RECOMMENDATION ON THE VARIANCE APPLICATION OF
PSE&G/North Bergen Substation - 2nd Half Upgrades (Variances)
FILE # 23-041

I. INTRODUCTION

An application for three bulk variances has been filed with the New Jersey Sports and Exposition Authority (NJSEA) by Public Service Electric and Gas Company (PSE&G), for the premises located at 4001 Paterson Plank Road, identified as Block 442.02, Lot 1 (formerly known as Block 442, Lots 6, 7 and 8), in the Township of North Bergen, New Jersey. The subject premises, although located within a utility right-of-way, is deemed to be within the District's Light Industrial A zone, pursuant to N.J.A.C. 19:4-3.6(a). The variances are sought in connection with the applicant's proposal to install system upgrades and expand its North Bergen Substation to address the need for additional electrical capacity in its area network.

Specifically, the applicant is requesting relief as follows:

1. N.J.A.C. 19:4-5.77(a)3i, which requires a minimum front yard setback of 50 feet, whereas the applicant is proposing concrete foundation structures with a minimum setback of 21.4 feet from the easterly front property line along West Side Avenue.
2. N.J.A.C. 19:4-5.77(a)3iii, which requires a minimum rear yard setback of 75 feet, whereas the applicant is proposing concrete foundation structures with a minimum setback of 23.6 feet from the westerly rear property line.
3. N.J.A.C. 19:4-8.10(a)1, which does not permit fences in the required front yard, whereas the applicant is proposing to install fencing within the required front yard on the subject property.

Notice was given to the public and all interested parties as required by law. The public notice was published in The Jersey Journal. No written objections were received. A public hearing waiver was requested by the applicant, and such waiver was granted by the NJSEA Chief Engineer, pursuant to N.J.A.C. 19:4-4.17(j). All information submitted to the Division of Land Use Management relative to this application is made part of the record of this recommendation.

II. GENERAL INFORMATION

A. Existing and Proposed Use

The property in question, Block 442.02, Lot 1 (formerly known as Block 442, Lots 6, 7 and 8), as depicted on the North Bergen Tax Map, has an area of approximately 10.13 acres, of which a 1.89-acre portion of the lot contains the PSE&G North Bergen substation, which is the subject of the instant application. The property is designated as right-of-way (ROW) on the Official Zoning Map of the Hackensack Meadowlands District; however, pursuant to N.J.A.C. 19:4-3.6(a), the property is deemed to be located within the District's Light Industrial A zone.

The subject site is located parallel to West Side Avenue and north of 71st Street, and is currently developed with the PSE&G North Bergen Substation, containing a control house, transmission wires, and associated site improvements. The portion of the property that is subject to the variance request is rectangular in shape and contains 551.51 feet of frontage along West Side Avenue.

The property is bordered to the north and south by PSE&G ROW property and to the east by West Side Avenue. A warehouse/distribution facility is located to the west of the subject premises, and surrounding properties are principally developed with industrial uses. The subject property is accessed by driveways from West Side Avenue, a heavily travelled roadway with significant trucking movements.

The proposed construction represents a second-phase expansion of PSE&G's Class H substation at the premises, previously upgraded in 2018-2019 as part of

PSE&G's Distribution Hardening Initiative to improve network reliability by raising equipment above base flood elevations established by the Federal Emergency Management Agency (FEMA). PSE&G proposes to increase area capacity by expanding the south end of the existing substation on the premises by approximately 43 feet to accommodate the installation of new equipment, A-frames, fencing, and an access driveway, over existing paved and gravel areas. The scope of the project requires bulk variance relief for proposed front and rear yard setbacks, and for proposed fencing in the required front yard along West Side Avenue.

The subject property previously received bulk variance approvals in File #14-596 PSE&G/North Bergen Substation Upgrades/Variances and File #17-068 PSE&G/North Bergen Substation Switchgear Upgrades/Variances. As a result, the subject property contains pre-existing nonconforming fencing within the front yard, an established pre-existing nonconforming front yard setback of 18.4 feet along West Side Avenue, whereas a minimum setback of 50 feet is required, and a minimum rear yard setback of 20.1 feet, whereas 75 feet is required.

B. Response to the Public Notice

No written comments or objections were received during the public comment period.

III. PUBLIC HEARING (WAIVED)

Pursuant to N.J.A.C. 19:4-4.17(j), the public hearing for the requested bulk variances was waived. The public notice was published in The Jersey Journal on July 15, 2023, and notice was given to the public and all interested parties as required by law. No comments were received during the 10-day public comment period that expired on July 25, 2023.

The bulk variance request, and submitted documents supporting the request, were evaluated by Sara J. Sundell, P.E., P.P., Director of Land Use Management and Chief Engineer; Sharon A. Mascaró, P.E., Deputy Director of Land Use Management and Deputy Chief Engineer; Mia A. Petrou, P.P., AICP, CFM, Supervising Planner; and William Moran, P.E., AICP, P.P., CME, Senior Engineer.

The professional plans and reports submitted by the applicant in support of the bulk variance request are as follows:

1. "PSE&G North Bergen Substation - Site Plan", prepared by Kevin B. Robinson, Jr., P.E., of Black & Veatch and Shehzad Khan, P.L.S., PSE&G, dated 01/24/2023, last revised 05/19/2023.
2. "PSE&G North Bergen Substation - Boundary & Topographic Survey", prepared by Shehzad Khan, P.L.S., PSE&G, dated 01/24/2023, last revised 04/05/2023.
3. The following plans prepared by Kevin B. Robinson, P.E., Black & Veatch, entitled and dated as follows:
    a. Drawing 790664A-0P1 entitled, "North Bergen Substation, 230/13KV Substation - Removals Plan", dated 12/13/2022, last revised 04/05/2023;
    b. Drawing 247685A-5P1 entitled, "North Bergen Substation, 230/13KV Substation – Property, Fence, Road and Grading Plan", dated 12/07/1982, last revised 04/05/2023;
    c. Drawing 391547A-2P1 entitled, "North Bergen Substation, 230/13KV Substation - Fence & Miscellaneous Site Protective Barriers – Sheet 1", dated 04/30/2015, last revised 05/19/2023;

d. Drawing 791349A-0P entitled, "North Bergen Substation, 230/13KV Substation - Fence & Miscellaneous Site Protective Barriers – Sheet 2", dated 12/13/2022;

e. Drawing 391546A-2P entitled, "North Bergen Substation, 230/13KV Substation - Drainage & Soil Erosion and Sediment Control Notes and Details – Sheet 1", dated 04/30/2015, last revised 12/13/2022; and

f. Drawing 791348A-0P1 entitled, "North Bergen Substation, 230/13KV Substation - Drainage & Soil Erosion and Sediment Control Notes & Details – Sheet 2", dated 12/13/2022, last revised 04/05/2023.

4. The following plans prepared by Andrew A. Brown, P.E., PSE&G, entitled and dated as follows:

   a. Drawing 253040A-7P, "North Bergen Substation - Key Plan", dated 07/31/2015, last revised 09/02/2022.

   b. Drawing 391468A-2P, "North Bergen Substation - Key Plan Elevations", dated 07/31/2015, last revised 09/02/2022.

   c. Drawing 391525A-1P, "North Bergen Substation - Ultimate Lighting Distribution Plan", dated 06/28/2017, last revised 09/02/2022.

5. "Stormwater Management Report for the North Bergen Street 230/13KV Substation," prepared by Kevin B. Robinson, P.E., Black & Veatch, dated December 13, 2022.

6. Acoustics report entitled "Evaluation of Sound Emissions from Additional Systems, PSE&G North Bergen Substation", prepared by Michael T. Conaway, P.E., Ostergaard Acoustical Associates, dated August 16, 2022.

7. "Planner's Report, PSE&G North Bergen, North Bergen Class H 230/13kV - Second Half, Request for Variance Relief", prepared by Katherine L. Hering, P.E., P.P., CME, E2 Project Management, LLC, dated May 19, 2023, last revised June 12, 2023.

8. "Tax Map - North Bergen Township, Sheet 99," dated June 2019, formally certified by the Division of Taxation on March 11, 2021.

Staff findings and recommendations are based on the entire record.

IV. RECOMMENDATION

A. Standards for the Granting of a Bulk Variance from the Provisions of N.J.A.C. 19:4-5.77(a)3i, which requires a minimum front yard setback of 50 feet, whereas the applicant is proposing concrete structures with a minimum setback of 21.4 feet from the easterly front property line along West Side Avenue.

The Hackensack Meadowlands District Zoning Regulations at N.J.A.C. 19:4-4.14(e) state in part that, *a variance shall not be granted unless specific written findings of fact directly based upon the particular evidence presented are made that support conclusions that...*

1. *Concerning bulk variances:*
   i. *The variance requested arises from such condition that is unique to the property in question, is not ordinarily found in the same zone, and is not created by any action of the property owner or the applicant.*

The subject premises containing the North Bergen Substation is owned by PSE&G and consists of a 1.89-acre portion of Block 442.02, Lot 1 (formally known as Block 442, Lots 6, 7 & 8), which overall totals 10.13 acres. The property is deemed to be within the District's Light Industrial A zone, pursuant to N.J.A.C. 19:4-3.6(a). The subject premises is uniquely configured, having a 150-foot-wide lot depth

and 551.51-foot-long frontage along West Side Avenue to the east. The subject property is currently improved with an existing electric substation with a control house, transmission towers, and electrical equipment, and contains access driveways from West Side Avenue. The location and configuration of these improvements on the existing lot include a pre-existing nonconforming front yard setback of 18.4 feet along West Side Avenue, whereas a minimum setback of 50 feet is required, and a pre-existing nonconforming minimum rear yard setback of 20.1 feet, whereas 75 feet is required.

The proposed improvements are required by PSE&G to upgrade and expand the existing electric substation at the premises to provide additional capacity in its area network. A minimum front yard setback of 21.4 feet to the concrete foundations of proposed A-frame structures in the southerly portion of the project site is proposed. The placement of improvements on the site, including the A-frame structures, is dictated by the location of existing equipment and regulatory requirements of the National Electric Safety Code (NESC) to maintain certain clearances between equipment and structures. Therefore, the variance requested arises from conditions that are unique to the property in question and are not ordinarily found in the same zone.

ii. *The granting of the variance will not adversely affect the rights of neighboring property owners or residents.*

The requested variance will not impact the ability of neighboring industrial and commercial properties to function as intended. The

neighbor to the east is located across the 70-foot-wide ROW of West Side Avenue, and this distance, combined with existing and proposed fencing in the front yard of the subject property, will not cause the proposed concrete structures to result in any significant negative impact to the neighboring properties. Furthermore, the proposed front yard setback of 21.4 feet does not extend beyond the site's preexisting nonconforming front yard setback of 18.4 feet. Existing site and maintenance operations at the unmanned substation will be maintained at their present levels.

The proposed improvements will result in area-wide network capacity improvements that will promote energy reliability, which will benefit area energy customers. In addition, no residential uses are located within the vicinity of the subject property. Therefore, the granting of the requested variance will not adversely affect the rights of neighboring property owners or residents.

iii. *The strict application of the regulations will result in peculiar and exceptional practical difficulties to, or exceptional and undue hardship upon, the property owner.*

The strict application of the minimum front yard setback requirement of 50 feet on the subject property would result in particular and exceptional practical difficulties to, or exceptional and undue hardship upon, the property owner. The subject property has a lot depth of 150 feet and an existing nonconforming front yard setback of 18.4 feet, which will not be reduced as a result of the proposed improvements. When applying the required front yard setback of 50 feet and the required rear yard setback of 75 feet, the resulting building envelope is only 25 feet wide. The proposed A-frame foundations cannot be constructed within the 25-foot-wide building envelope due to the existing configuration of the electric process equipment, which represents an exceptional practical difficulty in the ability to comply with the front yard setback requirements. The placement of the proposed structures on the site is also limited by the NESC, which requires specific clearance distances between equipment. The proposed setback is necessary to accommodate the needed upgrades to the existing substation on the site, while maintaining adequate area to accommodate required clearances between equipment and structures. Therefore, the existing site conditions present exceptional practical difficulties in the ability to comply with the front yard setback requirements.

iv. The variance will not result in substantial detriment to the public good and will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.

Approval of the requested variance to permit a minimum 21.4-foot front yard setback, whereas the minimum required front yard setback is 50 feet, will not result in substantial detriment to the public good and will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.

The applicant's Planner's Report states that PSE&G's "Homestead and Penhorn Substations are currently heavily loaded; Homestead 2H is currently at 110% capacity and Penhorn 2H is currently at 108% capacity. Each of the two stations serves approximately 21,000 customers in the North Bergen area. The construction of the second half of the Class H substation will provide the additional capacity needed in the network, and essentially be a mirror image of the station improvements that were installed in 2018-2019."

The proposed substation expansion will promote the general welfare through the improvement of power capacity to the public customers of PSE&G that are served by this substation. The existing substation is unmanned and traffic is minimal, and the proposed conditions will not substantially differ from the current operations of the site.

v. The variance will not have a substantial adverse environmental impact.

The granting of the requested variance to permit a minimum front yard setback of 21.4 feet, whereas a minimum of 50 feet is required, will not have a substantial adverse environmental impact. The existing non-conforming front yard setback of 18.4 feet will not be further decreased by the proposed upgrades and station expansion. The installation of the concrete foundations for the A-frame structures, although within the required setback, will not adversely impact the environment, as they will be installed over existing disturbed surfaces, including paved and gravel areas. The property's 100-year base flood elevation, per both the 2014 Preliminary and 2019 Effective FEMA Flood Insurance Rate Maps is at 8 feet (NAVD '88). Proposed structures will be elevated a minimum of one foot above the best available flood data elevation of 8 feet, in compliance with Hackensack Meadowlands District floodplain management regulations. Minimum lot coverage and open space requirements are met, and existing drainage patterns will be maintained. The District's environmental performance standards for noise, glare, vibrations, airborne emissions, hazardous materials or water quality will not be exceeded.

vi. The variance represents the minimum deviation from the regulations that will afford relief.

The proposed project involves an upgrade and expansion of the existing substation to address the need for additional capacity and to improve reliability of the regional utility

system. The particular characteristics of the property, including the shallow depth of the parcel and the location of existing improvements, constrain the ability of the proposed improvements to comply with the front yard setback requirements. These conditions represent exceptional practical difficulties in the accommodation of the required upgrades and expansion of the substation. The placement of the proposed structures and equipment on the site is also limited by national regulatory codes that require specific clearance distances between equipment and structures. The proposed upgrades will not extend beyond the preexisting nonconforming front yard setback and will occupy only a small portion of the property's frontage along West Side Avenue. Adequate light, air, and open space will continue to be provided. Therefore, the requested variance represents the minimum deviation from the regulations that will afford relief.

vii. Granting the variance will not substantially impair the intent and purpose of these regulations.

The granting of the requested variance to permit a 21.4-foot front yard setback, whereas a minimum front yard setback of 50 feet is required, will not substantially impair the intent and purpose of these regulations. There will be no significant impact to the provision of light, air, and open space as a result of the requested setback variance. Due to the existing configuration of the property and the improvements on the site, including the shallow depth of the parcel, the layout of the proposed equipment per national regulatory criteria, and the existing nonconforming setback, the site is

constrained in its ability to meet the required front yard setback. As the District regulations are intended to provide for infrastructure and utility improvements and to promote the efficient use of the land, the requested variance will not substantially impair these purposes.

B. Standards for the Granting of a Bulk Variance from the Provisions of N.J.A.C. 19:4-5.77(a)3iii, which requires a minimum rear yard setback of 75 feet, whereas the applicant is proposing concrete structures with a minimum setback of 23.6 feet from the westerly rear property line.

The Hackensack Meadowlands District Zoning Regulations at N.J.A.C. 19:4-4.14(e) state in part that, *a variance shall not be granted unless specific written findings of fact directly based upon the particular evidence presented are made that support conclusions that...*

1. *Concerning bulk variances:*
   i. *The variance requested arises from such condition that is unique to the property in question, is not ordinarily found in the same zone, and is not created by any action of the property owner or the applicant.*

The subject premises containing the North Bergen Substation is owned by PSE&G and consists of a 1.89-acre portion of Block 442.02, Lot 1 (formally known as Block 442, Lots 6, 7 & 8), which overall totals 10.13 acres. The property is deemed to be within the District's Light Industrial A zone, pursuant to N.J.A.C. 19:4-3.6(a). The subject premises is uniquely configured, having a 150-foot-wide lot depth and 551.51-foot-long frontage along West Side Avenue to the east. The subject property is currently improved with an existing electric substation with a control house, transmission towers, and electrical equipment, and

contains access driveways from West Side Avenue. The location and configuration of these improvements on the existing lot include a pre-existing nonconforming front yard setback of 18.4 feet along West Side Avenue, whereas a minimum setback of 50 feet is required, and a pre-existing nonconforming minimum rear yard setback of 20.1 feet, whereas 75 feet is required.

The proposed improvements are required by PSE&G to upgrade and expand the existing electric substation at the premises to provide additional capacity in its area network. A rear yard setback of 23.6 feet to the concrete foundations of proposed A-frame structures in the southerly portion of the project site is proposed. The placement of improvements on the site, including the A-frame structures, is dictated by the location of existing equipment and regulatory requirements of the National Electric Safety Code (NESC) to maintain certain clearances between equipment and structures. Therefore, the variance requested arises from conditions that are unique to the property in question and are not ordinarily found in the same zone.

ii. *The granting of the variance will not adversely affect the rights of neighboring property owners or residents.*

The requested variance will not impact the ability of neighboring industrial and commercial properties to function as intended. The neighbor to the west of the proposed improvements is a warehouse facility with loading areas located along its easterly façade and mature vegetation adjacent to the PSE&G ROW line. The applicant

proposes fencing in the rear yard of the subject property. Therefore, the proposed rear yard setback will not cause the proposed concrete structures to result in a significant negative impact to neighboring properties. Furthermore, the proposed rear yard setback of 23.6 feet does not extend beyond the site's preexisting nonconforming rear yard setback of 20.1 feet. Existing site and maintenance operations at the unmanned substation will be maintained at their present levels.

The proposed improvements will result in area-wide network capacity improvements that will promote energy reliability, which will benefit area energy customers. In addition, no residential uses are located within the vicinity of the subject property. Therefore, the granting of the requested variance will not adversely affect the rights of neighboring property owners or residents.

iii. *The strict application of the regulations will result in peculiar and exceptional practical difficulties to, or exceptional and undue hardship upon, the property owner.*

The strict application of the minimum rear yard setback requirement of 75 feet on the subject property will result in particular and exceptional practical difficulties to, and exceptional and undue hardship upon, the property owner. The subject property has a lot depth of 150 feet and an existing nonconforming rear yard setback of 20.1 feet, which will not be further reduced as a result of this project. When applying both the required front yard setback of 50 feet and the required rear yard setback of 75 feet, the resulting building envelope is only 25 feet wide. The proposed A-frame foundations cannot be constructed within the 25-foot-wide building

envelope due to the existing configuration of the electric process equipment, which represents an exceptional practical difficulty in the ability to comply with the rear yard setback requirements. The placement of the proposed structures on the site is also limited by the NESC, which requires specific clearance distances between equipment. The proposed setback is necessary to accommodate the needed upgrades to the existing substation on the site, while maintaining adequate area to provide the mandatory clearances between equipment and structures. Therefore, the existing site conditions present exceptional practical difficulties in the ability to comply with the rear yard setback requirements.

iv. The variance will not result in substantial detriment to the public good and will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.

Approval of the requested variance to permit a 23.6-foot rear yard setback, whereas a minimum rear yard setback of 75 feet is required, will not result in substantial detriment to the public good and will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.

The applicant's Planner's Report states that PSE&G's "Homestead and Penhorn Substations are currently heavily loaded; Homestead 2H is currently at 110% capacity and Penhorn 2H is currently at 108% capacity. Each of the two stations serves approximately 21,000 customers in the North Bergen area. The construction of the second half of the Class H substation will provide the additional capacity

needed in the network, and essentially be a mirror image of the station improvements that were installed in 2018-2019."

The proposed substation expansion will promote the general welfare through the improvement of power capacity to the public customers of PSE&G that are served by this substation. The existing substation is unmanned and traffic is minimal, and the proposed conditions will not substantially differ from the current operations of the site.

v. The variance will not have a substantial adverse environmental impact.

The granting of the variance to permit a minimum rear yard setback of 23.6 feet, whereas a minimum of 75 feet is required, will not have a substantial adverse environmental impact. The existing non-conforming rear yard setback of 20.1 feet will not be further decreased by the proposed upgrades and station expansion. The installation of the concrete foundations for the A-frame structures, although within the required setback, will not adversely impact the environment, as they will be installed over existing disturbed surfaces, including paved and gravel areas. The property's 100-year base flood elevation, per both the 2014 Preliminary and 2019 Effective FEMA Flood Insurance Rate Maps is at 8 feet (NAVD '88). Proposed structures will be elevated a minimum of one foot above the best available flood data elevation of 8 feet, in compliance with Hackensack Meadowlands District floodplain management regulations. Minimum lot coverage and open space requirements are met, and existing drainage patterns will be maintained. The District's environmental performance standards for noise, glare, vibrations, airborne

emissions, hazardous materials or water quality will not be exceeded.

vi. The variance represents the minimum deviation from the regulations that will afford relief.

The proposed project involves an upgrade and expansion of the existing substation to address the need for additional capacity and to improve reliability of the regional utility system. The particular characteristics of the property, including the shallow depth of the parcel and the location of existing improvements, constrain the ability of the proposed improvements to comply with the rear yard setback requirements. These conditions represent exceptional practical difficulties in the accommodation of the required upgrades and expansion of the substation. The placement of the proposed structures and equipment on the site is also limited by national regulatory codes that require specific clearance distances between equipment and structures. The proposed upgrades will not extend beyond the preexisting nonconforming rear yard setback and will occupy only a small portion of the property's westerly lot line. Adequate light, air, and open space will continue to be provided. Therefore, the requested variance represents the minimum deviation from the regulations that will afford relief.

vii. Granting the variance will not substantially impair the intent and purpose of these regulations.

The granting of the requested variance to permit a 23.6-foot rear yard setback, whereas a minimum rear yard setback of 75 feet is required, will not substantially impair the intent and purpose of these regulations. There will be no significant impact to the provision of light, air, and open space as a result of the requested setback variance. The intent of the minimum required 75-foot rear yard setback in the Light Industrial A zone is generally to provide sufficient area for truck maneuvering and loading areas in the rear of industrial properties. However, this purpose will not be impaired as the subject utility use on this site does not involve such loading operations.

Due to the existing configuration of the property and the improvements on the site, including the shallow depth of the parcel, the layout of the proposed equipment per national regulatory criteria, and the existing nonconforming setback, the site is constrained in its ability to meet the required rear yard setback. As the District regulations are intended to provide for infrastructure and utility improvements and to promote the efficient use of the land, the requested variance will not substantially impair these purposes.

C. Standards for the Granting of a Bulk Variance from the Provisions of N.J.A.C. 19:4-8.10(a)1, which does not permit fences in the required front yard. The applicant is proposing to add a section of new fencing within the required front yard across a portion of Lot 1.

The Hackensack Meadowlands District Zoning Regulations at N.J.A.C. 19:4-4.14(e) state in part that, *a variance shall not be granted unless specific written findings*

of fact directly based upon the particular evidence presented are made that support conclusions that...

1. *Concerning bulk variances:*
   i. *The variance requested arises from such condition that is unique to the property in question, is not ordinarily found in the same zone, and is not created by any action of the property owner or the applicant.*

   The subject site is currently developed with an existing electric substation including a control house, transmission towers, electrical equipment, and access driveways from West Side Avenue. An existing non-conforming chain link fence is located between 1.3 and 2.1 feet from the front property line along West Side Avenue. The existing fence around the substation is proposed to be replaced in its existing location, with a proposed new section of fencing extending approximately 75 feet toward the south to completely enclose the expanded utility compound. The new fence section will consist of a 7-foot-high chain link fence with 1-foot barbed wire and will include gates to secure the driveway opening. The proposed new section of fence will have a minimum setback of 0.2 feet from West Side Avenue.

   The Hackensack Meadowlands District Zoning Regulations restrict the placement of fences within required front yards. The property is configured and improved in such a way that potential locations for a fence are limited without negatively affecting site improvements and jeopardizing site security. The security fencing surrounding the substation is required by the National Electric Safety Code (NESC). Thus, security requirements for critical infrastructure such as electric substations are heightened in comparison to other permitted uses in

the Light Industrial A zone. Therefore, the variance requested arises from the conditions that are unique to the property in question, are not ordinarily found in the same zone, and were not created by any action of the property owner or applicant.

ii. *The granting of the variance will not adversely affect the rights of neighboring property owners or residents.*

The installation of the proposed security fence within the required front yard of the subject property, as proposed, will not adversely affect the rights of neighboring property owners and residents. The subject property contains an existing chain link fence located between 1.3 and 2.1 feet from the property line along West Side Avenue, and the proposed fencing within the front yard, proposed at a minimum 0.2-foot setback, will replace the existing fencing and be extended to enclose the expanded utility compound to provide adequate security for the site. The proposed fence will not obstruct access to neighboring properties. In addition, there are no residential uses located within the vicinity of the subject site.

iii. *The strict application of the regulations will result in peculiar and exceptional practical difficulties to, or exceptional and undue hardship upon, the property owner.*

A new security fence and gates are proposed around the expansion of the electric substation and extend into the required front yard of the subject property at a minimum front yard setback of 0.2 feet from West Side Avenue, whereas fences are not permitted within the

required front yard. An existing nonconforming chain link fence located between 1.3 and 2.1 feet from the property line along West Side Avenue is proposed to be replaced in the same location. A new 75-foot-long portion of the fence, with access gates, is proposed to be located within the required front yard of the subject property to meet the existing fence line, in order to provide for adequate security on the site. If the fence were not permitted to extend into the front yard and connect with the existing fence, the security of the electric substation would be compromised by the resulting gaps in the fencing.

If the regulations were strictly applied, the applicant would be unable to provide for a continuous security fence around the site perimeter and, therefore, would be unable to secure the site in accordance with industry requirements. Security requirements for critical infrastructure such as electric substations are heightened in comparison to other permitted uses in the Light Industrial A zone. The proposed location of the fence will allow the site to continue to function unimpeded.

Therefore, the strict application of the regulations governing fence location will result in particular and exceptional practical difficulties to, and exceptional and undue hardship upon, the property owner.

iv. The variance will not result in substantial detriment to the public good and will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.

Approval of the requested variance to permit the proposed fence within the required front yard of the subject property will not result in substantial detriment to the public good and will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare. Rather, the proposed fence will properly secure the expanded substation site and thereby protect the public safety and general welfare. In addition, the protection of critical infrastructure, such as electric substations, is in the best interest of the general public. The proposed location of the fence will not result in any detriment to area traffic or cause back-ups on West Side Avenue by utility vehicles accessing the site. The existing and proposed substation is unmanned and, therefore, traffic is minimal and will not differ significantly from existing operations at the site. Although gate posts are proposed at nine feet in height, the proposed height of the fence and gates themselves will not exceed the eight-foot maximum height requirement in the Light Industrial A zone.

v. *The variance will not have a substantial adverse environmental impact.*

The granting of the requested variance to permit the proposed fence within the required front yard of the subject property will not have a substantial adverse environmental impact. The proposed fence will secure the property and protect the public by securing access to vital utility infrastructure. Fencing will not be located in environmentally sensitive areas, such as wetlands or open water, and existing drainage patterns will be maintained after the fencing is installed. The Hackensack Meadowlands District's environmental performance standards for noise, glare, vibrations, airborne emissions, hazardous materials or water quality will not be exceeded.

vi. *The variance represents the minimum deviation from the regulations that will afford relief.*

The proposed fence plan represents the replacement of the existing fencing around the entire substation, along with a proposed 75-foot-long new portion of fencing located at a minimum 0.2-foot setback from West Side Avenue to secure the expanded substation. The existing nonconforming fence currently extends east into the required front yard along West Side Avenue at a minimum 1.3-foot setback. The length of the new fence/gate portion represents approximately 13.6 percent of the site's frontage along West Side Avenue, which is a minimal expansion of a preexisting nonconforming condition on the premises.

A conforming fence location would be located at a 50-foot setback from the property line along West Side Avenue, which would position the fencing through existing utility improvements on the 150-foot-wide site. This is not a practicable alternative. There are no alternative compliant locations to provide a security fence without altering the safe operation and layout of the substation. Therefore, the requested variance represents the minimum deviation from the regulations that will afford relief.

vii. Granting the variance will not substantially impair the intent and purpose of these regulations.

The granting of the requested variance to permit fencing at a minimum 0.2-foot setback within the required front yard of the subject property will not substantially impair the intent and purpose of these regulations. The proposed fencing will connect to a preexisting nonconforming fence in the required front yard on the easterly lot line along West Side Avenue. Due to the particular characteristics of the property and the existing and proposed electrical substation layout, the site cannot be redesigned to provide for a compliant fence location. The intent and purpose of fence regulations is to allow for site security, however, if the requested variance were not granted, that purpose would not be fulfilled. Therefore, the proposal supports the purpose of the Hackensack Meadowlands District zoning regulations to "promote development in accordance with good planning practices that relates the type, design, and layout of such development to both the particular site and surrounding environs."

V. SUMMARY OF CONCLUSIONS

A. <u>Standards for the Granting of a Bulk Variance from the Provisions of N.J.A.C. 19:4-5.77(a)3i, which requires a minimum front yard setback of 50 feet, whereas the applicant is proposing concrete foundation structures with a minimum setback of 21.4 feet from the easterly front yard property line along West Side Avenue.</u>

Based on the record in this matter, the bulk variance application to construct concrete structures within the required front yard along West Side Avenue with a minimum setback of 21.4 feet, whereas a minimum front yard setback of 50 feet is required, is hereby recommended for APPROVAL.

APPROVAL	7/13/2023	
Recommendation on Variance Request	Date	Sara J. Sundell, P.E., P.P. Director of Land Use Management Chief Engineer
Approved	7/13/23	
Recommendation on Variance Request	Date	Frank Leanza, Esq. Senior Vice President Chief of Legal and Regulatory Affairs

B. **Standards for the Granting of a Bulk Variance from the Provisions of N.J.A.C. 19:4-5.77(a)3iii, which requires a minimum rear yard setback of 75 feet, whereas the applicant is proposing concrete structures with a minimum setback of 23.6 feet from the westerly rear yard property line.**

Based on the record in this matter, the bulk variance application to construct concrete structures within the required rear yard with a minimum setback of 23.6 feet, whereas a minimum rear yard setback of 75 feet is required, is hereby recommended for APPROVAL.

APPROVAL	7/13/2023	
Recommendation on Variance Request	Date	Sara J. Sundell, P.E., P.P. Director of Land Use Management Chief Engineer
Approved	7/15/23	
Recommendation on Variance Request	Date	Frank Leanza, Esq. Senior Vice President Chief of Legal and Regulatory Affairs

C. **Standards for the Granting of a Bulk Variance from the Provisions of N.J.A.C. 19:4-8.10(a)1, which does not permit fences in the required front yard. The applicant is proposing to install fencing within the required front yard on the subject property.**

Based on the record in this matter, the bulk variance application to install fencing at a minimum 0.2-foot setback from West Side Avenue, within the required front yard of the subject property, is hereby recommended for APPROVAL.

APPROVAL	7/13/2023	
Recommendation on Variance Request	Date	Sara J. Sundell, P.E., P.P. Director of Land Use Management Chief Engineer
Approved	7/13/23	
Recommendation on Variance Request	Date	Frank Leanza, Esq. Senior Vice President Chief of Legal and Regulatory Affairs