GOVERNMENT OF THE DISTRICT OF COLUMBIA
HISTORIC PRESERVATION OFFICE

HISTORIC PRESERVATION REVIEW BOARD
APPLICATION FOR HISTORIC LANDMARK OR HISTORIC DISTRICT DESIGNATION

New Designation __X__
Amendment of a previous designation _____
Please summarize any amendment(s) _____

Property name Potomac Electric Power Company Harrison (Friendship Heights) Street Substation
*If any part of the **interior** is being nominated, it must be specifically identified and described in the narrative statements.*

Address 5210 Wisconsin Avenue, NW, Washington, DC

Square and lot number(s) Square 1657 Lot 26

Affected Advisory Neighborhood Commission 3E

Date of construction 1940 Date of major alteration(s) _____

Architect(s) Pepco Architectural style(s) Modern Movement/Art Moderne

Original use Industry/energy facility Present use Industry/energy facility

Property owner Potomac Electric Power Company

Legal address of property owner 701 Ninth Street, NW, Washington, DC 20068

NAME OF APPLICANT(S) Art Deco Society of Washington (ADSW)
Tenleytown Historical Society (THS)

***If the applicant is an organization**, it must submit evidence that among its purposes is the promotion of historic preservation in the District of Columbia. A copy of its charter, articles of incorporation, or by-laws, setting forth such purpose, will satisfy this requirement.*

Address/Telephone of applicant(s) ADSW, P. O. Box 42722, Washington, DC 20015 301/448-5613

THS, 5332 42nd Street, NW, Washington, DC 20015 202/686-1446

ADSW – Steve Knight, President

Name and title of authorized representative THS – Jane Waldmann, President

Signature of representative Jane Waldmann Date 9/24/2017

Name and telephone of author of application Kent Boese 202/904-8111

Date received _____
H.P.O. staff _____

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.

1. Name of Property

Historic name: _Potomac Electric Power Company Harrison Street Substation_____
Other names/site number: _____
Name of related multiple property listing**:**

_____
(Enter "N/A" if property is not part of a multiple property listing

2. Location

Street & number: _5210 Wisconsin Avenue, NW_____
City or town: _Washington___ State: __D.C._____ County: ___N/A_____
Not For Publication: ☐ Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ 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 ___ 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 ___local
Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title: **Date**
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**

Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State

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

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	X
Public – Local	
Public – State	
Public – Federal	

Category of Property

(Check only **one** box.)

Building(s)	X
District	
Site	
Structure	
Object	

Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State

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

Contributing	Noncontributing	
1		buildings
		sites
		structures
		objects
1	0	Total

Number of contributing resources previously listed in the National Register _____

6. Function or Use
Historic Functions
(Enter categories from instructions.)
INDUSTRY/energy facility

Current Functions
(Enter categories from instructions.)
INDUSTRY/energy facility

7. Description

Architectural Classification
(Enter categories from instructions.)
MODERN MOVEMENT/Art Moderne

Materials: (enter categories from instructions.)
Principal exterior materials of the property: Brick, Concrete, Steel, Limestone

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 Potomac Electric Power Company Harrison Street Substation is a 1/3-acre energy distribution site. It is located on the northwestern corner of Wisconsin Avenue and Harrison Street. In addition to outdoor power distribution equipment, the site contains a 1-story substation building constructed in 1940 and located on the southern half of the property facing Wisconsin Avenue. The substation building is designed in the Art Moderne style and constructed of red brick laid in American bond fashion on the northwest, southwest, and southeast elevations. The northeast (primary) elevation fronting Wisconsin Avenue is clad in limestone panels and trimmed in black glazed ceramic tiles along the base of the building and surrounding the entrance door.

Narrative Description

General Description:

Site:

Potomac Electric Power Company Harris Street Substation is prominently located on Wisconsin Avenue approximately 114 ft. northwest of Harrison Street, NW (Lot 26 in Square 1652). The property is bounded on the southeast by a bank building, on the southwest by a public alley, and on the northwest by a vacant lot owned by the Potomac Electric Power Company.

Overall, the Harrison Street Substation is T-shaped in plan and is a 1-story brick building with basement constructed with solid American bond red brick walls on the northwest, southwest, and southeast elevations. The Wisconsin Avenue elevation is clad in limestone panels and trimmed in black glazed terracotta tiles. The building is covered with a flat roof hidden behind the parapet walls of the elevations.

The Harriston Street Substation is characterized by its 1-story Art Moderne-style building form.

Exterior Description

The northeast (Wisconsin Avenue) façade is symmetrical with the entrance door centrally located. Above the door and projecting half way above the parapet wall is an electric clock which is recessed within the façade and surround by a rectangular glass panel which is reverse painted in black, but clear in the center permitting visibility of the clock. The façade is dominated by large display windows symmetrically placed on both sides of the entrance door. Each series of display windows originally consisted of three large plate glass windows that were approximately 7 1/2 ft. tall by 9 1/3 ft. wide, making each display area approximately 7 1/2 ft. tall and 28 ft. wide. These windows have since been replaced by beige brick walls. The limestone panels surrounding the display windows areas contain a two low relief recesses that step down from the façade to meet the window frames. The base of the façade is trimmed in a black terra cotta tile which projects slightly from the building and forms a water table. The black terra cotta tile trim also surrounds the entrance door projecting slightly from the limestone face of the building.

The northwest elevation consists of a solid wall void of fenestration or doors constructed of red brick laid in American bond fashion. Approximately 26 feet to the southwest of the Wisconsin Avenue façade, the elevation steps back by approximately 33 ft. The remainder of the elevation contains a series of five equally spaced alcoves which contain electrical equipment.

The southwest (rear) elevation is solidly built of red brick laid in American bond fashion. It is dominated by a central projection with deeply set back wings to the northwest and southeast. The

central section has a large roll-up service door centrally located which spans the height of the building. To the northwest of the service door is a large 48 pane steel cased window (6 panes wide by 8 panes tall). This window also nearly spans the height of the elevation. The northwestern wing is dominated by a centrally placed 40 pane steel cased window (10 panes wide by 4 panes tall). Below the window leading to a basement level there is a single steel door off center to the southeast and a double steel door off center to the northwest. The southeast wing is void of doors or windows, but contains to vent grates evenly spaced at the basement level.

The southeast elevation contains no doors or windows and is solidly built of red brick laid in American bond fashion. Approximately 1/3 of the building closest to Wisconsin Avenue abuts the neighboring bank building. There is also a large alcove at the southwest end of the elevation which contains a large alcove filled with electrical equipment.

Interior Description

The interior floor plans generally consist of a large, open space in which electrical equipment can be placed for the transforming and distribution of electricity to the surrounding community.

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] 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.
- [X] 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 important in prehistory or history.

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

- [ ] 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.)
Architecture
Engineering

Period of Significance
1940

Significant Dates
1940, 1943, 1954

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

Cultural Affiliation
N/A

Architect/Builder
Potomac Electric Power Company

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 Potomac Electric Power Company Harrison Substation was constructed in 1940, in part, to meet growing electrical demand in the Friendship Heights neighborhood and, in part, in response to Pepco's need to find ways and means of meeting the National Capital's power need in the event of war.

The Potomac Electric Power Company Harrison Street Substation is eligible for listing in the National Register of Historic Places at the **local level of significance under Criterion A** as it is closely associated with the growing need to provide reliable electric service to the residents in the District of Columbia, particularly those who resided in the vicinity of Friendship Heights. In 1902 Pepco became the sole electric utility company providing electrical service to Washington, D.C. and nearby suburbs in Maryland and Virginia. Beginning with the centralization of generating electric power at the Bennings power plant in late 1906, Pepco substations became the critical link in distributing electricity for the various classes of services for which it was needed throughout the city.

The Potomac Electric Power Company Harrison Street Substation also meets **Criterion C** as an outstanding example of a Pepco substation designed by in-house Pepco architects during the period 1939-1960. The Harrison Street Substation is significant to the work of Pepco architects who developed an architectural style incorporating camouflage (or trompe l'oeil) elements as part of their overall program to improve security for their electrical distribution system in preparation in the event of war. Buildings constructed during this period mimicked building types typically employed for residential or commercial uses, rather than industrial uses. In this context, the Harrison Street Substation is a unique example of a substation constructed to resemble a business storefront in the Art Moderne style.

The period of significance is 1940 taking in the original construction of the building. The substation is still in use today with minor alterations which to not impact the structure's integrity.

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

Summary Paragraph;

The Potomac Electric Power Company's Harrison Street Substation, located at 5210 Wisconsin Avenue, NW, on the northwest corner of Wisconsin Avenue and Harrison Street was built in 1940 as part of a construction campaign anticipating the need to increase the ability for Pepco to deliver reliable and secure electrical current to Washington, D.C. in the event of war. Following events in Europe leading up to 1939, Pepco began working with the National Defense Power Committee to find ways and means of meeting the Nation's power need in the event of war. This resulted in Pepco constructing additional small substations throughout the District of Columbia.

The Harrison Substation was designed by in-house Pepco architects in the Art Moderne style and is significant in the area of architecture. As part of Pepco's efforts to keep the power supply safe, the substation is an early example of Pepco's use of camouflage in its architectural designs, and is a unique example of this approach to constructing a substation on a busy commercial corridor.

Brief History of the Potomac Electric Power Company

The Potomac Electric Company organized in 1891 with capital stock of $25,000 and a generating station located on the Virginia side of Chain Bridge. This company went into receivership on July 17, 1893. A reorganization brought about the Potomac Light and Power Company under the same management. Another reorganization brought about the Potomac Light and Power of Virginia. The company put in a bid for street lights in competition with the United States Electric Light Company, which was accepted by the District Commissioners. The United States Electric Light Company took the case to court leading to several years of bitter competition between the two companies.

By 1898, the Potomac Company secured contracts for power to the independent railway lines in the District of Columbia and installed feeders to Brightwood, the Washington Street substation, Eckington and Riverdale, and Montrose Junction on the Tennallytown Rockville Line. This same year, the United States Electric Lighting Company erected a new plan at 14th and B streets, NW.

The following year, in 1899, the United States Electric Light Company and the Potomac Power and Light Company joined forces in a more cooperative arrangement, and when the Washington Railway and Electric Company (WRECo) was formed in 1902, it combined the several independent railways in Washington into one unified system and formally combined the two lighting companies as a subsidiary of WRECo known as the Potomac Electric Power Company (Pepco).

One of the earliest initiatives of Pepco was to establish a new central power plant. Of the possible locations near Washington, the site at Benning on the Anacostia River was ideally located for the generation of electrical energy. Work began at Benning in April 1906 with operations beginning by December of the same year. By 1907, it was possible for Pepco to shut down all of the older generating stations with the exception of the Edison equipment at 14h and B streets. The centralization of electric generation in Washington gave rise to the need for a

power substation distribution system to supply the various types of energy needed throughout the city.

During the fifteen year period from 1907 to 1922, there was no notable change to Pepco's method of generating or electric distribution system. Following 1922, demand for electrical power experienced a rapid increase leading Pepco to install generators capable of supplying more power and the addition of new substations.

During the 1930s, Pepco experienced a building boom largely caused by the displacement of its headquarters, generating facilities, and distributing operations at 14th and B streets due to the U.S. Government's plans to develop the Federal Triangle area. This lead to the construction in 1930 of a new headquarters building at 999 E Street, NW, a new service station at 10th and Florida Avenue, NW, and a new substation on Champlain Street. The decade also witnessed the construction of the Buzzard Point Generating Station which began in October 1932 and was completed within the year. During World War II, Buzzard Point would become Pepco's base load generating plant.

Today Pepco continues as Washington's sole supplier of electricity, though the company no longer generates electricity. On June 7, 2000, Pepco sold generating plants with a total capacity of 5,154 megawatts to the Mirant Corporation, including four generating stations located in Maryland and Virginia. From this time, Pepco has operated primarily as an energy supplier distributing electricity through its system of substations.

Substations of the Potomac Electric Power Company

The addition of the 6600 volt, 25 cycle, three phase turbo-generators in Pepco's Station B (14th and B streets, NW) prior to 1905 is considered the beginning of electric substations as they are known today – this being that high tension energy was delivered to the substation by means of high tension feeders from the generating station. Upon delivery, the energy is transformed, converted, and redelivered for the various classes of services for which it is needed.

With the completion of the Benning power generating plant in December 1906, it was possible for Pepco to shut down all of their older generating stations with the exception of the Edison equipment at 14th and B streets. It was then necessary to rely almost exclusively on substations to form the connecting link between the generating station and the consumer as it was impractical to generate all classes of energy at one location to reach all consumers.[1]

Four new substations were immediately added to the system with the opening of Bennings – nos. 2, 10, 11, and 12. The new substation no. 2 adjoined the old substation no. 2 at 450 Washington Street, NW. Substation no. 10 was a purpose built brick structure designed by architect Frederick B. Pyle and located in the alley between H, I, 14th, and 15th streets, NW. Substation no. 11 was located in a remodeled office building abutting the streetcar carbarn at 13th and D streets, NE,

[1] Santamaria, Cesar, *History and Evolution of the PHI Electric System,* p. 6.

and substation no. 12 was located in the old steam power station at 33rd and K streets, NW, in Georgetown.

In 1907, Pepco's proposal to construct a new substation at Harvard Street and Sherman Avenue was met with opposition from the surrounding Columbia Heights community which attempted to prevent its construction through court action. After a two month delay, construction of Substation no. 13 proceeded. The Harvard substation (no. 13), designed by Frederick B. Pyle, is notable for being the first purpose built substation built outside of Washington's central core in one of the city's growing suburbs (Columbia Heights). It is also the most architecturally significant of Pepco's early substation designs prior to 1928. Prior to construction of the Harvard substation, the small number of Washington suburban substations that existed were co-located with streetcar carbarns.

Power That Flows Freely to YOUR SERVICE

ACTING as sentries for the great army of horsepower Pepco Service brings to your instant disposal, substations are important. They occupy sites which are selected after exhaustive engineering surveys and enable your electrical source of supply to keep in close touch with demands for service in the sections they serve.

Substations are constructed to conform to the zoning laws of the section they occupy and to harmonize, as much as possible, with the types of buildings prevailing in their neighborhoods. Here again Pepco's spirit of co-operation with civic beautifying projects is evident

The Sub-Station OPERATOR

One of a Series "Personalities of Pepco"

JUST like the heart pumps blood to the arteries of the body, the flow of Pepco Power is guided to your service through Sub-Stations. Night and day vigilant operators at these places are on duty to keep in close touch with demand and attend to its supply.

Electricity cannot be stored. It must be used as it is generated—or there will be waste. As generated at the Power Plant it must be at high tension, to meet every possible demand. Further than that, transmission at high voltage reduces losses over the wires considerably. Substations take high tension current and, with the least possible waste, reduce it to the voltage you require for instant response to your "push" on the button.

The POTOMAC ELECTRIC POWER CO.

—Matchless Service—

MAIN TEN THOUSAND

(Ad from the *Washington Post,* 1927.)

After 1907, Pepco not only designed and built substations to conform with the zoning laws in the section of the city they occupied, but also adopted a philosophy of designing the buildings to harmonize, as much as possible, with the types of buildings prevailing in the surrounding neighborhood. A review of known Pepco substation design from 1899 to present reveals that Pepco's philosophy of creating substations that architecturally harmonize with their surroundings has evolved over time.

Pepco's substation design in Washington D.C. falls into four major categories that correspond to the era in which they were constructed. These are:

- Early substations (built prior to 1928): The substations are largely utilitarian or industrial in character. Several were built as extensions of streetcar carbarn facilities, as alley structures, or in preexisting buildings converted for substation use. Two notable substations from this era are substation no. 13, located at Harvard Street and Sherman Avenue (1907), and substation no. 8 (1927), located at 2415 Martin Luther King Jr., Avenue. Substations nos. 13 and 8 exemplify Pepco's best efforts to harmonize substation design with their surrounding communities during this era.
- Substations constructed from 1929 to 1939: The design of substations during this period was dominated by architect Arthur B. Heaton, who not only elevated the architecture of

Pepco substations but created an Art Deco aesthetic that unified both the service buildings of Pepco and its parent company, the Washington Railway and Electric Company. Heaton was concerned with promulgating high standards of design beyond the monumental core of Washington and his work was recognized on several occasions by the Washington Board of Trade for elevating architectural design in private development.

- Substations constructed from 1939 to 1960: During this era, Pepco architects designed substations that were camouflaged with their surroundings. Beginning in September 1939, small substations constructed in Washington neighborhoods were designed to resemble Colonial revival residential properties or, when on a commercial corridor, as a storefront. While this policy lead to some of Pepco's most architecturally harmonious designs in residential sections of Washington, they also had the dual purpose of decreasing public awareness of substation locations which, in turn, helped address concerns related to keeping Washington's electrical system safe and secure in the years leading up to and during World War II and afterward during the Cold War era.
- The Modern Era: Contemporary substation design follows no singular design aesthetic, although Pepco continues to consider location, the character of the neighboring buildings, and the technical requirements of delivering reliable electrical service as they design new substation buildings. Today, substations tend to be larger than substations of earlier eras, and a number of unique design solutions have been used to continue the practice of employing creativity to both achieve buildings that harmonize with their surroundings and a low level of public awareness.

The Potomac Electric Power Company, Protecting the Electrical System, and Subterfuge

In the early spring of 1939, the Potomac Electric Power Company began working with the National Defense Power Committee to develop a plan for meeting the Nation's power needs in the event of war. Nearly as important as being prepared to meet the expected increase in demand for electricity was the need to develop plans for defense against sabotage, air attack and mob violence. In response to the anticipated needs in the event of war, Pepco began to build and expand Washington's electrical system. Between 1939 and the end of 1944, Pepco spent more than 34½ million dollars on new buildings, cables, generators, turbines and other equipment – increasing its electricity producing capacity of its plants by 60%. By 1944, more than 1,600,000,000 kilowatt hours of electricity were supplied to the metropolitan Washington area, an increase of 88% over the amount supplied to the city at the time of Germany's invasion of Poland.[2]

In addition to expanding the power network to keep apace of wartime Washington's increased demand for electricity was the equally important task of protecting the utility. Precautionary measures for the protection of vital utility service and industries against sabotage in the National Capital was underway and being perfected by 1940, according to War Department officials. The coordinated civil defense program required that generating stations be secured to avoid or prevent sabotage by enemy agens. Pepco's efforts included fortifying fences with barbed wire

[2] Gerrity, John F. "Utility Firms Do Herculean Job for Wartime Washington." *The Washington Post,* Aug. 26, 1945.

and flood lights at both Benning and Buzzard Point Generating Stations, doubling its armed guards to severely limit access to those facilities, and launching a shortwave broadcasting system to link Pepco headquarters with its hundreds of emergency, trouble shooter, and line trucks. The Coast Guard removed derelict boats from the Anacostia River in the vicinity of Buzzard Point to help prevent saboteurs from taking up residence next to the facility, and PEPCO began to issue photo identification passes to employees for the first time in its history.[3]

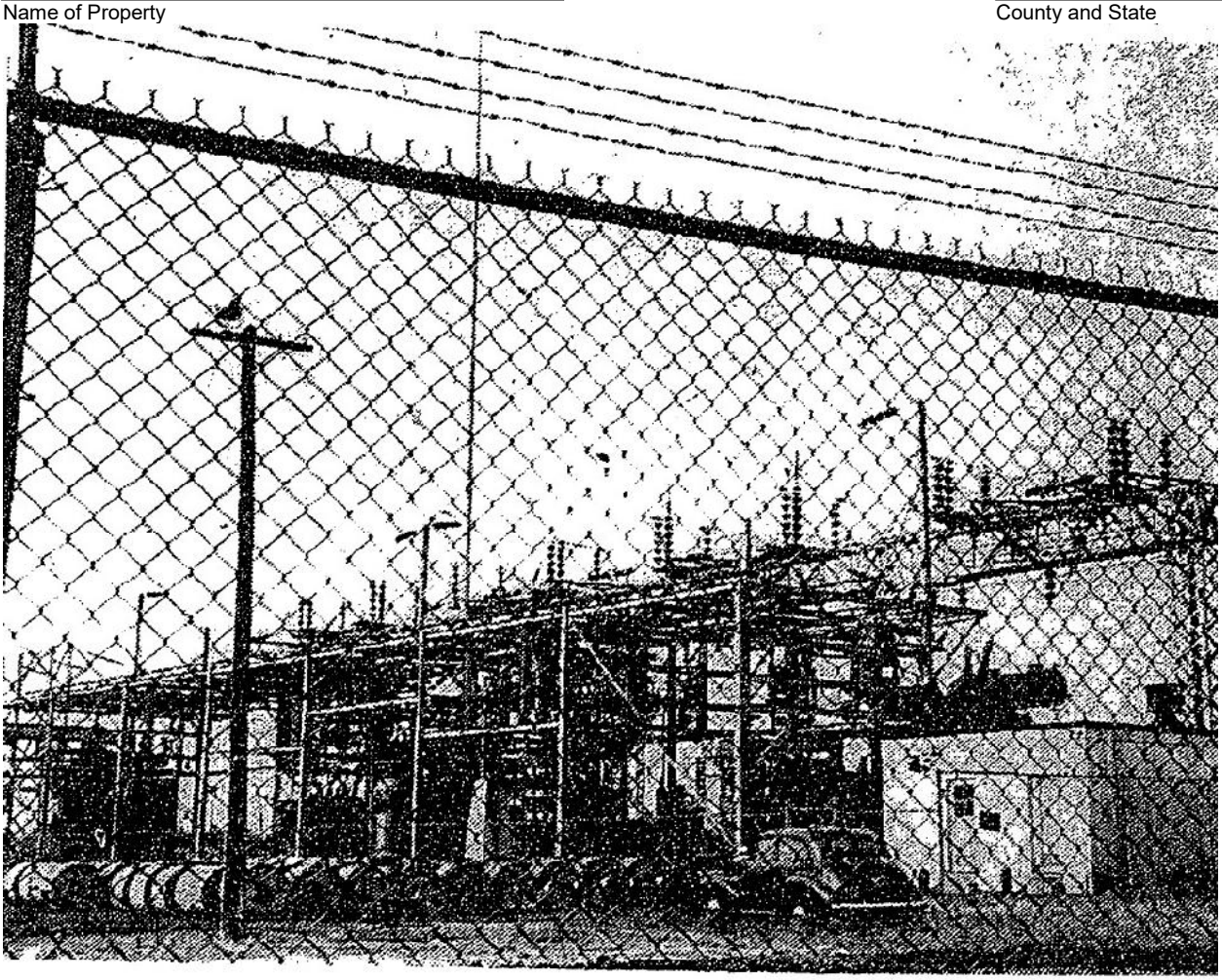
Tensions were heightened in July 1940 when an employee of a contracting firm working on Pepco property boasted that he could wreck the Buzzard Point power plant. Pepco's investigation determined that the threat involved a man of about 30 who had pronouncedly pro-Hitler views. A month later, prowlers climbed the fence of the Buzzard Point plant, where Pepco guards chased them before they escaped. Pepco reprimanded the guards for failing to shoot the prowlers.[4]

In addition Pepco's efforts to strengthen security at its power plants, Pepco undertook efforts to make the entire system of energy distribution in Washington more secure. The result of these efforts went well beyond barbed wire and armed guards, and resulted in Pepco changing the very architectural design of its electrical substations – a break from an established design aesthetic developed a decade earlier by Arthur B. Heaton.

Beginning with architect Arthur B. Heaton's design for Pepco Substation No. 25 in 1930, Pepco substations had a uniform Art Deco design. So established was Heaton's Art Deco aesthetic that it was also used in the Pepco Service Building (1930), the WRECo bus garage on Georgia Avenue (1930), and the Western Bus Garage (1934). The substation at 1618 L Street, NW, constructed in April 1939 was the last building constructed in this style.

Pepco's approach after the spring of 1939 embraced the art of deception, whereby Pepco architects designed substations that were camouflaged to reflect the built environment around them. Substations erected in residential neighborhoods were designed as either one- or two-story red brick colonial houses. These structures typically included slate roofs, painted shutters, and landscaped grounds. The art of deception was carried out to such a detailed degree as to use trompe l'oeil paintings for the windows of the residential substations. Venetian blinds and curtains were painted on composition board and located within the windows to give an appearance of an inhabited house. Often times, these paintings included flowers or vines in the windows as well.[5] Alternatively, substations constructed on commercial streets, such as the Harrison substation, were constructed to resemble storefronts and included display windows with changing displays for Pepco, appliances, or the war effort.

[3] Beck, William O. *100 Years of Matchless Service.* Washington, D.C.: Potomac Electric Power Company, 1996; pp. 122-123.
[4] "D.C. Utilities Sharpen Eyes For Saboteurs." *The Washington Post,* July 10, 1940; "Pepco Guards Told to Shoot At Prowlers." *The Washington Post,* Aug. 29, 1940.
[5] Herron, Paul. "These Homes Are Really Electrifying." *The Washington Post,* April 4, 1954.



PATTERN FOR PROTECTION—The Potomac Electric Power Co. has adopted a strict system of pass control to its generating stations. It is protecting the stations with barbed wire and flood lights, and is planning to double its armed guard as part of a program to prevent sabotage. One of the transformers at the Benning plant is shown behind a barbed-wire-topped fence

(Image from the *Washington Post*, July 10, 1940, illustrating Pepco's use of barbed wire at the Benning plant due to increased concern about sabotage and the need for security.)

Pepco constructed substations that blended into the landscape throughout World War II and the succeeding Cold War era. By the mid-1950s, the art of deception had grown to include ground crews mowing lawns and trimming bushes during the warmer months, and lighted Christmas wreaths in the windows during the holiday season. In some neighborhoods, the substation included a lighted Christmas tree in the yard if the majority of the neighbors had them as well. The Colonial Revival substation located at 2 Westmoreland circle also contained a system of switches to automatically turn on the downstairs lights at 8 p.m. The lights stayed on until 10 p.m. when the upstairs lights turned on. All the lights turned off at 10:30 p.m.[6]

[6] Ibid.

Pepco slowly ended its practice of subterfuge sometime in the 1960s when newer and larger substations were required by the network. While Pepco presently strives to design buildings that are architecturally compatible with their surrounding neighborhoods, the company no longer employs the art of deception in its design process.

Potomac Electric Power Company Harrison Street Substation

In the spring of 1939 Pepco began to build and expand Washington's electrical system in anticipation of growing demand for electricity in the event of war. The increased need for a secure and reliable electrical system led Pepco to adopt a design solution that resulted in new buildings substation designs that employed basic camouflage techniques so that the new buildings would blend in with their architectural surroundings. Between 1939 and the end of 1944, Pepco spent more than 34½ million dollars on new buildings, cables, generators, turbines and other equipment – increasing its electricity producing capacity of its plants by 60%.

A significant component of this effort was the construction of electric substations located in the outer suburbs of the District of Columbia and nearby Maryland. The Potomac Electric Power Company Harrison Street Substation is an early and unique result of Pepco's efforts to architecturally disguise substations as buildings constructed for other uses. Pepco's first three camouflaged substations were constructed in 1939 and resembled small red-brick colonial houses. The Harrison Street substation was Pepco's fourth substation designed to deceive passersby. Overall, the substation was designed to resemble a store front and included large display windows facing Wisconsin Avenue.

Planning for the substation began in 1939 with Pepco requested permission to construct an electric substation on the west side of Wisconsin Avenue between Jenifer and Harrison streets, NW, in December 1939. The Board of Zoning Adjustment approved Pepco's request on January 3, 1940, with the condition that Pepco could not use rotating equipment in the plant and it would have to enclose any equipment on the Harrison Street side of the substation. By early February 1940, Pepco received a permit to construct the 1-story substation at 5210 Wisconsin Avenue, NW. The substation was subsequently enlarged twice -- once in 1943 and again in 1954.

Construction of the Harrison Street Substation was part of Pepco's efforts to provide a secure and reliable power supply to the Nation's Capital in the event of War. In the space of four years' time, Washington went from a quiet Southern town to the capital of a world power. By early 1941, the U.S. Army's civilian work force in the District and surrounding area had grown from 7,000 to 41,000 employees. Military and civilian employees flooded into the District, creating a housing crunch that did not abate until the 1950s. With the influx of new residents came an increase in the demand for electricity. In 1942, the company recorded its first summer peak, the result of increased air conditioning on the system. In 1944 more than 1,600,000,000 kilowatt hours of electricity were supplied to Washington, an increase of 88% over the amount supplied to the city in September 1939 at the onset of World War II.

The Harrison Street Substation is an outstanding example of a Pepco substation designed by in-house Pepco architects to address both the need of a growing demand for electricity and the need for additional security in anticipation of war and the threat of sabotage from 1939 to 1960. Substation from this era employed camouflage in their designs so that buildings resembled residential or commercial structures. In this context, the Harrison Street Substation is both and early and unique example. While many examples were constructed that resemble one- and two-story colonial revival houses, the Harrison Street Substation was the only substation built on a commercial corridor that was designed to resemble a business storefront. The substation is also unique in its use of the Art Moderne style, which Pepco did not use for other substations of this period.

9. Major Bibliographical References

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

Books & Manuscripts

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Santamaria, Cesar. *History and Evolution of the PHI Electric System.* Unpublished manuscript, 2009.

Primary Sources

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"Sabotage Protection Curtailed By D.C. Law Passed in 1898." *The Evening Star,* Aug. 28, 1940, p. B-1.

"Threat of Sabotage Leads Pepco to Place Barbed-Wire Barriers." *The Evening Star,* July 9, 1940, p. A-1.

"U.S. Takes Steps For Protection Of Utilities." *The Evening Star,* June 6, 1940, p. B-1.

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:

__X_ State Historic Preservation Office
____ Other State agency
____ Federal agency
_X__ Local government
____ University
____ Other
Name of repository: _____

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property _0.30 acres_____

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

1. Latitude: 38.957379 Longitude: -77.084352
2. Latitude: Longitude:
3. Latitude: Longitude:
4. Latitude: Longitude:

Or
UTM References
Datum (indicated on USGS map):

☐ NAD 1927 or ☐ NAD 1983

1. Zone: Easting: Northing:
2. Zone: Easting: Northing:
3. Zone: Easting: Northing:
4. Zone: Easting : Northing:

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

Potomac Electric Power Company Harrison Street Substation occupies Lot 0026 in Square 1657 in the Friendship Heights neighborhood of the District of Columbia.

Boundary Justification (Explain why the boundaries were selected.)

Potomac Electric Power Company Harrison Street Substation is on its original site and encompasses the boundaries of the Lot at the time of the substation's construction.

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11. Form Prepared By

name/title: _Kent C. Boese_____
organization: __Historic Washington Architecture_____
street & number: __608 Rock Creek Church Rd, NW_____
city or town:__Washington_____ state: ____DC_____ zip code:__20010____
e-mail__kcboese@hotmail.com_____
telephone:__202-904-8111_____
date:___March 18, 2017_____

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, 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.

Photo Log

Name of Property: Pepco Harrison Street Substation

City or Vicinity: Washington

County: N/A State: D.C.

Photographer: Kent C. Boese

Date Photographed: October 25, 2015; March, 18, 2017

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

1) General View looking southwest showing Wisconsin Street façade
   1 of 8.

2) General View looking north from Wisconsin Avenue, NW
   2 of 8.

3) Detail of clock on Wisconsin Avenue Façade
   3 of 8.

4) Detail of entrance door on Wisconsin Avenue Façade
   4 of 8.

5) General View looking south
   5 of 8.

6) General view of rear elevation from alley looking north

6 of 8.

7) Detail view of rear elevation, northwest wing, from the southwest showing door and fenestration configuration
7 of 8.

8) General View from Harrison Street, NW, looking north northeast
8 of 8.

Pepco Harrison Street Substation
Washington, DC
October 25, 2015
Kent Boese
General View looking southwest showing Wisconsin Street façade
1/8

Pepco Harrison Street Substation
Washington, DC
March 18, 2017
Kent Boese
General View looking north from Wisconsin Avenue, NW
2/8

Pepco Harrison Street Substation
Washington, DC
March 18, 2017
Kent Boese
Detail of clock on Wisconsin Avenue Façade
3/8

Pepco Harrison Street Substation
Washington, DC
March 18, 2017
Kent Boese
Detail of entrance door on Wisconsin Avenue Façade
4/8

Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State

Pepco Harrison Street Substation
Washington, DC
October 25, 2015
Kent Boese
General View looking south
5/8

Pepco Harrison Street Substation
Washington, DC
March 18, 2017
Kent Boese
General view of rear elevation from alley looking north
6/8

Pepco Harrison Street Substation

Washington, DC

March 18, 2017

Kent Boese

Detail view of rear elevation, northwest wing, from the southwest showing door and fenestration configuration

7/8

Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State

Pepco Harrison Street Substation
Washington, DC
March 18, 2017
Kent Boese
General View from Harrison Street, NW, looking north northeast
8/8

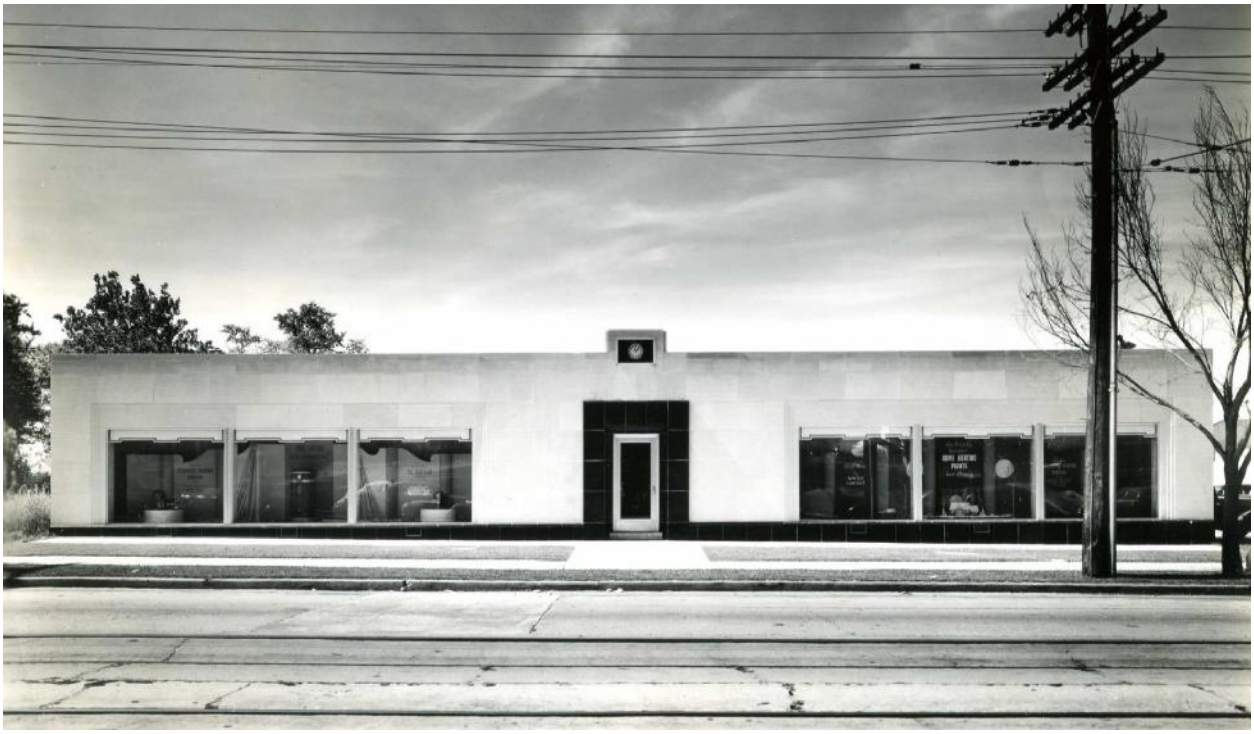
Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State

Site Plan:

Site Plan from ArcGIS (viewed July 22, 2016)

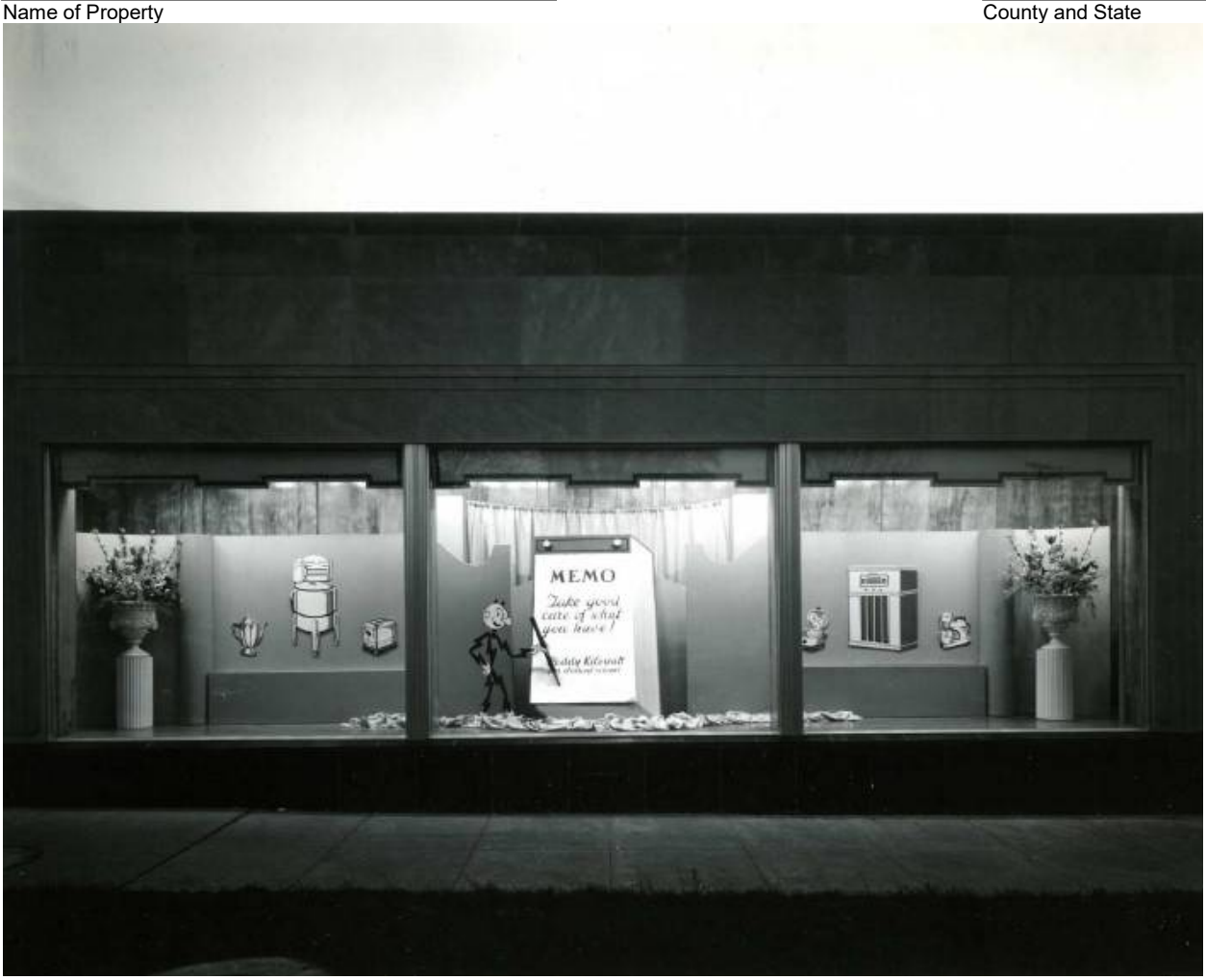
Historic Images:



Potomac Electric Power Company Harrison Substation showing Wisconsin Avenue facade, NW, ca. 1940s. (Photo from PEPCO)

Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State



Potomac Electric Power Company Harrison Substation showing window displays ca. 1940s. (Photo from PEPCO)

Potomac Electric Power Company Harrison Substation showing window display from December 1943. (Photo from PEPCO)

Potomac Electric Power Company Harrison Street Substation
Name of Property

Washington, D.C.
County and State

Potomac Electric Power Company Harrison Substation showing window display for Civilian Defense ca. 1940s. (Photo from PEPCO)

Potomac Electric Power Company Harrison Street Substation | Washington, D.C.
Name of Property | County and State

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.