properties having large acreage or numerous resources. Key all photographs to this map and insert immediately after the photo log and before the list of figures).

Photographs:

Submit clear and descriptive photographs. The size of each image must be 3000x2000 pixels, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Alton Gas & Electric Po	wer House		
Alton			
Madison	State:	IL	
Ruth Keenoy			
19 September 2018			
	Alton Gas & Electric Po Alton Madison Ruth Keenoy 19 September 2018	Alton Gas & Electric Power House Alton Madison State: Ruth Keenoy 19 September 2018	Alton Gas & Electric Power House Alton Madison State: Ruth Keenoy 19 September 2018

Description of Photograph(s) and number, include description of view indicating direction of camera:

Photo 1 of 33: Exterior, primary (southeast) view, NW Photo 2 of 33: Exterior, northeast elevation, SW Photo 3 of 33: Exterior, northwest and northeast elevations, E Photo 4 of 33: Exterior, northwest and southwest elevations, NE Photo 5 of 33: Exterior, addition connecting power house to transformer house, N Photo 6 of 33: Warehouse, southwest elevation – west end (NC), NW Photo 7 of 33: Warehouse, southwest elevation - east end (NC), NE Photo 8 of 33: Limestone bluff bordering north end of parcel, N Photo 9 of 33: Power House (right) and river/rail/road (left), E Photo 10 of 33: Warehouse and Power House, NE Photo 11 of 33: Interior – administrative area, NW Photo 12 of 33: Interior - administrative area, SE Photo 13 of 33: Interior – front hall (addition), N Photo 14 of 33: Interior – conference room, NW Photo 15 of 33: Main office - NE Photo 16 of 33: Southwest power house interior, W Photo 17 of 33: Southwest power house interior, detail of north wall Photo 18 of 33: Southwest power house interior, east end, E Photo 19 of 33: Southwest power house interior, E Photo 20 of 33: Clerestory windows detail, south power house interior Photo 21 of 33: Northeast power house interior, S Photo 22 of 33: Office area and mezzanine, northeast power house interior, E

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Photo 23 of 33: Window infill, northeast power house interior, north wall, NE Photo 24 of 33: Rear addition, N end of complex, interior, E Photo 25 of 33: Rear addition, N end of complex, interior, NW Photo 26 of 33: Rear addition, northeast elevation interior, NW Photo 27 of 33: Transformer house, interior west wall doors, SW Photo 28 of 33: Transformer house, below mezzanine, E Photo 29 of 33: Transformer house, molded concrete ceiling detail Photo 30 of 33: Transformer house, south wall interior detail Photo 31 of 33: Transformer house, west wall interior detail Photo 32 of 33: Transformer house, window on east wall Photo 33 of 33: Interior, connector addition, E

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Section number Additional Documentation

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List of Figures

(Resize, compact, and paste images of maps and historic documents in this section. Place captions, with figure numbers above each image. Orient maps so that north is at the top of the page, all document should be inserted with the top toward the top of the page.

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Figure 1. Location Map – Red marker on left is location of Alton Gas & Electric Power House, 700 W. Broadway, Alton (Madison County), Illinois (Source: Google Maps, 2019).



Figure 2. Parcel Map, 700 W. Broadway (two parcels). Blue line outlines the nominated property's boundary. Power house is yellow; warehouse is green (Source: Madison County, Illinois GIS, 2019).

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Figure 3. Site Map – Alton Gas & Electric Power House, Madison County, Illinois.

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Figure 4. View of the power house from the bluff bounding the site. Photo taken in 1914 as the transformer house was being completed (brick building opposite the smoke stack). Note the coal ash bin in the foreground, removed in the 1920s. The buildings on the right were removed after construction. Photo courtesy of Robert Abbott.



Figure 5. Power House under construction, 1913. Note limestone bluff on left and smoke stack being constructed at center of image. Photo courtesy of Robert Abbott.

United States Department of the Interior National Park Service

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Figure 6. Power House and Transformer House, November 1913, view is southeast. Note smoke stack which was one of the first components constructed. Photo courtesy of Robert Abbott.

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Figure 7. The northeast wall of the southwest 2.5-story power house addition appears much the same as it did in this photo from 1914. Photo courtesy of Robert Abbott.



Figure 8. Sanborn Fire Insurance Maps, Alton, 1885 (left) and 1892 (right). Note expansion of "Alton Gas Works" (circled) – the city's first power plant. Source: Library of Congress (<u>https://www.loc.gov/collections/sanborn-maps/?all=true&fa=location:illinois%7Clocation:madison+county</u>), Access date: 30 January 2019.

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Figure 9. Sanborn Fire Insurance Maps, Alton, 1902. The plant on the bottom right was originally constructed to power streetcars. Source: Library of Congress (https://www.loc.gov/collections/sanborn-maps/?all=true&fa=location:illinois%7Clocation:madison+county), Access date: 30 January 2019.

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Name of multiple listing (if applicable)

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BIT OF ONE OF THE MANUFACTURING CENTERS OF ALTON. A Hive of Industries, Showing a Portion of the Plants of the Beall Brothers, The Duncan Foundry and Machine Works and the Electric Power Plant in the Valley, with the Beautiful Highlands of North Alton Beyond.



Figure 10. Former power house for Alton Railway and Illuminating Company of which Alton Gas & Electric was a subsidiary. Located at 603 Piasa Street – upper is view in 1912 (circled, NW, Reid 1912, p. 17) lower is current view is (southeast, Google Maps, 2018).

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N/	-

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Figure 11. Note residences on top of bluff. The bluff was intended to buffer noise and smoke from the power plant. The building in the foreground was a temporary construction office (1913). Photo courtesy of Robert Abbott.



Figure 12. Site for power plant in 1914. Note railroad tracks and Mississippi River on the right. Photo courtesy of Robert Abbott.

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Figure 13. Circulating water pipe trench below train trestle, June 1913. Photo courtesy of Robert Abbott.



Figure 14. Transporting an intake pipe via river, December 1913. Photo courtesy of Robert Abbott.

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Fig. 1. Map of Country Served by Keokuk Development

Figure 15. Figure illustrating Keokuk power system area of service/transmission lines. Alton is circled in red (Source: Lof, 1914, 86).



A HALF MILE OF THE PRESENT ALTON WATER FRONT.

From This Point for More than Ten Miles There are Desirable Locations-Desirable for Manufacturing Purposes, to Supplement the Federal Lead Works, the Straw Board Factory, the Hapgood Plow Works, the Illinois Glass Works, the Western Cartridge Company, the Equitable Powder Manufacturing Company, and the Wood River Refinery of the Standard Oil Company.

Figure 16. Alton's industrial riverfront in 1912; view is north (Source: Reid, 1912, 30).

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10 Mississippi River

Figure 17. Alton's Manufacturing Company Addition was west of downtown (circled) - site for the new power house in 1913. This addition was initially illustrated on the city's 1902 Sanborn maps (Source: Sanborn Fire Insurance Map, Alton, Madison County, 1915).

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Figure 18. The 1913 power house as illustrated on Alton's 1915 Sanborn map collection. The reference to "east St. Louis Light & Power" relates to one of the Alton, Granite & St. Louis Traction Company's subsidiaries (Source: Sanborn Fire Insurance Map, Alton, Madison County, 1915).

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Figure 19. Site Plan and Photo Log (Exterior). Alton Gas & Electric Power House, Madison County, Illinois.

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Alton Gast Light CO Floor Plan too W. Broadway 9 (Photo Map) 10050 100 HOCH over head door werhead corruga metal + GR + Privers torn meia 1 story winn 7 120 loverhead overhead truck track door brick 4001 Brick brick wall 2.5 stones 2.5 Staries Milled baye (21) 6 20 6 - CONPINO OVERERO track SUNG mezzanine 13 Office ENLIDS wing ea to hall ston 10 bay-wind le niclosed - Chillord 1950 addition Shes ertry garage. door foyer 1 bai Parkine Madisonko, IL

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Figure 20. Floor Plan and Photo Log (Interior). Alton Gas & Electric Power House, Madison County, Illinois.

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Figure 21. GIS Map, Google 2019.

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UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

Requested Action:	Nomination				
Property Name:	Alton Gas & Electric Power House				
Multiple Name:					
State & County:	ILLINOIS, Madison				
Date Recei 7/15/201	ved: Date of 1 9 8/5	Pending List: D 9/2019	Pate of 16th Day: [8/26/2019	Date of 45th Day: 8/29/2019	Date of Weekly List: 8/30/2019
Reference number:	SG100004309				
Nominator:	SHPO				
Reason For Review:					
Appeal	ppeal			Text/Data Issue	
SHPO Request		Lands	scape	Photo	
Waiver		Natior	nal	Map/Boundary	
Resubmission		Mobile	e Resource	Period	
X Other		TCP		Less than 50 years	
		CLG			
X Accept Return Reject 8/28/2019 Date					
Abstract/Summary Comments:					
Recommendation/ Criteria					
Reviewer Barbara		Discipline	Historian		
Telephone (202)35		Date			
DOCUMENTATION: see attached comments : No see attached SLR : No					

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.



Illinois Department of **Natural Resources**

One Natural Resources Way Springfield, Illinois 62702-1271 www.dnr.illinois.gov JB Pritzker, Governor Colleen Callahan, Director

July 11, 2019

Ms. Barbara Wyatt, National Park Service National Register of Historic Places 1849 C Street, NW, Mail Stop 7228 Washington, DC 20240

Dear Ms. Wyatt:

Enclosed are the disks that contain the true and correct copies of the National Register nomination recommended for nomination by the Illinois Historic Sites Advisory Council at its June 28, 2019 meeting and signed by the Deputy State Historic Preservation Officer:

Alton Gas and Electric Power House, Madison County Downtown Urbana Historic District, Champaign County First Congregational Church of Des Plaines, Cook County Rollo Congregational United Church of Christ, DeKalb County

PLEASE NOTE:

The US Post Office building in the Downtown Urbana Historic District is leases, not owned, by the USPS.

A corrected signature page for Fredrick Louis House, Barrington Hills, Lake County (Reference Number SG100003649) is included.

Please contact me at 217/785-4324 if you need any additional information. Thank you for your attention to this matter.

Sincerely,

Ant- Heatly per

Andrew Heckenkamp, Coordinator, Survey and National Register program Illinois State Historic Preservation Office/Illinois Department of Natural Resources Attachments