

MINUTES OF THE SEPTEMBER 27, 2016 PLANNING BOARD MEETING  
BOROUGH HALL, BOROUGH OF HILLSDALE

MEMBERS PRESENT: J. Miano, F. Franco, Z. Horvath, M. Kates, E. Alter  
Vice Chairwoman Calabria, Chairman M. Giancarlo

MEMBERS ABSENT: E. Lichtstein, Councilman F. Pizzella, Mayor D. Frank, G. Biener

EMPLOYEES PRESENT: N. Nabbie, Esq., Board Attorney  
C. Statile, P.E., Board Engineer  
C. Chadwick, Deputy Board Secretary

Chairman Giancarlo called the meeting to order with a reading of the Open Public Meetings Statement at approximately 7:30pm.

OPEN TO PUBLIC (for matters not on the Agenda):

As no one wished to speak, the meeting was closed to the public.

MEETING MINUTES:

The *September 8, 2016 Meeting Minutes* were approved by the Board.

INVOICES:

Invoices from Gittleman, Muhlstock & Chewcaskie were approved by the Board for payment.

PRESENTATION:

*Pascack Valley Regional High School District Board of Education*

*Project Submission – New Modular Storage Building at the Pascack Valley High School*

P. Erik Gundersen, Superintendent of Schools, introduced himself as well as his witness, architect Charles Koch, RA of Environetics. This is a required Capital Project Review for the High School Board of Education.

Mr. Gundersen explained that this is a project to install a new modular storage building at the Pascack Valley High School. Mr. Koch escribed the measurements and details of the storage unit building. Mr. Koch stated that the prefabricated structure will be green in color and its location will be behind the recently constructed parking lot, adjacent to the sports field. The high school intends to store vehicles (a Koboda) and equipment inside the structure. Planning Board members were given the opportunity to voice any questions or concerns with the project and all were addressed by Mr. Koch and Mr. Gundersen. Board Engineer Statile discussed the limits of the soil erosion plan verusus the 25 ft. steam corridor offset requirement. He also explained that fuel should not be stored inside the building. Mr. Statile also asked if there will be smoke detectors inside the building and Mr. Koch informed him that there currently are not any, but they can be installed if necessary. Mr. Statile encouraged the installation of smoke detectors. It was further confirmed that the building is 1,200 square feet. Superintendent Gundersen stated that this building will be more secure than the old storage building.

PUBLIC HEARING:

***PZ-12-15; PSE&G Substation – Phase III; Block 1212, Lot 14; 295 Patterson Street  
Major Site Plan with Variances (includes use variance)***

Counsel for the Applicant – Glenn C. Kienz, Esq. of Wiener Lesniak

Mr. Kienz explained that PSE&G is seeking Preliminary and Final Site Plan approval; use variances are also being sought for building height and bulk variances for building setbacks. Furthermore, the substation use has already been determined to be beneficial in the prior two phases that came before the Board. Board Attorney Nabbie deemed PSE&G's published legal notice for the public hearing correct and acceptable, granting the Board jurisdiction to hear the application.

A slideshow presentation entitled "Building Design Evolution" prepared by Black & Veatch was marked into evidence as **Exhibit A-1**.

Mr. Kienz called his first witness, Mr. Juan Ananos, Project Manager at PSE&G, 4000 Hadley Road, South Plainfield, NJ. Mr. Ananos explained that the purpose this third phase of the substation project is to ensure a stronger resilience of the electrical equipment and greatly decrease the chances of it failing during a major storm event, such as Hurricane Irene and/or Hurricane Sandy. A natural gas generator will also be installed on the site. Mr. Ananos confirmed that there are currently 50,000 to 70,000 customers in the local area who are served by this facility. However, this substation site also links to other substation sites as a backup system, termed by PSE&G as "N minus 1." Therefore, the Hillsdale PSE&G substation is a backup to two other PSE&G substations (Waldwick and New Milford), and those substations back up the Hillsdale facility. Elevating all of the substation's equipment will allow the station to remain dry during flood events and continue to operate since it will be raised 3 ft. above FEMA's 100-year flood elevation. Board Engineer Statile asked if there is an overall capacity of this substation and Mr. Kienz explained that the electrical engineer expert witness will answer that question.

The Board then had the opportunity to ask questions. It was confirmed that the project will be completed in April of 2020 and will not be an inconvenience to nearby residents as most of the work on site will be occurring inside the building. It was also confirmed that there are six transformers involved and no additional transformers are being added to the GIS building.

The meeting was then opened to the public. Marisa Cefali of 6 Manson Place, Hillsdale asked questions about flood events and the height of the building, as well as site lighting, and was referred to the engineering witness. Nick Markantus, 109 Prospect Place, Hillsdale and owner of Westwood Banana Company asked if PSE&G will be digging up the street and putting cables underground in front of Knickerbocker; it was confirmed that PSE&G install underground conduit to Patterson Street. Mr. Markantus was also referred to the engineering witness. The meeting was then closed to the public.

The engineering witness then testified – Andrew Martin, PE of 9000 Regency Parkway, Cary, North Carolina. Mr. Martin is a licensed electrical engineer in the state of New Jersey and spoke about the "Existing Conditions Map" dated September 19, 2016 explaining that the first two phases shown on the map are currently underway. The "Site Plan" dated September 19, 2016 was also referenced, specifically the relocation of two switchgears and the control house. Mr. Martin explained that PSE&G is in negotiations with the Knickerbocker Ave. industrial property owner; the building there will be demolished and two transformers and one switchgear building will be installed all connected to the main substation lot. PSEG is in negotiations to acquire the Knickerbocker Avenue right-of-way to connect the two portions of the substation together.

The GIS building (gas insulated switchgear) will contain a system which has a smaller footprint and increased reliability to accommodate with 20 switch breakers. The GIS building will contain many exterior pipes, as well as relay panels and cables, and a crane.

The current existing grade of the site is between Elevation 60 – 63 and there was an observed flood elevation of 65.5 ft. during Hurricane Irene, meaning there was 3.5 – 4.5 feet of floodwater at the substation. The proposed building will be 58 ft. above existing. There will be 20 ft. lightning masts on the building as well. Site lighting will be kept on-site with shielded fixtures within the property to reduce off-site glare. Ornamental poles and lights will be installed along the streetscape.

Mr. Martin confirmed that the transformers will contain mineral oil, are raised above grade, and have oil containment pits in the event of leakage. The rate of transformer failure is extremely rare. Board Engineer Statile asked about the capacity of the substation. Mr. Martin explained that there are six transformers; four of the six are 45 MVA units, the other two are 66.7 MVA units. Therefore, the total capacity of the substation would be 313.4 MVA. During high load periods the transformers may operate over 100% capacity.

Regarding noise generated from the site, the submitted noise analysis for the proposed substation showed better results than the current facility, and within lawful, state standards. The walls being installed around the site will also help alleviate any emitted noise.

There will be underground construction on Prospect Place and Knickerbocker Avenue (new electric duct banks); PSE&G will need to excavate in the road along Westwood Banana Company next door, but will work with the business owner to continue to conduct his operations.

This will be an unmanned facility. Approximately once or twice a week PSE&G will have an employee check the substation to assure it is operating as designed. There will be an audible alarm in event of transformer failure, however it is extremely unlikely that there would be any transformer failure. There will be one restroom in the GIS Hall control room as required by the building code. Some overhead wires will be rerouted to underground. Regarding the lightning analysis – there are five existing 70 ft. lightning masts; PSE&G is replacing those with ten 75 ft. lightning masts. There was then a discussion regarding NJDEP permits and Mr. Martin confirmed that PSE&G does have NJDEP approval and a permit for a flood hazard mitigation area as well as verbal approval from the Soil Conservation District. Mr. Martin confirmed PSE&G is working with the BCUA to discharge groundwater from the pile driving work into the sanitary sewer trunk, but is looking at alternative plans that do not involve driving piles such as large mat foundations. It was confirmed that this site will not be used for equipment storage.

The Board then had the opportunity to question the witness. Mr. Horvath asked about a stormwater operation maintenance plan and this question was deferred to the civil engineer. Mr. Alter asked about the GIS building and how gas used for switchgear insulation will arrive on site; Mr. Martin explained that it will only need to be delivered once, and will be delivered by truck. Mr. Alter asked how often the gas will need to be refilled and Mr. Martin explained it will never need to be refilled and has a 10-20 year life. Regarding concerns about gas escaping, it is highly unlikely that any would escape as PSE&G has a partial discharge alert system which informs PSE&G immediately if there are any leaks. Mr. Alter asked the type of gas used. Mr. Martin confirmed it is sulfur hexafluoride (SF<sub>6</sub>). Mr. Alter mentioned, that according to the Intergovernmental Panel on Climate Change, SF<sub>6</sub> (Sulfur Hexafluoride) is the most potent greenhouse gas that it has evaluated. Sulfur hexafluoride is extremely long-lived, and has an estimated atmospheric lifetime of 800–3200 years. If a substantial quantity of gas is released it will settle in low-lying areas and present a significant risk of asphyxiation if the area is entered. Safety was Mr. Alter's biggest concern, because of the fire and explosion at the Waldwick PSE&G sub-station last September.

Witness Kyle King, an electrical engineer of K & R Consulting, LLC, 64 Sherwood Drive, Lenox, Massachusetts then elaborated about the sulfur hexafluoride gas (SF6), explaining that it has been used since the 1960's as an electrical insulator and is colorless, odorless, and non-toxic; it is safe for use in electrical substations. If there was any leak, an alarm would automatically de-energize the system. Mr. Alter asked if Mr. King is familiar with any weaponry uses of the gas and he stated he is not. Ms. Kates asked if this is considered a high voltage facility and Mr. King stated yes. Mineral oil and forced air will be used to cool the transformers; Ms. Kates questioned the use of mineral oil and it was explained that it is used for its insulating properties and because it is non-toxic. Ms. Kates explained how last year there was a fire/explosion at the PSE&G substation facility in Waldwick, NJ. Mr. Martin and Mr. King explained that in event of a similar fire, the Hillsdale Fire Department will be instructed to wait outside the station and only take action to protect adjacent properties while PSE&G de-energizes the facility. The local fire department will be provided with training on substation emergencies. The actual PSE&G substation failure rate is .00064%.

The meeting was then opened to the public. Marisa Cefali of 6 Manson Place, Hillsdale asked if there are any other plants exactly like this in Bergen County and Mr. Martin replied that there are other similar plants in Bergenfield, Bayonne, and all over New Jersey. Ms. Cefali also commented on the lighting emanating from the site at night, as well as "loud booming" noise. Nick Markantus of 109 Prospect Place, Hillsdale also had questions and concerns. The meeting was then closed to the public.

Mr. Statile asked Mr. Martin to explain the purpose of the 25 foot wall around the site and Mr. Martin explained it is an insulation wall for safety of the public and is required to be there along the eastern and western property lines. The wall also doubles as a visual shield and will have brick façade detail as negotiated with the Board's hired architect. The segment of wall along Prospect Place will hide the switch and two transformers from view; the other segments of plain concrete walls are currently on site protecting similar equipment.

Due to the late hour and other Board business, Chairman Giancarlo explained to Mr. Kienz that the Board needed to carry the meeting. As the Board had a full agenda until November, Mr. Kienz requested a special meeting date. The Board carried the application to a special meeting date of October 19, 2016 at 7:00pm and Mr. Kienz waived the time frame for the Board to act until that date, on behalf of PSE&G.

***The special meeting date was later amended, and the application carried instead to October 20, 2016 at 7:00pm.***

**CLOSED SESSSION:**

***Affordable Housing***

The Board unanimously agreed to go into closed session. Board Attorney Nabbie announced that formal action may or may not be taken. At 10:40pm, the Board returned from Closed Session and Ms. Nabbie announced that no formal action was taken by the Board.

Upon returning to Open Session, Mr. Alter discussed with the Board members how to obtain an OEM ID card for looking at properties. Mr. Statile explained to the Board members that even with this ID card, they still do not have the right to enter any private properties.

The meeting was adjourned at 10:45pm.

Respectfully submitted,

Caitlin Chadwick,  
Deputy Secretary