United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

1. Name of Property

historic name **Louisville & Interurban Railway Co. High Street Power Station**

other names/site number LG&E Canal Generating Station, JFWP-328

Related Multiple Property NA

2. Location

street & number 2005 Northwestern Parkway NA not for publication

city or town Louisville NA vicinity

state Kentucky code KY county Jefferson code 111 zip code 40203

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, 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. I recommend that this property be considered significant at the following level(s) of significance:

___ national ___ statewide _X_ local

Applicable National Register Criteria:

_X__A ___B ____C ___D

Signature of certifying official/Title **Craig Potts/SHPO** Date

Kentucky Heritage Council/State Historic Preservation Office
State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official Date

Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

___ entered in the National Register
___ determined eligible for the National Register
___ determined not eligible for the National Register
___ removed from the National Register
___ other (explain:) _____

Signature of the Keeper Date of Action

Louisville Railway Company High Street Power Station | Jefferson County, Kentucky
Name of Property | County and State

5. Classification

Ownership of Property
(Check as many boxes as apply.)

- [X] private
- [ ] public - Local
- [ ] public - State
- [ ] public - Federal

Category of Property
(Check only **one** box.)

- [X] building(s)
- [ ] district
- [ ] site
- [ ] structure
- [ ] object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
2	0	buildings
		district
		site
		structure
		object
2	0	**Total**

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions.)

INDUSTRY/PROCESSING/EXTRATION/Energy facility

TRANSPORTATION/rail related

Current Functions
(Enter categories from instructions.)

VACANT/NOT IN USE

7. Description

Architectural Classification
(Enter categories from instructions.)

NA

Materials
(Enter categories from instructions.)

foundation: Concrete, steel
walls: Brick Curtain with Glazed Brick Detailing
Steel and Transite Sheeting
roof: Five Ply Tar & Gravel
other: Steel Framing Throughout

Narrative Description

Summary Paragraph

The Louisville Railway Company High Street Power Station (JFWP-328) is an electric generating complex. It was known from 1912-1930 as the High Street Power Station, as it served the Interurban network. It was purchased in 1930 by Louisville Gas & Electric Company, and given the name LG&E Canal Generating Station. The property is located at 2005 Northwestern Parkway in Louisville, Jefferson County. The LG&E Canal Generating Station, the principal structure on site, was built 1912-1913 and was designed by D. X. Murphy & Brothers Architects of Louisville.[i] The building served as a Power Station or electrical current generating facility for the day-to-day streetcar operations of the Louisville & Interurban Railway Company, and later as a utility power generating station for LG&E. The other structures in the complex are the Screenhouse Building (circa 1913), the Switching Station Control House, steel arch warehouse building, and the switchyard. Only 1.67 acres historically associated with the LG&E Canal Station site are proposed for listing, along with 2 contributing buildings. The remaining part of the current-day 13.89-acre property are not proposed for listing. They stand in proximity to the nominated area.

LOJIC Parcel of 13.89-acre site

Google Earth display of site with 5 coordinates labeled

The property became Louisville & Interurban Railway Company's third and last generating station. The first was at 17th & Walnut streets, and quickly became inadequate. The second was the Campbell Street plant, south of Finzer Street. In 1912, the Louisville Railway Co. began construction of the High Street plant. The grounds extended from about 20th Street to about 26th Street, between High Street (now Northwestern Parkway) and the canal. It produced 3-phase power at 25 cycles and perhaps 13,200 volts. By 1924, it was supplying all of the railway company's power. However, on July 1, 1930 it was sold to LG&E, along with the distribution system and substations for $3 million to raise money to pay off part of the railway company's mortgage bonds. LG&E installed 60-cycle generators and equipment at the plant in the 1930s and 1940s. The plant continued to supply

[i] Louisville & Interurban Railway D. X. Murphy Architectural Rendering, UofL Photographic Archives, 1912

25-cycle power for the railway company until May 1951, when the last electric-powered trolley bus line was abandoned.[ii]

Character and Historic Use of the Site

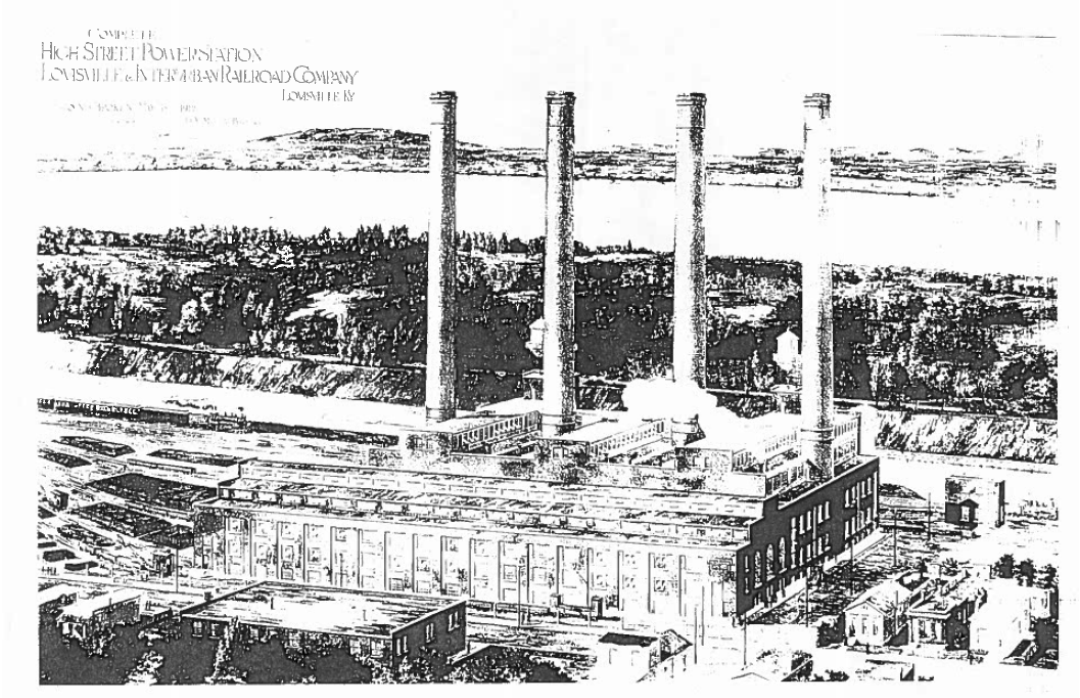
The LG&E Canal complex is located on a site in north central Louisville adjacent the Ohio River, just southeast of the US Lock & Dam and Lannan Memorial Park. It is located along Northwestern Parkway (High Street). To the south of the complex lies the Portland neighborhood, with the Pennsylvania Railroad Bridge and tower to the southeast, and running along the north side of the complex is Louisville's Riverwalk. The site has been under the ownership of two owners, and has had a range of features, which supported a variety of power generation and railroad operations. The site today has a remnant of both of those owners in its LG&E Canal Generating Station Building and Screenhouse. It will be useful to observe the property's changes over time, as changes can be understood by examining historical photographs and blueprints.

Historical Photographs and Blueprints (1912-1966)

By using information extracted from various historic photographs and drawings, a chronology can be traced of the structure, that helps tell the story of the Electric Streetcars and the Electric Industry in Louisville, and across Kentucky.

The site as depicted in a 1912 D. X. Murphy Architectural Rendering as part of the UofL Photographic Archives

In an architectural rendering by D. X. Murphy, the High Street Power Station can be seen as designed, and is dated as construction starting in 1912. It can be seen in this rendering that the original plans for the station as to be built for the Louisville & Interurban Co. was to have four chimneys, and be approximately twice the length of the existing structure in the direction parallel to the road and river; likely containing many more boilers and turbine generators. This rendering also shows the constructed screen house used for the intake of river water for plant operations. Originally designed to power the electric streetcars of Louisville solely, it is likely that the original four-chimney design had considered future electrical demand for an expanding streetcar network, which never came to fruition.



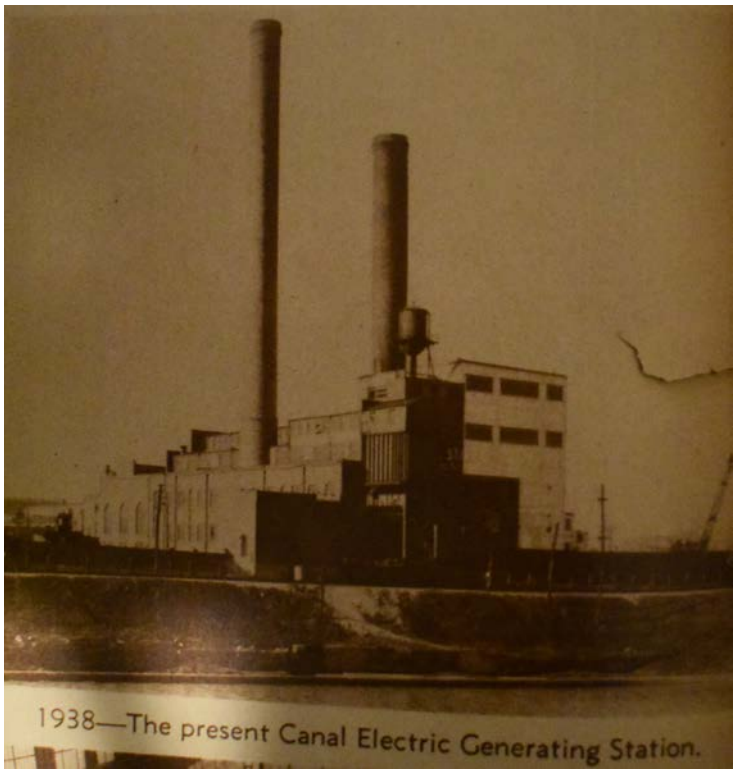
Murphy's 1912 Rendering

[ii] Personal correspondence, Martin E. Biemer, Louisville Streetcar Historian, August 27, 2017

The structure as seen in a 1921 photograph as part of the Caufield & Shook Collection of UofL Photographic Archives

As seen in a photograph of the power station taken on September 23rd, 1921, only one chimney had been built up to that time, and the building only had been built with the easternmost of the three long clearstories above the boiler room. The screen house can also be seen in the foreground, along with the coal unloading hopper roof structure. The structure at this time was still owned and operated by the streetcar company, and can be seen generating current at the time the photograph was taken as exhaust gases rise from the lone chimney.

1921 Photograph



1938 photograph from *Courier-Journal*

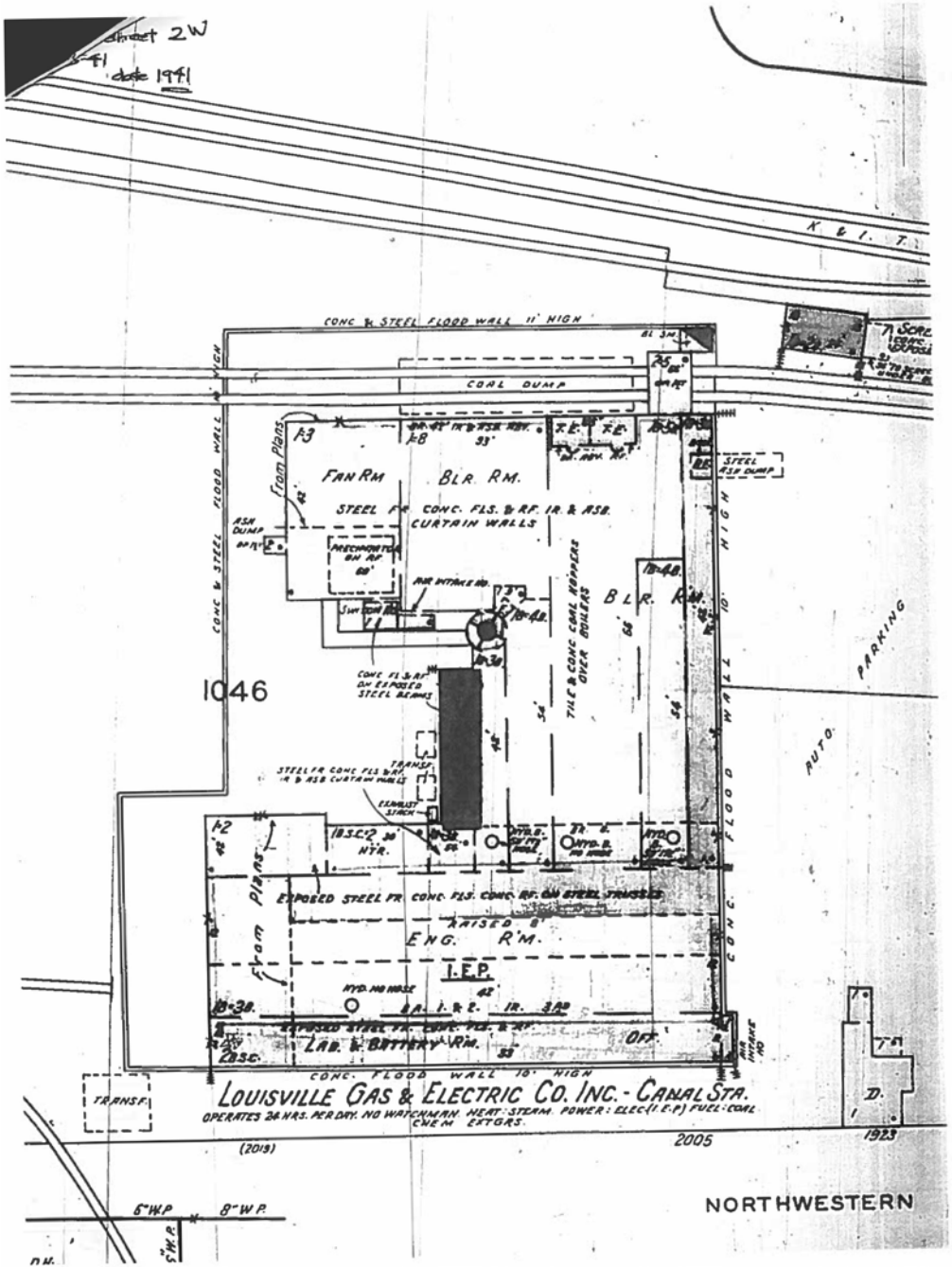
As seen in a photograph of the power station taken in 1938, it can be seen that the second chimney (of a larger diameter and shorter height than the first) had been built, and the 1937 boiler room addition had been mostly completed. The flood wall is also seen in front of the building, as installed in response to the Ohio River flood of 1937. The Canal station, except for the part of the chimneys extending beyond the roofline and the ash loading hopper, is seen in this 1938 photograph just the same as it is today.

The structure as seen in various LG&E company project photographs and blueprints from 1937- 1941

In July 1930, Louisville Gas & Electric Co. had purchased the High Street Power Station, renaming it the Canal Power Station. Immediately work began to convert the station for the generation of utility electricity. In these photographs it can be seen by January of 1937 the second (west) chimney had been constructed. Immediately adjacent to his newer chimney on the river side of it, the company demolished a part of the West boiler room to make way for the installation of a newer larger boiler, as well as draft fans and fly ash precipitators.

This new addition was covered in siding rather than brick, and is easily visible by examining the structure. In addition to the modifications of the structure for new generation equipment, the building also had a concrete

floodwall installed as part of the structures exterior walls. This floodwall modification though started in the beginning of January, was still being constructed in December of that year, not being complete upon the coming of the great flood of the Ohio River in early 1937. Thusly, repairs to equipment in the structure had to be made as seen in project photographs. Photographs dating from 1941 show modification work still being completed, both inside and outside of the structure, as part of the conversion of the station, including the construction of the 66 KV switching Station on the west end of the property.



1941 Sanborn Map image

The structure as retired in 1966, as seen today and as described in 2013 LG&E Study

Since the retiring of the Canal Power Station in 1966, the structure has remained relatively intact, though LG&E has made some changes outside the structure. Between 1966 and the present, the coal hoppers have been backfilled, and the overhang roof removed. The ash bunker which was overhead the coal unloading tracks and protruded from the building adjacent the roof water tank, was also removed. The coal pile between the switchyard and power station building is no longer present, with the location leased to and used as laydown by Miller Pipeline. All railroad tracks from the site have been removed. By 2009 levee reinforcement work beneath the floodwall was completed to block off the intake/discharge tunnels. The gate with a rail entrance at the northeast corner of the property in the floodwall was permanently closed and sealed off in 2010. The station is in retired condition, with its electric generating equipment still in place.

Generating Station, view to north

Generating Station, view to south

Generating Station Building: Contributing Building

Exterior

The principal structure on site, the LG&E Canal Generating Station Building, is a multi-story structure with a steel frame and exterior brick curtain and steel & transite sheet walls originally built in 1913. When originally constructed, the entire building's exterior was brick, including the chimneys, and contained numerous rectangular and arched windows. LG&E, in the late 1930s, when modifying the plant, installed transite and steel siding on about one fourth of the structure. The generating station has a concrete floodwall surrounding the entire structure that was added in 1937, and the floodwall is integral to the structure's walls and foundation on the east and south walls.

Northeast façade (river side). Floodwall in foreground

Southwest and Southeast sides. Shot to North

Each façade of the building differs in size, shape, and window arrangement. The most visually attractive façade is the southeast façade, as the glazed brick detailing can still be seen above the arched turbine room windows, with patterns running along the entire length of the structure. Both the turbine and the boiler rooms each have stepped rooflines, with rows of windows running along each step. The remains of the two brick chimneys can be seen protruding from the roofline. Near the northeast corner of the building, a steel water tank resides on the roof. This tank is of welded construction, and has a bowl shaped bottom, and a conical roof. Directly below the water tank on the northeast brick façade is the remnants of the painted sign reading “CANAL POWER STATION LOUISVILLE GAS & ELECTRIC”, with the words “LOUISVILLE RAILWAY” showing through from behind.

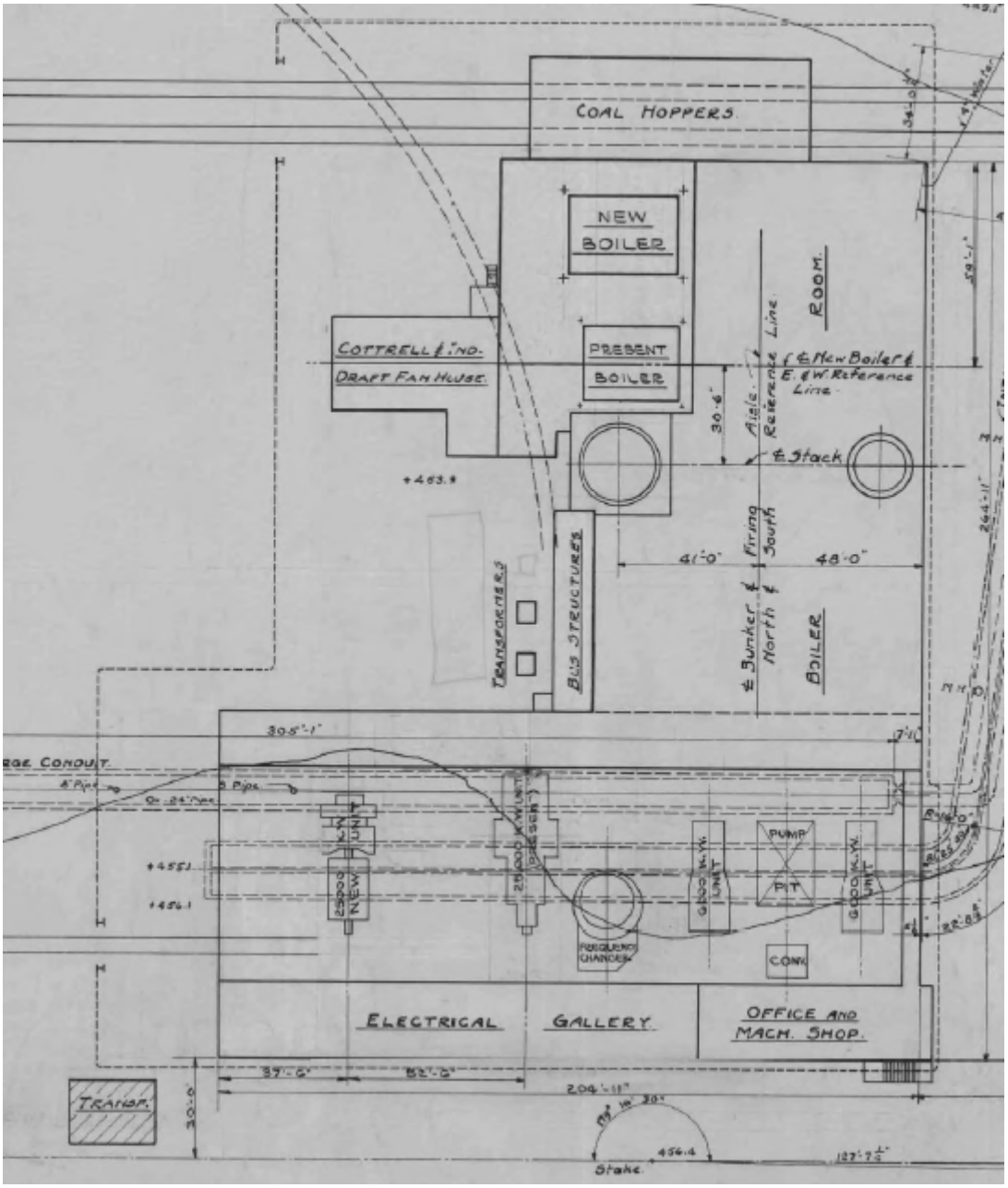
Northeast façade

Northeast facade

Interior

The interior of the LG&E Canal Station consists of exposed steel columns, girders, and trusses, has an exposed ceiling structure, and concrete and steel grating floors. The interior consists of six main areas: the boiler room, the turbine room, fan room, basement, electrical gallery, and office/machine shop. The boiler room located in the northeast corner of the building housed four coal-fired boilers, with two approximately one-hundred feet in height, and approximately twenty feet by twenty feet square, and the other two approximately sixty feet in height. Housed between the two sets of two boilers in the boiler room were the coal hoppers, each holding between 100 - 125 tons of coal to be pulverized. The boiler room extended the entire height of the building, from grade elevation up. The turbine room, located on the south end of the building and spanning the building’s entire width, housed four Westinghouse Electric turbine/generators, a large frequency changer, a 50-ton overhead crane, and a railroad track entering from the west side of the room for equipment deliveries. The turbine room also extended the entire height of the building, from grade elevation up, however this portion of the building consists of a lower roof line than the boiler room. The fan room located in the northwest corner of the building housed the induced and forced draft fans, as well as the lower portion of the Cottrell electro-static precipitators for collecting fly ash. The basement, which is 60 feet deep at the lowest point, consists of concrete walls and floors, and housed the condensers for the turbines, as well as intake and discharge tunnels for cooling water, the bottom ash rail cart system, and the coal pulverizers. The electrical gallery located in the far southwest corner of the structure held the various switchgear and other electrical equipment necessary to

distribute the generated power. Directly adjacent to the electrical gallery was the office and maintenance shop, which was located in the far southeast corner of the structure.



Interior floor plan

LG&E Screenhouse Building: Contributing Building

Exterior

The LG&E Screenhouse Building is a simple utilitarian building that is rectangular in shape located at the northeast corner of the Canal Station structure just outside of the floodwall. This structure housed the screens for filtering debris from intake water entering the station through the intake tunnels. It has brick walls, and a tar and gravel roof similar to the station structure.

Interior
Interior access was not granted because access is restricted by environmental issues.

Screenhouse, looking northeast from Northwestern Parkway

Screenhouse from tracks, looking west

The Switching Station Control House: Contributing Building
The Louisville Gas & Electric Company Switching Station Control House Building was built in 1940. It is a brick structure that is approx. 30 feet by 50 feet and is two stories in height. It is located on the westernmost end of the station property, and is on the south side of the switchyard, adjacent to Northwestern Parkway (High Street). This structure is still in use today by LG&E as part of the electrical substation.

The 66 KV Switchyard: Contributing Structure
The Louisville Gas & Electric Company Switching Station Control House Building was built in 1940. It is made of multiple steel frame structures supporting transformers and electric cabling, and has a footprint of approx. 500 feet by 350 feet. It is located on the Western most end of the station property, and sits between the Switching Station Control House Building and the reinforced concrete floodwall. This structure is still in use today by LG&E. This substation connected the Canal station electrically with the Ohio Falls, Waterside, and Paddy's Run generating stations, as well as the rest of the electrical distribution network.

Transformer Yard

Metal Warehouse (at left)

Metal Warehouse: Contributing Building

The Louisville Gas & Electric Metal Warehouse Building was used for storage of materials, and is currently used by a contractor renting the land adjacent to the Power Station. It was erected on the site adjacent to the coal pile prior to 1949.[iii]

Changes to the High Street Power Station (Canal) since the Period of Significance

The main station structure remains essentially intact and appears as it did circa 1937, after the addition of new boilers and room expansions by LG&E during the period of significance, with a few exceptions. Upon the retirement of the structure, the steel overhanging roof over the coal unloading hoppers on the north façade of the structure, as well as the coal unloading hoppers themselves have been removed/backfilled (date unknown). LG&E also removed the upper portion of both chimneys at an unknown date to prevent risks and hazards related to falling brick or chimney failure. The top portion of both Cottrell precipitators extending above the fan room roof line have been removed at an unknown date. In 2009, the intake, discharge, and de-icing tunnels were blocked off under the flood wall to prevent flood waters from passing under the flood wall through these tunnels. In addition, various windows on all facades near the ground level have been covered with steel and wood coverings for security reasons.

The Screenhouse was constructed circa 1913. The footprint of this building as it appears today is consistent with LG&E company drawings, and historic photographs, with the exception of a small extension on the west façade.

During the Period of Significance there were four railroad spur tracks, two for coal unloading, one for turbine room deliveries, and a fourth for access to the Hart Manufacturing Company on the other side of High Street. All railroad tracks from the property have since been removed, with the floodwall gates for track entrance sealed off in 2010. In addition, there was a coal storage pile located between the station building and the switchyard storing in excess of one million cubic feet of coal (according to a 1963 survey) that has also been removed.

[iii] No Author. Historic aerial photograph, historicaerials.com, 1949

Louisville Railway Company High Street Power Station | Jefferson County, Kentucky
Name of Property | County and State

8. Statement of Significance

Applicable National Register Criteria

X	A	Property is associated with events that have made a significant contribution to the broad patterns of our history.
	B	Property is associated with the lives of persons significant in our past.
	C	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.
	D	Property has yielded or is likely to yield, information in prehistory or history

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.

Areas of Significance
(Enter categories from instructions.)

Industry, Transportation

Period of Significance

1912 – 1966

Significant Dates

c. 1912, c.1930, c.1937, c.1951, C.1966

Significant Person
(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

D. X. Murphy & Brothers Architects of Louisville, Kentucky

Period of Significance

This nomination follows the National Register convention for a property meeting Criterion A: the Period of Significance, 1912-1966, marks the time during which the property is important within its historic context, up to 50 years prior to the time of the nomination. Completed in 1913, the property continued to contribute to the transit system until 1948 when the streetcars were retired, and the electric industry until 1966 when LG&E determined the building was functionally obsolete and retired their power generation operations at the site.

Criteria Considerations: NA

Statement of Significance

Summary Paragraph

The Louisville Railway Co. High Street Power Station (JFWP-328), referred to throughout this document as The LG&E Canal Station, meets National Register Criterion A and is significant within the context, "Streetcar and Interurban Railroad service in Louisville, Kentucky, 1864 – 1951" and "Electric Power Service in Louisville Kentucky, 1930 -1966." The LG&E Canal Station conveys important information about how one midsize American city provided public transportation and electric service in the late-19th and early-20th century. This building indicates increased growth and implementation in the electric service industry that directly correlates to an increase in the number of businesses requiring electric service for their business operations, and the transformation of public transportation modes. The Canal Station Building, the focal point of the site, was constructed in 1912-13 during a period of immense growth of electric power usage.

Historic Context: Public Transit in Louisville, Kentucky, 1864-1951

Louisville before Electric Streetcars

In the earliest days of any city, the fastest means of transit was via horse. Stagecoaches and carriages were the primary means of intercity and urban transport for distances which were too far for walking. Despite the increase in speed over walking, horse drawn carriages were not very fast (4-10 mph). On cities streets, stagecoaches and carriages moved at slow speeds over the rough cobblestone and brick streets so as to not impede on the comfort of passengers. If a faster mode of transit was to come, it needed to provide its users a smoother ride. On November 24th, 1864 this problem was solved in Louisville when the first horse drawn streetcar line went into operation.[iv] Operating over steel rails, the coach provided a smooth and steady ride, and reduced friction, making the cars easier to accelerate for the horses and mules. From 1864 to 1889 horse drawn streetcars traversed the streets of Louisville, transporting passengers and moving commerce.

Louisville's Electric Streetcars

The first electric streetcar operated in Louisville on September 21st, 1889, and ran from Eighteenth Street along Green (Liberty) Street to Baxter Avenue, and out Baxter to Highland Avenue. The electric streetcar provided the first real rapid transit in the city of Louisville. In 1890, Louisville's two transit companies merged to form the Louisville Railway Co. By 1901, the electrification of all streetcar lines in Louisville was complete. Later that same year, the Louisville & Eastern Railroad opened first interurban railway in the area, extending northeast to Crestwood. In 1907 this line was extended to La Grange. By 1910, lines to Okolona, Fern Creek and Shelbyville had been completed.

In addition to the electric streetcar and trolley lines, by the 1890s, Louisville had its own elevated railway built by the K&I Bridge Co. These commuter trains atop the elevated track were organized and operated as a mass transit, intercity commuter rail system. This elevated rapid transit line was electrified two years prior to the famous Chicago "L" system. This elevated line cut the commute time for a trip from Portland to First Street on the electric trolleys from 30 minutes down to just 10 minutes. Though only a few miles long, thousands of Louisvillians commuted on these trains daily, enjoying the regular 15-minute schedules.[v]

[iv] No Author. "100 Years of Public Service." Louisville Courier-Journal, February 13, 1938
[v] Schooling, Ron. "Louisville's Incredible Elevated Rapid Transit Trains." Broken Sidewalk, January 5, 2010.

By the 1920s, private automobile ownership led to a decline in ridership on the streetcars of cities across that nation. The private automobile, as made affordable by Henry Ford, was a more cost effective mode of transportation that provided transportation to any location of a driver's or rider's choice. By the 1930s, the Great Depression greatly accelerated the decline of streetcar ridership. On May 1st, 1948 the last of the Louisville streetcars operated, carrying passengers to the Kentucky Derby.[vi] In 1951 the last electric-powered trolley bus line was abandoned.

Historic Context: Louisville Electric Service In Louisville, Kentucky, 1881-1966

Louisville before Electric Lights[vii]

Prior to the availability of natural gas as an energy source, city streets were considered unsafe and prone to crime because they were illuminated using dimly lit tallow candles. City fathers, including James Guthrie, finance Committee Chairman, pushed for a contractual arrangement with private investors to form the Louisville Gas and Water Company, a for-profit firm which would install gaslight fixtures at street intersections and sell gas to the general public.

According to the Louisville Gas & Electric Company corporate history, "Though first incorporated as LG&E in 1913, the company's service roots can be traced back to 1838, when the Louisville Gas and Water Company was authorized to manufacture gas for lighting streets, businesses, and homes. The service area was an active River trading town of 20,000 people that was rapidly being recognized as a vital link between the settled and sophisticated East Coast and the rough and rugged Midwest and South[viii]."

In 1838, the Louisville Gas and Water Company was chartered by the State of Kentucky. This charter provided that the company provide gas for street lights, in homes, and by businesses. Additionally the 1838 charter provided banking privileges to the Louisville Gas and Water, thus ensuring that the company could collect payment for its services. Under the state charter, the Louisville Gas and Water Company provided gas lights and fixtures used to light city streets[ix].

The Louisville Gas and Water Company first supplied gas to the City Of Louisville on Christmas day in 1839. The city's first residential gaslight was lit before a crowd gathered on Jefferson Street in front of the home of L.L. Shreve, president of the Louisville Gas and Water Company. On that day, Louisville became the "…fifth city in the United States and the 1st city West of the Allegheny Mountains to have gaslights in its streets and homes[x]". Just one year earlier, the Louisville Gas and Water Company had been authorized to manufacture gas for lighting streets, businesses and homes. This action by the Kentucky State Legislature set the stage for Louisville to emerge as a trend setter by facilitating the availability of providing "modern" lighting and energy conveniences to its businesses and citizens.

[vi] Elson, Martha. "Can streetcars make a comeback in Louisville?" Louisville Courier-Journal, September 1, 2016.
[vii] Applicable section from "Louisville Gas & Electric Service Station Complex." United States Department of the Interior National Park Service / National Register of Historic Places Registration Form NPS Form 10-900 OMB No. 1024-0018
[viii] Pg. 3 Light Years: The History Of The Louisville Gas & Electric Company: 1838-1988
[ix] Pg. 513 Louisville Encyclopedia
[x] Pg. 1 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988

Under the leadership of the Louisville Gas Company, Louisville's first gas street lights were put into operation in 1840. The presence of gaslights coincided with an economic boom in the city, which also took place as Louisville's population greatly increased. The appeal of city streets and homes increased with gaslights because businesses could stay open beyond daylight hours.

The Louisville Gas and Water Company built a plant on East Main Street near Jackson Street in close proximity to Beargrass Creek and the Ohio River. It sold gas that was manufactured from coal brought to the site by coal barge. Upon delivery of coal, the raw material was roasted in airtight ovens, unwanted impurities such as ammonia were removed, or "scrubbed" from the gas, and the gas was held in storage tanks until it was delivered to residential and commercial customers using newly laid gas pipes. The Louisville Gas and Water Company's initial service area was small, encompassing much of what is now recognized as Louisville's Central Business District. By 1842, the company's name was shortened, to the Louisville Gas Company, and that year, the state legislature revoked the privilege of constructing a waterworks, eliminated banking privileges, and changed the name of the company to the Louisville Gas Company.

The use of manufactured gas as a modern convenience took off rapidly. By 1848, the city boasted 461 gas illuminated street lights and by 1859, this number increased to 925. In these early years gas use was primarily limited to streetlights. Widespread use for cooking and heating would not become common until the 1880s or later.

In the mid-1800s, the area around Seventh and Ormsby was the heart of the city's gas service. The land was owned by competing companies, with each manufacturing and storing gas on opposite sides of Ormsby Avenue. The area buzzed with trouble men, lamplighters, operators, engineers and other gas workers. Just after the Civil War, the Louisville Gas Company felt competition by the likes of the Brush Electric Light Company and the Citizen's Gas Light Company, which built a plant at 8th and Dumesnil in 1871. The Louisville Gas Company and The Citizens Gas Light Company were direct competitors with one another until a law suit was filed by the Louisville Gas Company, in which they claimed exclusive rights to supply gas to the citizens of the City of Louisville. When the Louisville Gas Company lost their legal battle, new gas companies, including the Kentucky Heating and Lighting Gas Company, emerged to serve a ready market. Competition among these competing gas companies stiffened when the Kentucky Heating and Lighting Gas Company found a way to pipe in natural gas, extracted from the earth, from Mead County at a competitive rate. The gas from Mead County proved to be a short-lived success however, as the natural gas was found to be unpredictable and inferior in quality.

Beginning of the Use of Electricity for Lights in Louisville
The Advent of Electric lights[xi]

By the 1870s, natural gas and gas manufactured from coal were challenged by the new technology of the electric light. Electricity had been present in urban areas from the 1840s, in the form of telegraph lines. Then, in 1876, Louisville Male High School physics and chemistry professor Dr. C. L. Mees, rigged a primitive electric generating dynamo to an arc lamp aboard the Ohio River steamboat "General Lytle" and illuminated the vessel. However, the technology was so new that it scared both passengers and passersby, and as a result, was not readily embraced by the steamboat company's owners or by the general public. Still, owners of the William C.

[xi] Applicable section from "Louisville Gas & Electric Service Station Complex." United States Department of the Interior National Park Service / National Register of Historic Places Registration Form NPS Form 10-900 OMB No. 1024-0018

Kelly Ax Factory in the Portland neighborhood embraced electric light technology, as did proprietors of the Louisville Opera house. They became some of the earliest commercial users of electric light. Also in 1876, at the Louisville Industrial Exposition, predecessor of the Southern Exposition, electric lighting provided for more competition.[xii]

From 1883 to 1887, Louisville's Southern Exposition, a five-year series of world fairs, featured the latest industrial, mercantile and technological innovations and attracted thousands of visitors. The Southern Exposition attracted more than 770,000 attendees to the city. It was located south of Louisville's business district near present-day Central Park in a neighborhood now known as Old Louisville. The highlight was the nation's largest display of (5,000) incandescent light bulbs by former Louisville resident Thomas Alva Edison.[xiii]

Edison's new incandescent light bulb system consisted of 4,600 Edison lights connected by 40 miles of wire. According to LG&E corporate historian George Yater, the display included "… Fuses, insulators, regulating devices, screw bases, sockets, conduits, junction boxes, and meters to precisely measure consumption—none of which had even existed a short time earlier. Virtually every piece of equipment necessary to provide community-wide service was featured at the Expo system. By creating a system that could be installed "off-the shelf," Edison had locked in immediate acceptance and demand for his new light bulb"[xiv]. Edison's display was remarkable, not only because it showcased "the technical feasibility of centralized electric light and power systems" but it also presented this new technology as safe and clean: unlike manufactured gas made from coal or natural gas piped from the earth, the electric light bulb generated much less heat and did not absorb any oxygen from the air. Edison's business colleague, Colonel Henry Marison Byllesbee, oversaw the installation and would later play a key role in the unification and refinement of Louisville's disparate gas and electric companies.

Edison's display of the incandescent bulbs at the Southern Exposition produced two important results: it convinced City Of Louisville Mayor Charles Jacob to install arc lights at the city's Ohio River wharf in 1884, and it inspired businessmen to construct individual power plants to serve their commercial enterprises. "Suddenly, what had been little more than a novelty had become a necessity. Manufacturers, speculators, and electric service companies hastily hung wires everywhere---on polls, buildings, signs, window ledges---on virtually anything that would support the weight of the wire and that didn't move. Some utility poles posted as many as 8 to 10 lines, all at different levels and each hung by a different company. Despite the intense competition, rates were high, service was erratic and most of the electric companies found it difficult, if not impossible to grow efficiently."

The advantage of electric light was that it produced a very bright light that was well-suited to outdoor uses or large interior spaces, but at first it was felt to be unsuitable for use in homes or smaller retail establishments because its light was so bright and the technology was not considered foolproof. Prior to appointment of the City of Louisville's 1st Inspector of Electric Lights and Wires in 1888, installation of electric wiring was haphazard and dangerous. In the early years "… customers were treated to watching the industry's technology unfold inside their homes and shops. Some wires were run through paper tubing; other jobs allowed for floorboards to be removed and grooves to be cut in beams where the wires could be concealed. Ironically for

[xii] Pg. 514 Louisville Encyclopedia
[xiii] LG&E Corporate History, Online Employee Newsletter, July 17, 2014
[xiv] Pg. 14 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988

most installations, the wires ran indoors and the lights were hung outdoors. And because rubber-insulated wire had not been perfected, cloth-covered wire was used exclusively. The safest installations were often little more than accidents waiting to happen"[xv]. Because electric lights were unpredictable and sometimes dangerous, the technology was not readily embraced by the general public in these early years. It was not until Thomas A. Edison invented the incandescent bulb in 1879 as an alternative to the brightly illuminated arc light, that electric lighting became more readily accepted by the general public.

The owners of the Lithgow Stove Foundry, located at Clay and Main Streets, saw great potential in utilizing steam from their own foundry to generate electricity. Jacob Smyser and James Lithgow partnered with the Brush Electric Company of Cleveland, a company that held numerous patents which played a role in the generation of electricity. Using excess steam from the stove foundry during evening hours when the foundry was not in production, enough electricity was generated to power three 40-light dynamos. These dynamos supplied electricity transmitted by a series of lines and polls that reached from Clay Street to 12th Street.

By 1881, electric lights were used to illuminate the Denunzio Fruit Company on Jefferson Street, the first documented retail application of this emerging technology. Other early commercial customers included the Galt House Hotel and the Buckingham Theater. As the use of electric lights increased, so did competition. The Louisville Electric Light Company was established in 1882 and soon provided electricity for both commercial and industrial businesses.

LG&E's historians indicate that, "…factories found the manufacture of their own electricity to serve their own business to be a significant drain on capital and manpower. The electric companies themselves were plagued by costly duplication of service and equipment, and inexperienced management, in the absence of a unified plan for ongoing expansion."[xvi] Despite these challenges, more than 10 new companies were formed by the late 1800s including The People's Electric Light Company, The Kentucky Heating and Lighting Company, The Kentucky Electric Company and the Gooch Electric Light Company, all of whom obtained equipment that had been patented by Edison's General Electricity Company.

In 1888, The Louisville Gas Company sought to diversify to protect its market share. They did so by obtaining a new charter. By 1890, utilizing the structure provided by this new charter, the company secured the right to "manufacture, distribute, and sell" electricity and to buy stock in electric companies. Almost immediately the Louisville Gas Company purchased controlling interest in the Louisville Electric Light Company, the primary supplier of the city's electric-arc lighting.[xvii] With the widespread use of arc lights, gas street lamps soon became obsolete. "By 1893, there were 875 arc lamps on the street, compared with 301 gas lamps. And by April 1899, the last 10 gas lights in Louisville had been replaced by electric lamps."[xviii] The early 1900s saw the rise of infrastructure to support electricity as the newest form of lighting. In 1903, The Louisville Lighting Company was formed and became a major competitor in the local market by providing electricity and by selling electric appliances.[xix] By 1910, The Kentucky Electric Company built an 8,000-horsepower powerhouse, later named Waterside, and laid underground wires to supply electricity for Louisville's downtown network.

[xv] Pg. 13 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988
[xvi] Pg. 17 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988
[xvii] Pg. 17 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988
[xviii] Pg. 18 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988
[xix] LG&E Corporate History

Louisville Gas & Electric Corporate History[xx]

H.M. Byllesby, the Chicago engineer who oversaw the installation of Edison's electric system at Louisville's Southern Exposition of 1883, took note of the changes in the city and eventually entered the Louisville market. By 1913, H. M. Bylesbee and Company of Chicago consolidated the city's many gas and electric utilities to form Louisville Gas & Electric Company, which incorporated on July 2. Bylesbee managed The Louisville Gas & Electric Company (LG & E) under the umbrella of the larger Standard Gas and Electric System, which served 5.5 million customers in 19 states.

The acquisition of gas and electric companies by H. M. Bylesbee was not without its difficulties. In 1913, when LG&E consolidated the competing gas firms and other gas and electric companies into a single entity, it left numerous employees scattered around town, working out of hotels, homes and other odd places. H. M. Byllesby secured the former Louisville Gas Company Building located at 211 W. Chestnut St. in downtown Louisville (a building which now serves as the Louisville Water Company headquarters) as their local headquarters while other LG&E engineering and business functions were scattered throughout the city.

Because gas supplies available were deemed inadequate for Louisville's growing customer base, provisions were put in place to assure adequate supply for the projected demand.[xxi] Before the City of Louisville would approve the consolidation of the city's disparate gas and electric companies, H. M. Bylesbee was required to build a new gas pipeline from West Virginia to Louisville with the expectation that this new service line would provide utility services to Louisville for the next 20 years. City fathers hoped that this move would position the City of Louisville to compete with neighboring cities in the region including Lexington, Cincinnati, and Frankfort, Kentucky.[xxii] This pipeline, ran from Inez, Kentucky, a town located close to the West Virginia border, and was completed in 1914. It would remain in service until 1962. Installation of the pipeline resulted in improved gas quality and in a reduction of gas prices for customers. As a result, gas usage increased tremendously as businesses, industry, and residential customers used more and more gas. Local distilleries became important new customers as well.[xxiii]

By February 2, 1917, daily gas demand by LG&E customers peaked, and the company instituted a conservation program to combat the energy crisis. By the late 'teens, coal industry growth, prompted by World War I manufacturing, resulted in LG&E entering the mining business to ensure it had an adequate supply of coal. The company eventually owned 3 mines, including the Cherry Hill Mine in Muhlenberg County. By 1922, the company mounted a gigantic new sign atop of the newly constructed Waterside Station that clearly established Louisville as the "Gateway to the South". By 1923, LG&E took advantage of a natural resource—water—to generate electricity. LG&E received a license from the federal power commission to construct a dam and hydro-electric plant at the Falls of the Ohio. When completed, the plant had 8 generating units capable of producing 80,000 kilowatts. The plant began operation in 1927.

The local newspaper, the *Courier-Journal,* applauded LG&E's efforts. One reporter wrote,

[xx] Applicable section from "Louisville Gas & Electric Service Station Complex." United States Department of the Interior National Park Service / National Register of Historic Places Registration Form NPS Form 10-900 OMB No. 1024-0018
[xxi] Additional Gas Will Be Provided By New Put Pipeline, Louisville Post, October 23, 1919. LFPL clipping file.
[xxii] Pg. 21 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988
[xxiii] Pg. 22 Light Years: A History Of The Louisville Gas & Electric Company: 1838-1988

> "…electricity in Louisville is produced by steam power in great turbines. The company owns its own coal mine, assuring an ample supply of fuel far into the future. The coal is brought from the mine to the power station in the company's own steel cars."[xxiv]

According to the *Courier-Journal*,

> "…practically all parts of the city are covered by the arteries of gas and electric distribution; most of the people living in the suburban districts are served with electricity as extensively as their city neighbors. The company reaches in Louisville and its suburbs of a population approximate to be considerably in excess of 300,000, and also furnishes electricity on a wholesale basis to the utility companies operating in New Albany in Jeffersonville, Indiana. Recently the properties of the Madison Light and Power Company, at Madison Indiana were added to the system by purchase, and it is intended to make connection with the Waterside Plant by means of a transmission line. How well the company has succeeded in bringing the advantages of low-priced electricity and gas to the people of Louisville is shown by the charts reproduced in connection with this article. Measured in terms of increased output of electricity and gas, increased number of customers in the growth use of service, these figures speak eloquently of the company's part in building a prosperous community. The large increase in the number of customers served is at a much faster rate than the growth in population. It is due to energetic new business methods, to the extension of lines and plant capacities, and to the ability to obtain capital for new construction. The company recognizes the fact that municipal and industrial growth depends on adequate utility service, and has made every effort faithfully to discharge its responsibility toward community development."[xxv]

The growth precipitated by the formation of the Louisville Gas & Electric Company by H. M. Bylesbee cannot be overstated. According to the *Courier-Journal*,

> "The largest growth in the entire history of the company from a standpoint of gas and electrical output and customers served was experienced during the past two years. Demand for gas has grown by leaps and bounds and today the company is supplying nearly 600,000,000 ft^3 more than was supplied two years ago, an increase of 21%. Likewise the use of electrical energy supplied by the local firms has increased enormously, making necessary a 45% increase in generating capacity. The company today serves more than 63,000 electrical customers and 45,000 gas customers, the actual increase during the past two years being 9,336 of both classes. During the same period approximately 300 miles of new electrical distribution system have been built and 75 miles of gas mains and pipes installed.[xxvi]

Other buildings in LG&E's real estate portfolio by the late-1920s included: The Waterside Generating Station (located at 3rd Street on River road), The Beargrass Gas Compressor Station (located on Upper River Road near the water tower), the Upper River Road Switching Station, and various smaller substations including the Algonquin (on 7th Street), the Beechmont (at 3rd Street and Kenwood Way), and the Liberty substation (at 223 West Liberty). All served a vital role in delivering energy to homes and businesses through a complex web that involved creating new energy from the Falls of the Ohio hydroelectric plant or processing coal into electricity and then transporting it by electric line to the end-user.

[xxiv] Louisville Gas and Electric Company, Courier-Journal, March 9, 1923
[xxv] The Trail of Progress of the Louisville Gas & Electric Company, Louisville Herald Post, June 15, 1924
[xxvi] Louisville Gas and Electric Company, Courier-Journal, March 9, 1923

Byllesby's accomplishments can best be summed up by his obituary which appeared in the Louisville Post in 1924. According to the obituary, upon his death Byllesby was "…president of H.M. Byllesby and Company, Chicago, chairman of board of the Board of Directors of the Louisville Gas & Electric Company, Pioneer engineer and promoter of electrical, gas and other utilities…" The obituary continues, "Although H.M. Byllesby was seldom in Louisville he had an important influence on the life of the city through the merger of the gas and electric plants in Louisville in March, 1918. The Byllesby Company bought the Kentucky Electric Company and after acquiring the stock merged the Louisville Lighting Company, a rival concern, the Louisville Gas Company, which furnished only artificial gas, and the Kentucky Heating Company, which provided the city with natural gas. These companies were merged and the new concern was called the Louisville Gas & Electric Company.

The City Of Louisville sold all of its stock in the Louisville Gas Company and used the money to construct sewers. Since that time the general terms of the contract were that the company was permitted to increase the charges for electricity in return for which the city was to receive lower gas rates."[xxvii]

Evaluation of the Significance of the Louisville & Interurban Railway Company High Street Power Station within the Context of Public Transit in Louisville, Kentucky, 1864-1951

The first Louisville & Interurban Railway Co. power station was at 17th & Walnut streets; it quickly became inadequate. The second station was the Campbell Street plant, south of Finzer Street. The High Street Power Station was the company's third and last generating station. By 1924, the High Street Power Station was supplying all of the railway company's power for its expansive network, running day and night to keep the trains on time and the city moving; it was the heart of the company's vast transit system. Though the station was sold in 1930 to LG&E, it continued to provide power for streetcars until 1948 when they were finally retired, and for the electric-powered trolley bus lines until 1951 when their service ended. The High Street Power Station and the men who operated it were the unsung heroes that provided a reliable power source to keep the citizen's moving day and night all across town and beyond.

Evaluation of the Significance of the Louisville Gas & Electric Company Canal Power Station within the Context of Louisville Electric Service in Louisville, Kentucky, 1930-1966

Purchased in 1930 along with the distribution system and substations from the Louisville & Interurban Railway Co., LG&E renamed the "High Street Power Station" to "Canal Power Station". The Canal Power Station was acquired to supplement the already-in-service LG&E Waterside Power Station and the Ohio Falls Hydro-Electric Station to provide electric power to the citizens of the river city. Electricity won popular praise as an innovative technology that would revolutionize home and industrial life. The growing populations, and the demand for electricity, as well as electrical appliances and equipment, sent utility companies like LG&E scrambling for generating capacity. The electrical output from utility companies exploded from 5.9 million kWh in 1907 to 75.4 million kWh in 1927.[xxviii] The Canal Generating Station was acquired to allow LG&E to keep up with the demand of electrical power for the growing river city.

During this era of rapid electrical expansion in the 1930s and 1940s, the plant was re-equipped with 60-cycle generators and equipment by LG&E. In addition, two new large boilers were installed in 1937 that were much

[xxvii] Great Career Ended By Death of Byllesby: One of the Most Constructive Factors in the Field of Electric Development. Louisville Post, May 2, 1924

[xxviii] Dr. Richard F. Hirsh, Dr. Bernard S. Finn, "Powering The Past: A Look Back", Smithsonian Institution, Sept. 2002

larger and more efficient than any the company owned previously. These boilers were the first pulverized coal-fired boilers the company ever owned.[xxix] Pulverized coal (fine powder) burns more wholly and efficiently than non-pulverized coal, due to the increased surface area, allowing more heat energy to be harnessed by the boiler and transferred to the water for steam production. Cottrell electrostatic fly ash precipitators (ESP's) were also installed to reduce pollution in the 1937 additions; these were one of the first anti-pollution devices ever fitted to a coal fired generating unit.[xxx] Since the installation of the ESP's at Canal, the company has been a leader in pollution control; implementing the first ever 'scrubber' at Paddy's Run in 1973, and installing the most advanced pollution control equipment available at the time. The company has received various national and international awards for its pollution controlling devices throughout the years.

According to *Steam Power Plant Engineering*, "Although the first edition of this work was published less than a decade ago, the development of the Steam Power Plant has been so rapid that nearly all of the descriptive matter and a considerable portion of the data of this early edition became obsolete shortly after publication. Revisions in 1909, 1911, and 1913 failed to keep pace with the art, and the task of recording correct practice appeared to be a hopeless one." [xxxi] The Canal Power Station allowed LG&E to keep the lights on and keep industry moving in Louisville during this period of electrical expansion, as well as allow the company to invest in newer and more efficient technology in an ever expanding and evolving industry. The plant continued to supply 25-cycle power for the railway company until May 1951, and continued to produce 60-cycle utility electric until the station was retired in 1966.

The Canal Power Station is a prime example of early utility scale electric power generation. Now-antiquated equipment such as non-pulverized coal boilers, mine cart style ash handling, brick chimneys, early steam turbines and generators, and other types of equipment, now extinct within the power industry, are present at this station. The small scale boilers, early fly ash precipitators, and turbine/generators contrast greatly to their modern counterparts now found in coal fired generating stations across the nation and the world. In an age where coal fired generation is slowly dying off and power stations are being demolished upon decommissioning, the Canal Power Station is a time capsule to an earlier era in the modernization and industrial age of Louisville and the state of Kentucky. At the time of writing this document the LG&E Waterside (circa 1917) and the Paddy's Run Generating Station (circa early 1940s) have been completely demolished, and the LG&E Cane Run (circa 1954), KU Tyrone (circa 1947), KU Green River (circa 1950), and KU Pineville (circa 1924) generating stations have all been retired and are currently slated for demolition by LG&E and KU.[xxxii]

Evaluation of the Integrity of the Significance of the Louisville Gas & Electric Canal Power Station and its Current Physical Condition

The Louisville Gas & Electric Company Canal Power Station property is being interpreted within the terms of Criterion A, significant for its role in illustrating to us what was significant about Electrified public transit, and electric power generation to Louisville's population during the Period of Significance. Any property found historically significant within this context must possess integrity of location, design, setting, materials. If it possesses those integrity factors, then the property will be evaluated to possess integrity of association, the most

[xxix] Yater, George H. "Light years: A History of Louisville Gas and Electric Company, 1838-1988". Louisville Gas and Electric Company, 1988
[xxx] Yater, George H. "Light years: A History of Louisville Gas and Electric Company, 1838-1988". Louisville Gas and Electric Company, 1988
[xxxi] Gebhardt, George F. "Steam Power Plant Engineering" Fifth Edition, John Wiley and Sons, 1917
[xxxii] No Author. "Our Company - Power Plants and Compressor Stations" lge-ku.com, Sept. 2017

important integrity factor for a property nominated according to the terms of Criterion A, which emphasizes the associations the property has for us, associations which form the basis of our view of the property's significance.

The Canal Power Station retains **integrity of location and setting**. Of course, the buildings of the site remain in their original locations on 2005 Northwestern Parkway in Louisville, Kentucky. However, the location of the property carries important information about the use of the facility for the interurban transportation system and later, for electric generation. The on-site setting is open for the outside storage of equipment and, historically, coal. Outside of the site, neighboring properties are largely the same: light industrial and working-class housing to the west and south, and railroad tracks and the Ohio River to the east. The railroad tracks provide a tangible link to the early transportation function of the property. The river helps link the use of the site for electric generation during an era when coal was the main boiler fuel source and that fuel have come to the site via riverine barges.

The Canal Power Station has a sufficient level of **integrity of design** and **materials** to convey its identity and its historic significance. The facility appears to have worked efficiently despite its conversion from service to one industry to another. The basic form of the primary building appears unchanged from the 1930s. Some details of siding, windows, and roof have undergone alteration, but there is no question of the plant's identity, nor of its historic functions.

Because the property possesses integrity of location, setting, materials, and design, the building is judged to have **integrity of association**. Because it possesses an integrity between its significant associations and its physical form, it is deemed eligible for the National Register.

9. Major Bibliographical References

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

No Author. "100 Years of Public Service." *Louisville Courier-Journal*, February 13, 1938.

Yater, George H. "Light years: A History of Louisville Gas and Electric Company, 1838-1988". Louisville Gas and Electric Company, 1988

Personal correspondence, Martin E. Biemer, Louisville Streetcar Historian, August 27, 2017

Elson, Martha. "Can streetcars make a comeback in Louisville?" *Louisville Courier-Journal*, September 1, 2016.

Schooling, Ron. "Louisville's Incredible Elevated Rapid Transit Trains." *Broken Sidewalk*, January 5, 2010.

No Author. "Canal Station Conceptual Phase Study Demolition with Clean Fill Option." Amec Environmental & Infrastructure, June 18, 2013.

Weeter, Joanne. "Louisville Gas & Electric Service Station Complex." United States Department of the Interior National Park Service / National Register of Historic Places Registration Form NPS Form 10-900 OMB No. 1024-0018

Gebhardt, George F. "Steam Power Plant Engineering" Fifth Edition, John Wiley and Sons, 1917

Dr. Richard F. Hirsh, Dr. Bernard S. Finn. "Powering The Past: A Look Back", Smithsonian Institution, Sept. 2002

No Author, Great Career Ended By Death of Byllesby: One of the Most Constructive Factors in the Field of Electric Development. Louisville Post, May 2, 1924

No Author. "Our Company - Power Plants and Compressor Stations" lge-ku.com, Sept. 2017

No Author. Historic aerial photograph, historicaerials.com, 1949

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 # _____

Primary location of additional data:

____State Historic Preservation Office
____Other State agency
____Federal agency
____Local government
____University
____Other
Name of repository: _____

Historic Resources Survey Number (if assigned): JFWP-328

10. Geographical Data

Acreage of Property 13.89 acres

Geographic References

Coordinates for the property:

Coordinate #	Latitude	Longitude
1	38.267645º	-85.778451º
2	38.268306º	-85.777733º
3	38.271385º	-85.780865º
4	38.270428º	-85.781881º
5	38.269866º	-85.781672º

	Zone	Easting	Northing		Zone	Easting	Northing
1				3			
2				4			

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

The property proposed for this listing corresponds to the address 2005 Northwestern Parkway. It is a 13.89 parcel defined by the Jefferson County Property Valuation Administrator under the account # 005D00010000.

Boundary Justification (Explain why the boundaries were selected.)

The boundary encompasses the area of the site which historically performed the important function, and which have integrity of location, setting, materials, and design.

11. Form Prepared By

Louisville Railway Company High Street Power Station | Jefferson County, Kentucky
Name of Property | County and State

name/title Maison Young
organization N/A date 8-28-2017
street & number telephone
city or town state zip code
e-mail

Photographs:

Name of Property: **Louisville & Interurban Railway High Street Power Station**
City or Vicinity: **Louisville**
County: **Jefferson**
State: **Kentucky**
Photographer:
Date Photographed:

Description of Photograph(s) and number:

1 of ___.

Property Owner:

name Louisville Gas & Electric
street & number telephone
city or town state zip code