

New Orleans Historic District Landmarks Commission  
Landmark Designation Report  
Valence Street Substation



Meeting Date: April 7, 2021

Property Address: 2100 - 2138 Valence Street, 4700 Loyola Avenue

Owner: Entergy New Orleans  
639 Loyola Avenue  
New Orleans, La 70113

Architect: Sanderson & Porter

Construction Date: 1905-1906

Significance: Economic, Cultural, Architectural, Representative of the work of a recognized architect or designer

Date Nominated: September 12, 2000

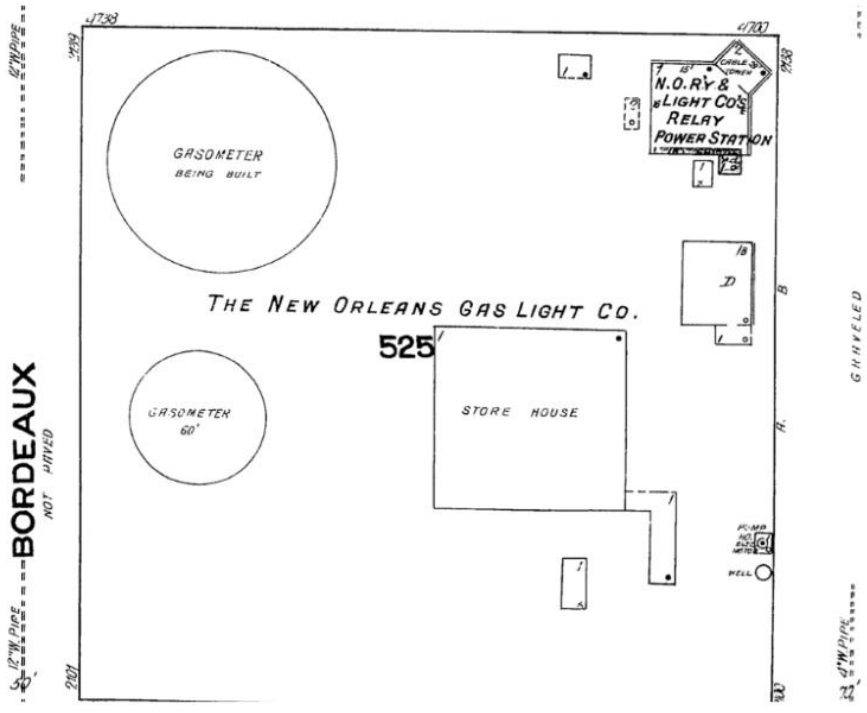


Figure 1. Sanborn Fire Insurance Map, 1909

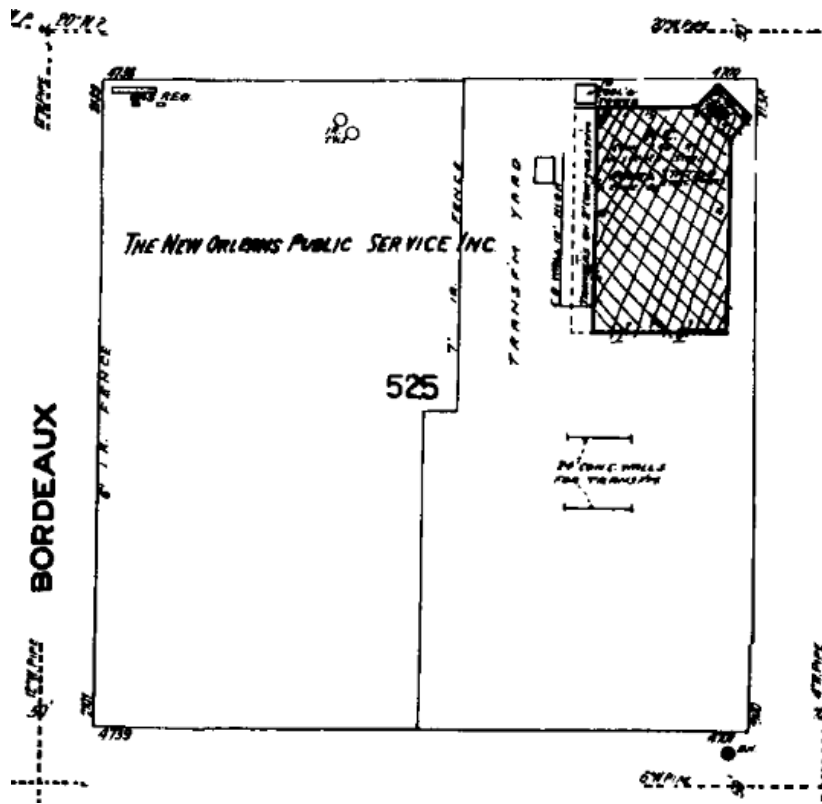


Figure 2. Sanborn Fire Insurance Map, 1951

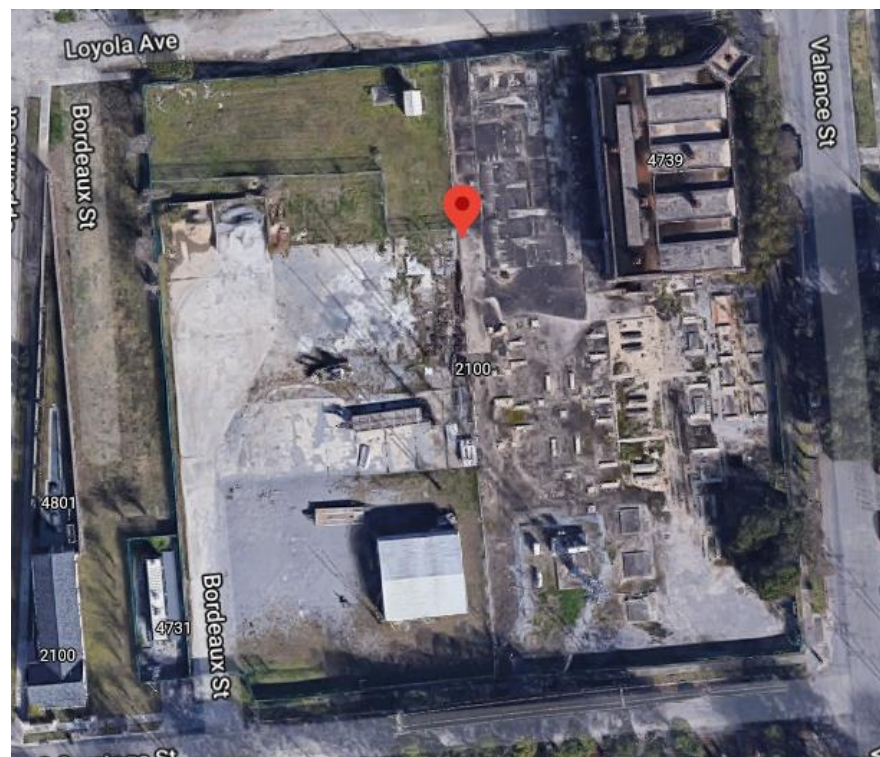
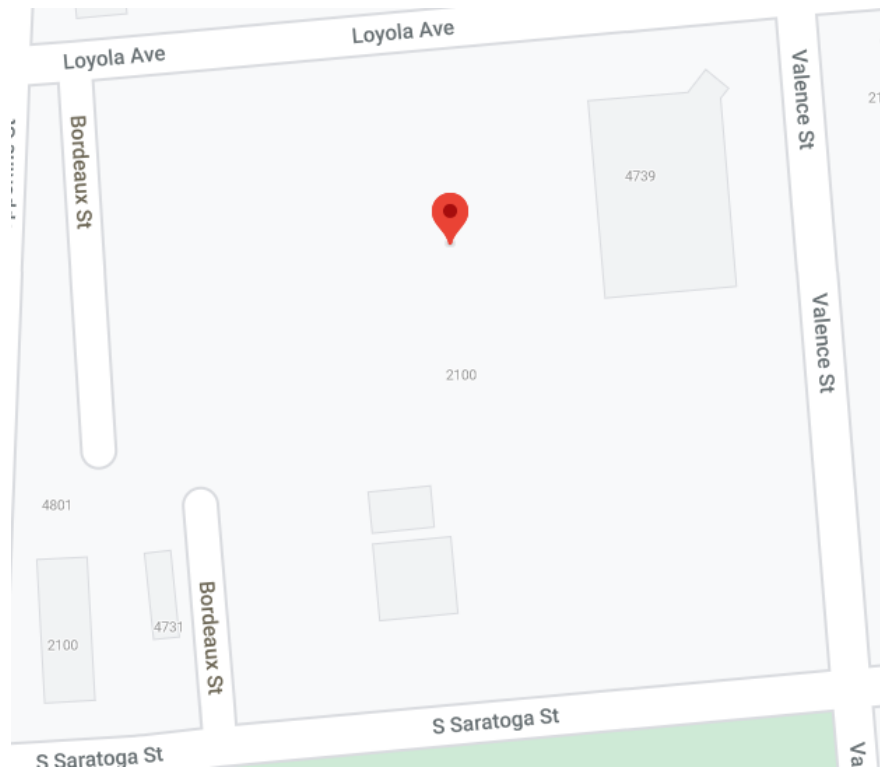


Figure 3. Google Maps Images, 2021

## General History

The Valence Street Substation a contributing-rated structure in the Uptown National Register Historic District, located on municipal square 525, facing the intersection of Valence Street and Loyola Avenue. The history of this building is inextricably intertwined with that of the infrastructure of the City of New Orleans. The Valence Street Substation was built as a feeder station in 1905 - 1906, part of the early power grid; this grid largely grew in response to the City's early transit needs. Gas, power, and transit, at this time, were completely entangled with one another. By 1900, more than 200 electric or gas companies and thirty transit companies had operated independently within the City, leading to redundancies and inefficiencies, which led to financial issues for the companies involved as well as a fair amount of chaos for consumers.<sup>1</sup> Companies used different voltages, different equipment, and were overlapping without interconnecting.<sup>2</sup> The mergers of a number of these businesses throughout the 20<sup>th</sup> Century are still evident in the City's contemporary power, gas, and transportation systems.

## Background

On February 7, 1829, the Louisiana Legislature passed an act which incorporated the New Orleans Gas Light Company; in 1833, the franchise was 'declared forfeited' and the exclusive rights to vending gas lights in the City of New Orleans was given to James H. Caldwell.<sup>3</sup> Less than 50 years later, the "era of electricity began": the Southwestern Brush Electric Light and Power Company was incorporated in New Orleans on June 11, 1881, and was the first company to generate and distribute electricity in the city.<sup>4</sup> The company began operating early in 1882, and by the end

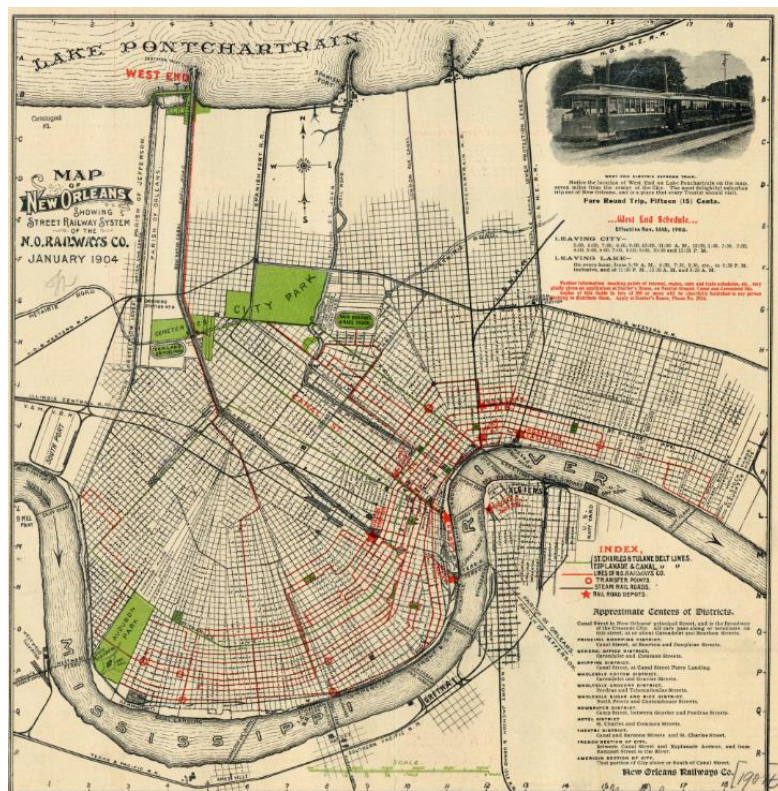


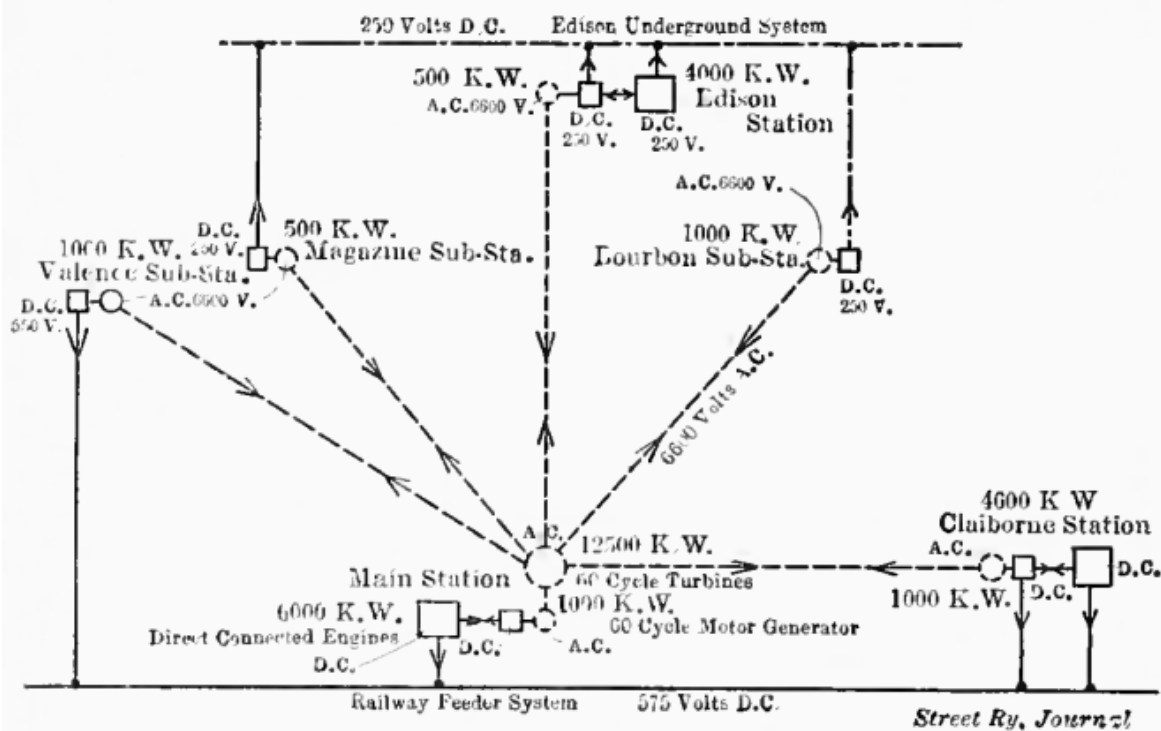
Figure 4. Map of Streetcar Service in the City of New Orleans, 1904

<sup>1</sup> (New Orleans Public Service Inc 1994)

<sup>2</sup> (Entergy n.d.)

<sup>3</sup> (The Reconstruction of the Power System of the New Orleans Railway and Light Company 1907), (New Orleans Public Service Incorporated 1926)

<sup>4</sup> (Hernandez 2010)



## PLAN OF POWER DISTRIBUTION IN NEW ORLEANS

Figure 5. Plan of Power Distribution in New Orleans, 1907

that same year had installed 12 generators “serving 480 of the brilliant electric arc lights invented by Charles Brush,” most of those installed for street lighting.<sup>5</sup> The Edison Electric Illuminating Company, chartered in 1886, was the first electric company to provide incandescent lighting.<sup>6</sup> By 1894, the Louisiana Electric Light Company built a steam electric power generating facility on the site now inhabited by the Market Street Plant at 1642 S. Peter St. (replaced in 1901 by the current plant which was built by the New Orleans Power House Company Ltd., designed by Thomas Sully, with additions designed by Sanderson & Porter from 1905 – 1907).<sup>7</sup>

The New Orleans and Carrollton Railroad Company was granted a charter in 1833.<sup>8</sup> They built the railway lines which connected the Central Business District and the suburban uptown neighborhoods. The St. Charles Line (originally called the Carrollton Line) originally started on Canal Street, but was extended up to Baronne Street, then to Howard Avenue (formerly Delord Street), then ran to Tivoli Place and up St. Charles Avenue (formerly Nayades Street) up to

<sup>5</sup> (Hernandez 2010)

<sup>6</sup> Ibid.

<sup>7</sup> (Hernandez 2010), (The Reconstruction of the Power System of the New Orleans Railway and Light Company 1907)

<sup>8</sup> (Gamse 1985)

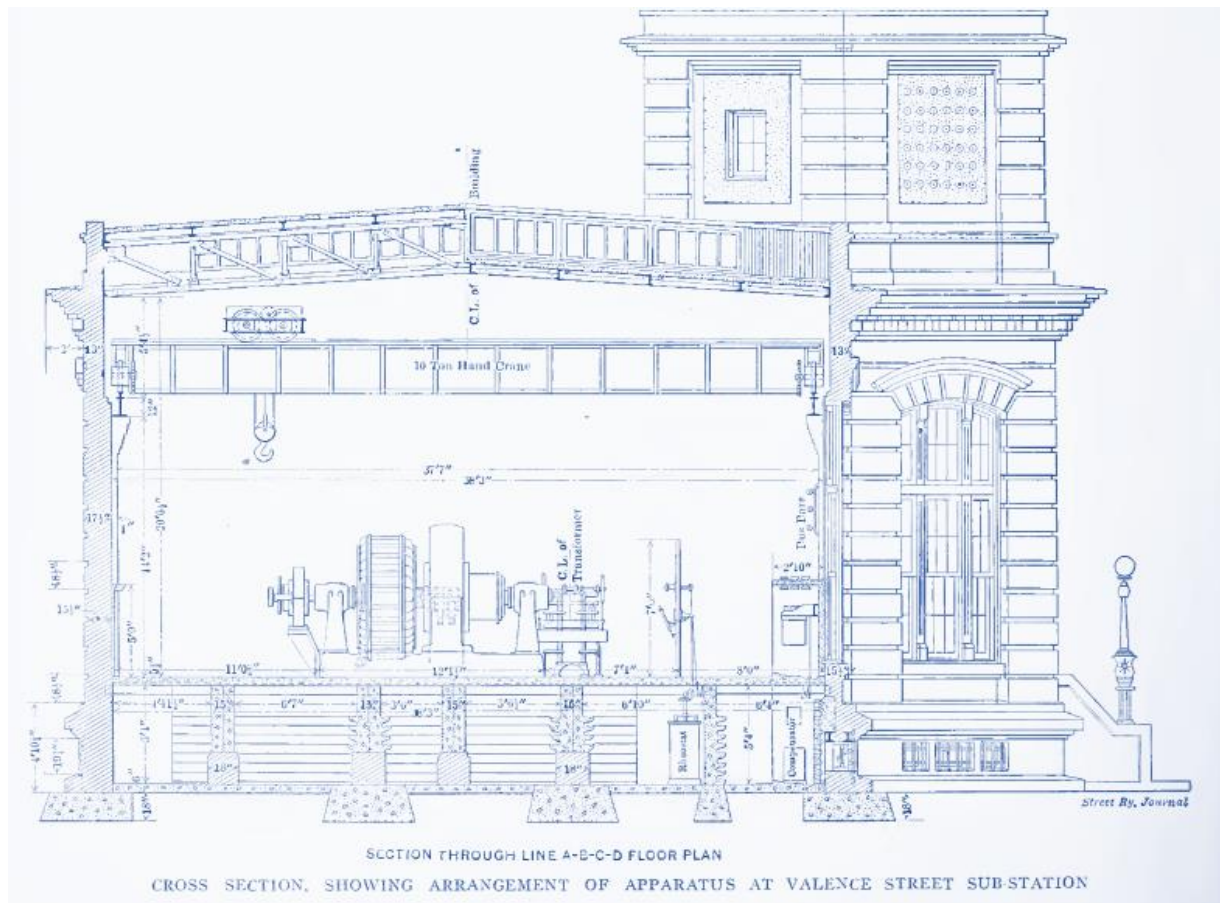


Figure 6. Cross Section, Valence Street Substation, 1907

Carrollton Avenue.<sup>9</sup> The streetcars were originally powered by steam, then by horses and mules, and finally by 1893, electricity.<sup>10</sup> In 1899, the New Orleans and Carrollton Railroad Company and the Canal and Claiborne Railroad Company merged.<sup>11</sup> In 1902, those companies became the New Orleans Railways Company.<sup>12</sup> The New Orleans Railways Company went into receivership, and reorganized in 1905, as the New Orleans Railway and Light Company, which was the first real attempt at centralizing the City's energy, gas, and transportation needs.<sup>13</sup>

In 1903, the New Orleans Railway and Light Company hired New York engineering firm Sanderson & Porter to implement their plans for the "enlargement and reconstruction of the power generating and distributing systems."<sup>14</sup> The construction of substations were necessitated by the heavy energy consumption load of both the newly installed ARC street

<sup>9</sup> (Lemann 1973)

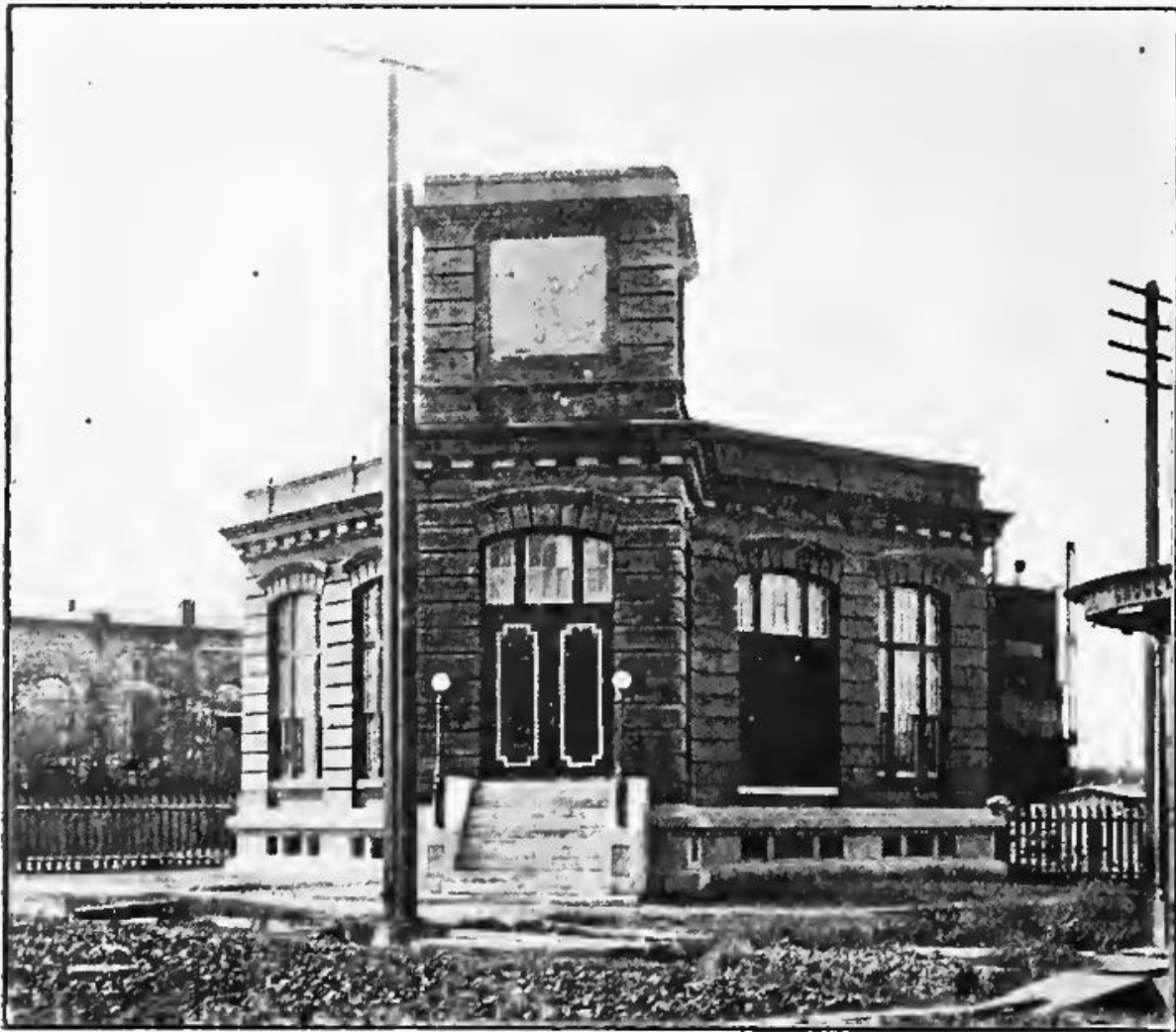
<sup>10</sup> (Gamse 1985)

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> (Cobar 2019), (Gamse 1985)

<sup>14</sup> (The Reconstruction of the Power System of the New Orleans Railway and Light Company 1907)



CORNER VIEW OF THE VALENCE SUB-STATION

Figure 7. Valence Street Substation, 1907

lighting throughout the City, as well as by streetcars. The newly constructed system comprised of one commercial lighting station, one-direct current streetcar station, and one alternating current station.<sup>15</sup>

The Valence Street Substation was the first constructed permanent substation that provided energy for a combination of arc lighting and streetcars; it was built to “contain 110-lamp arc-light transformers and two 500 kw motor generator sets.” The upper portion was a cable tower. A three conductor 4-0 6600 volt and a 2300 volt feeder from the Market Street Station (roughly three miles away) entered at one side, with outgoing feeders at the opposite side.<sup>16</sup> From the cable tower, high-tension feeders dropped to bare busses on the wall behind

<sup>15</sup> (The Reconstruction of the Power System of the New Orleans Railway and Light Company 1907)

<sup>16</sup> Ibid.

the switchboard, then went to hand-operated oil switches installed in cement cells under the busses; the leads were then carried under the floor to the synchronous motor generator sets.<sup>17</sup> The railroad switchboard contained two feeders and two generator patterns.<sup>18</sup>

The station supplied the needed energy to run both the uptown streetcars and the nascent area power grid. Along with the Market Street Station, the Claiborne Power House on Elysian Fields, the Baronne Street Station, the Howard Avenue Terminal House, and the Dryades Substation, the City of New Orleans had a fairly comprehensive and connected power grid under one company.<sup>19</sup>

In 1921, the Citizens' Commission of Forty proposed a further consolidation of the major power companies, and in 1922, the City of New Orleans passed the Settlement Ordinance, which called for one company to be created which would partner with the City to control



Figure 8. Links in the Chain of Public Service, 1924

<sup>17</sup> (The Reconstruction of the Power System of the New Orleans Railway and Light Company 1907)

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

electricity, gas, and transit. In 1922, New Orleans Public Service Incorporated (NOPSI) formed and acquired the New Orleans Railway and Light, Co.<sup>20</sup>

In 1926, the Consumers Electric Light and Power Company and the Citizen’s Light and Power Company, Inc. were likewise consolidated under NOPSI, and NOPSI was chartered as an Investor Owned Utility (IOU).<sup>21</sup> All power plants and distribution stations were under NOPSI control by 1926. Further consolidation occurred in 1949, when Electric Bond and Share Company (EBASCO – a subsidiary of Genral Electric) was dissolved and Middle South Utlities formed as a holding company for Arkansas Power and Light, Louisiana Power and Light, Mississippi Power and Light, and NOPSI.<sup>22</sup> By “special request” NOPSI maintained exclusive control of gas and transit in the City.<sup>23</sup>

The Market Street Station and feeder stations continued to supply power to the City until 1947, when the Industrial Canal Generating Station was constructed; it was renamed the A.B. Paterson station in 1952.<sup>24</sup> In 1957, another new plant was built, this time at Michoud in New

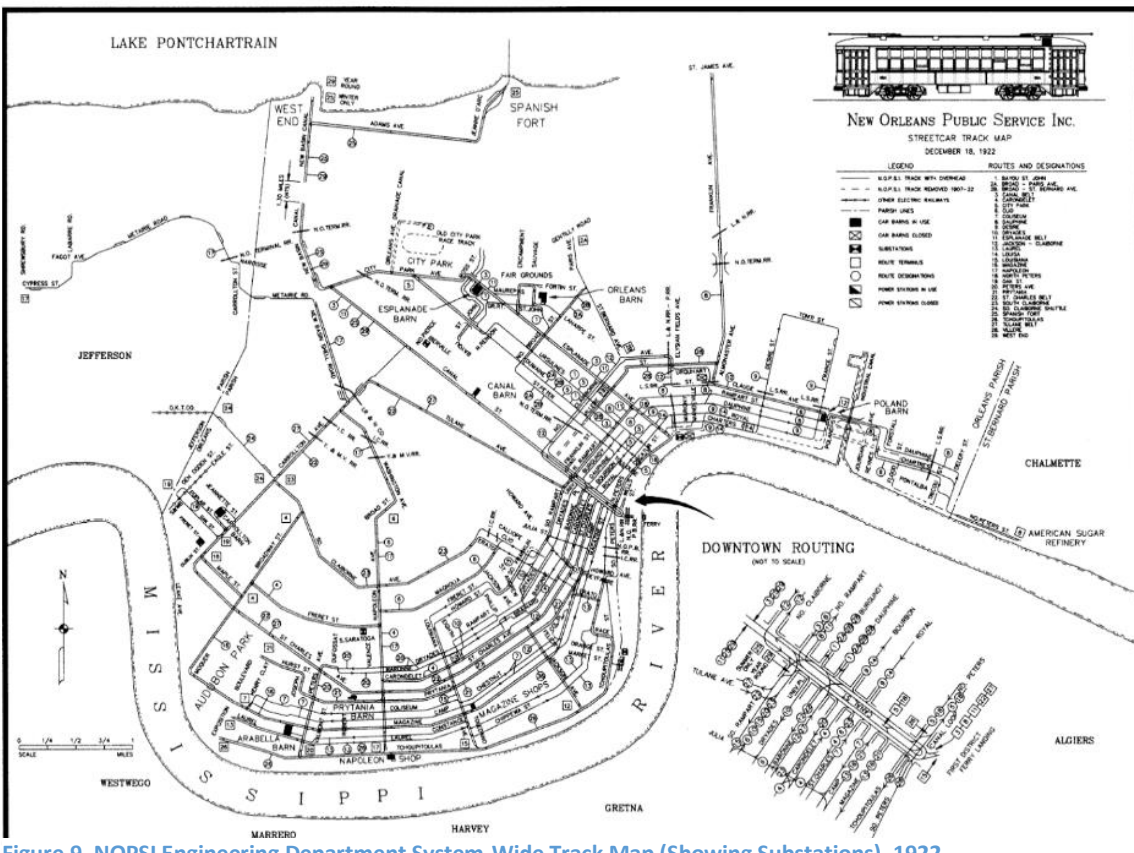


Figure 9. NOPSI Engineering Department System-Wide Track Map (Showing Substations), 1922

<sup>20</sup> (New Orleans Public Service Incorporated 1926), (Cobar 2019)

<sup>21</sup> (Cobar 2019)

<sup>22</sup> (Entergy n.d.)

<sup>23</sup> Ibid.

<sup>24</sup> (Hernandez 2010), (Cobar 2019), (New Orleans Public Service Inc 1994),

Orleans East, with two additional units constructed in 1963 and 1967.<sup>25</sup> The Market Street Plant was no longer in use by 1973 although some of the original feder stations, including the Valence Street Substation remained in use.<sup>26</sup>

By 1964, NOPSI had ceased operations on all streetcar lines but two; in 1973, the St. Charles Streetcar Line was placed on the National Register of Historic Places.<sup>27</sup> Streetcars remained under NOPSI control until July 1, 1983, when RTA (formed in 1979) took over all public transit in the City.<sup>28</sup> A 1985 report by the Institute of Transportation Engineers reported that the Valence Street Substation,



Figure 10. Valence Street Substation, 1989

which still supplied all power to the St. Charles Streetcar Line, had “obsolete equipment that should be replaced;” they recommended that both the circuit breakers and switch gears needed to be addressed.<sup>29</sup> That same report also noted that “given the historic importance of the St. Charles Streetcar Line, the rehabilitization must not adversely affect the quality of its historic characteristics.”<sup>30</sup>

In 1989, Middle South Utilities rebranded as Entergy, but NOPSI still maintained its local brand identity at this point.<sup>31</sup> By 1992, the vast majority of NOPSI’s energy was being produced by natural gas, and only two of its plants were still operational: the Michoud Plant and A.B.

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<sup>25</sup> (Cobar 2019)

<sup>26</sup> Ibid.

<sup>27</sup> (Lemann 1973)

<sup>28</sup> (Gamse 1985), (US Department of Transportation 2017)

<sup>29</sup> (Gamse 1985)

<sup>30</sup> Ibid.

<sup>31</sup> (Entergy n.d.)

Paterson.<sup>32</sup> In 1996, all Entergy holdings, including NOPSI were subsumed by the parent company, and NOPSI was effectively no more.<sup>33</sup> All of NOPSI's former holdings and properties, including the now defunct Market Street plant and feeder substations were now solely owned by Entergy.

The Entergy-owned Valence Street Substation was nominated as a Local Historic Landmark in 2000. As of 2021, the site is in heavy industrial use; it currently houses a cell tower and the location still provides the electricity needed to run the St. Charles Streetcar Line.



Figure 11. Valence Street Substation, 2021



Figure 12. Valence Street Substation, 2021

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<sup>32</sup> (New Orleans Public Service Inc 1994)

<sup>33</sup> (All Entergy 1996)



Figure 13. Valence Street Substation, 2021

### Building Description

The Valence Street Substation is a masonry building with a prominent diagonal entry tower; it is seven bays deep and three bays wide. Side bays have large multi-section windows with segmentally arched tops. Some of these windows have been altered, and all are covered with non-original metal screening. The



Figure 14. Valence Street Substation, 2021

building is slightly raised – the basement level above ground is narrow and punctuated with narrow rectangular windows. The main body of the building is rusticated brick with cornices above the windows and doors. The building terminates with a wide cornice that features heavy dentils. The tower has four large concrete panels punctuated by a symmetrical pattern of small round objects, one on each façade. The original front door has been replaced with a small metal entryway. The original opening has been bricked-in but the multi-lite transom remains. The door is accessed by wide concrete steps with a curved knee wall on either side. At the bottom of each knee wall is an inset panel. Above this is a small platform which holds an ornate iron light standard, one on each side of the entry. The rear of the structure is surrounded by chain link fencing and large electrical equipment.

## Statement of Significance and Staff Recommendation

The Historic District Landmarks Commission evaluates the significance of a structure based on the four criteria as established by Section 84.22 of the City Code, any one of which can make a building eligible for designation. The

*Landmark or landmark site means an unimproved parcel of ground (landmark site) or such parcel with improvements or such improvements without grounds (landmark), wheresoever located in the city, subject to the jurisdiction of the historic district landmarks commission, of particular historic, architectural, or cultural significance, which parcel plus its improvements, if any:*

- (1) Exemplify or reflect the broad cultural, political, economic, or social history of the nation, state, or community;
- (2) Are identified with historic personages or with important events in national, state, or local history;
- (3) Embody distinguishing characteristics of an architectural type or specimen, inherently valuable for a study of a period, style, method of construction, or of indigenous materials or craftsmanship; or
- (4) Are representative of the notable work of a master builder, designer, or architect whose individual ability has been recognized.

HDLC finds that this building meets three of those criteria in that it:

**Exemplifies or reflects the broad cultural and economic history of the community** - As noted in the General History portion of this report; this structure is inextricably intertwined with the history of modern infrastructure in the City of New Orleans. Since 1906, this site has been providing electricity to the St. Charles Streetcar Line, which has been listed on the National Register of Historic Places since 1973.

**Embodies distinguishing characteristics of an architectural specimen** - The Valence Street Substation was originally nominated by the Historic District Landmarks Commission on September 12, 2000, based on its architectural significance as a “power station building in the Italian Villa style...a highly unusual and well designed building...its location in the center of a small scale residential neighborhood makes it even more noteworthy.”<sup>34</sup> This structure is indeed a very good example of early 20<sup>th</sup> Century pre-modernist industrial or commercial design. Industrial buildings of this era were “architectural highlights” of their urban landscapes.<sup>35</sup> While this structure was clearly built for utilitarian purposes, its pressed bricks are laid out in a decorative fashion and the building is trimmed with purely aesthetic cement details. While relatively small compared with the other power houses in the City from the same era (notably the Market Street Plant and Claiborne Power House on Elysian Fields, which are both built in the same general style) there is still a monumentality to the structure which belies its purpose.

**Is representative of the notable work of an architect whose individual ability has been recognized** – New York Engineering Firm Sanderson & Porter designed multiple large scale projects in the early 20<sup>th</sup> Century including the ca. 1906 Nine Mile Hydroelectric Power Plant in Spokane Washington, which was listed on the National Register of Historic Places in 1990.

For all these reasons, the staff recommends that the Valence Street Substation be designated as a Local Historic Landmark.

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<sup>34</sup> (Historic District Landmarks Commission 2000)

<sup>35</sup> (Jonite 2019)

## Figure Attribution

**Cover Image.** Author's Own, 2021

**Figure 1.** Sanborn Fire Insurance Map, 1909

**Figure 2.** Sanborn Fire Insurance Map, 1951

**Figure 3.** Google Maps Images, 2021

**Figure 4.** Map of Streetcar Service in the City of New Orleans, 1904, The New Orleans Railways Company

**Figure 5.** "The Reconstruction of the Power System of the New Orleans Railway and Light Company." *The Street Railway Journal* XXX (23): 1082.

**Figure 6.** "The Reconstruction of the Power System of the New Orleans Railway and Light Company." *The Street Railway Journal* XXX (23): 1082.

**Figure 7.** "The Reconstruction of the Power System of the New Orleans Railway and Light Company." *The Street Railway Journal* XXX (23): 1082.

**Figure 8.** "Links in the Chain of Public Service," 1924, *Times-Picayune*, 7 Dec, p. 89

**Figure 9.** NOPSI Engineering Department System-Wide Track Map (Showing Substations), New Orleans Public Service Engineering Department, 1922

**Figure 10.** New Orleans architecture. Vol. 7, Jefferson City : Toledano Street to Joseph Street, Claiborne Avenue to the Mississippi River / by the Friends of the Cabildo, Associates of the Louisiana State Museum ; compiled and edited by Dorothy G. Schlesinger, Robert J. Cangelosi, Jr., Sally Kittredge Reeves ; contributing authors Bernard Lemann, Samuel Wilson, Jr., Sally Kittredge Reeves, John E. Walker ; photographs by Walter B. Moses, Jr., Gretna, Louisiana : Pelican Publishing Company, 1989.

**Figure 11.** Author's Own, 2021

**Figure 12.** Author's Own, 2021

**Figure 13.** Author's Own, 2021

**Figure 14.** Author's Own, 2021

## Works Cited

Cobar, Michael. 2019. "Alliance for Affordable Energy." *New Orleans Utility History*. August. Accessed March 9, 2021. [https://www.all4energy.org/uploads/research\\_project](https://www.all4energy.org/uploads/research_project).

Entergy. n.d. "Company History." *Entergy.com*. Accessed March 17, 2021. <https://www.energynewsroom.com/history/>.

Gamse, Beryl. 1985. "New Orleans St. Charles Streetcar Line." *Institute of Transportation Engineers Journal* 18 - 20 .

*Hattiesburg American*. 1996. "All Entergy." April 24: 20.

Hernandez, Nicole. 2010. *1642 S. Peters Market St Designation*. Government Report, New Orleans: City of New Orleans.

Jonite. 2019. "A Guide to Industrial Architecture." <https://insights.jonite.com/a-guide-to-industrial-architecture>. Accessed March 18, 2021. <https://insights.jonite.com/a-guide-to-industrial-architecture>.

Lemann, Bernard. 1973. *National Register of Historic Places Inventoy - Nomination Form - The St. Charles Line (Streetcar)*. National Register of Historic Places Nomination Form , Washington D.C.: US Department of the Interior National Park Service.

New Orleans Public Service Inc. 1994. *NOPSI Company Profile*. New Orleans: New Orleans Public Service Inc.

New Orleans Public Service Incorporated. 1926. *A Near Century of Gas in New Orleans*. New Orleans: New Orleans Public Service Incorporated.

NOPSI. 1994. *New Orleans Public Service Incorporated Company Profile*. Corporate Profile, New Orleans: NOPSI.

1907. "The Reconstruction of the Power System of the New Orleans Railway and Light Company." *The Street Railway Journal* XXX (23): 1082.

US Department of Transportation. 2017. *Historic Context Report for Transit Rail System Development*. Historic Context Report, Washington D.C.: US Department of Transportation.

### **Author's Notes**

The Building Description was pulled from the Landmark Nomination Property Summary Report written in September of 2000; changes were made as needed reflecting the current conditions.

**Report Prepared by Yvette Tyler**