September 23, 2013

Linda D. Puglisi Town Supervisor 1 Heady Street Cortlandt Manor, 10567-1254

RE: Issues for the West Point Partners LLC presentation at the Town Board work session on September 23, 2013

Dear Supervisor Puglisi,

We can agree that the electrical transmission infrastructure - the so-called "power grid" must be maintained and updated. The challenge is to do so carefully, respectfully, responsibly and reasonably, in consideration of the potential impact on the public, the environment, and specifically, with regard to West Point Partners proposed project, the health, welfare, and future impact on the residents of the Hamlet of Verplanck.

The West Point Partners LLC West Point project proposal and application submittal raises many questions and issues. I have only been researching this project for a few weeks, while it appears WPP has been working on this project and in Verplanck, for over a year. If the project is approved as submitted, I will be greatly and adversely affected. Following are a number of questions and issues that I believe have to be further examined and addressed:

- Are you aware that your proposed project plans actually call for routing through the Hamlet of Verplanck, to connect with Buchannan North Substation? All references to the project (including the Dax Law Firm letter) tell local residents the project is proposed for the Village of Buchanan, NY, which could explain why there has been so little local response from Verplanck residents to your proposal to date. Do you have any idea as to why Verplanck is not mentioned in any of the descriptions? It was the only option explored for the converter station, and while less than ½ mile of cable is proposed to be in Buchanan, almost a mile is proposed to run through cut through the hamlet of Verplanck and the Town of Cortlandt.
- 2) A key question: Is it true, as indicated in the Powerbridge website, that *routing*, *environmental and technical studies have been completed*?
- 3) What alternate routes/properties were considered? According to Exhibit 3, at least nine (9) locations were explored for the northern landfall near Albany. For the southern

landfall and converter station in Westchester County, <u>only one location</u> was considered, although other potential options are available. For the Southern end of the transmission line – the one presently designated to connect to the Buchanan North Substation - why were alternate landfalls and converter locations **NOT** considered? The parcel of property currently being proposed for the project - which contains an old stone quarry has been known to be on the market for MANY years. Did WPP aggressively try to pursue any other more appropriate sited properties?

- A) Was a potential landfall at China Pier in Peekskill, Lents Cove, or the wooded Entergy property north of the Indian Point in Buchanan **ever explored**? They are not listed in the alternates, nor are there any reasons indicating why these locations are not feasible.
  - B) There are several commercial / industrial properties along Broadway, owned by Entergy and/or Con Ed in the Village of Buchanan. Were these properties evaluated? Per section 4.12.1.3, each converter station, North or South, will require approximately 5 acres. The converter hall is 106 feet by 370 feet by 49 feet. Did WPP look into the northern wooded portion and the area between Broadway and Entergy parking on the 171 acre Entergy Indian Point parcel (43.10-2-1), the 12.4 acre Con Ed lot east of Broadway (43.11-2-33), or the 50.74 acre Con Ed lot adjacent to the Buchanan North transfer station you are trying to get to? There is no indication that WPP looked into these options in the application under alternates, nor are the reasons indicating why these locations are not feasible. At a minimum, these alternate locations would save the project over 2 miles of cable and installation, with the related material costs, and related savings for less road work and restoration, or balance added costs to prepare these areas.
- C) One of the few alternate routes considered, was option L1. The application indicates that WPP would have the DC cables come down the Railroad Right of Way, on the East side of the Hudson River from upstate New York, then south on Route 9a, west onto Bleakley Ave, south onto Broadway, running *past the Buchanan North station*, and then west onto 11th street in Verplanck, into the proposed converter. The proposed alternate route would then send the power back up 11<sup>th</sup> and Broadway to the Buchanan North Substation. Why backtrack? There are adjacent industrial parcels lots much closer to Buchanan North. The L1 option, which would include an additional 2 miles of underground work, is not reasonable and a waste of taxpayer dollars. WPP could find a suitable local spot, hopefully closer to the Buchanan North Station.
- D) In the <u>Summary of Response to Request for Information</u>, WPP indicates it does not expect to require or seek Eminent Domain authority for its real estate needs. *However*, in the application, under exhibit 3 (June 28, 2013), WPP states that land must be

available for purchase from willing land owners as WPP does not presume to have the authority to take property by Eminent Domain. Which is it? Does WPP have access to eminent domain, if needed?

Why would WPP need eminent domain? The two entities that have the vacant land in the industrial areas adjacent to the substation - Con Ed and Entergy - should be willing partners of your project, and willing to offer you land that makes connections to Buchannan North reasonable for all. Doesn't this project at least in part fulfill the directive from NYSPSC to Con Ed ( see 11/27/12 news release ) to develop and file a contingency plan to address the needs that would arise in the event the Indian Point units are shut down? WPP indicates there is a potential to expand to 2000 MW, which is very close to the 2065 MW that Entergy's Indian Point can produce. Wouldn't this directive be enough motivation for Con Ed to assist you, possibly with the 50-acre parcel adjacent to the Buchanan North station, or locating on the existing Entergy Indian Point property?

4) What are **the health issues** associated with the added Electric Fields or magnetic field levels this project will create?

Is there a co-relation between cancers, or other conditions, for long term exposure to even slightly elevated levels of EMF?

What are the short and long term effects, physically and/or mentally, of repeated and / or prolonged daily exposure to elevated electric and magnetic fields, which the application indicates are still within the allowable state / federal limits?

Are there any issues with these added electric and magnetic fields as it relates to the development of children?

- 5) Where else in the country is one of these facilities adjacent to an established residential district? Within 1000 feet? Within 500 feet?
- 6) Some people may be looking at the tax value. Based upon past history, what would be the value of this facility on the Town wide tax rolls? This will have an effect on the valuation of the homes NOT ONLY adjacent to and within earshot of the converter, but the entire region. Is there any estimate on how much nearby the properties will be **devalued**, and by how much?
- 7) Since WPP has requested that the Public Service Commission waive a number of Town codes, and permit requirements, and their related fees, how is the Town compensated for reviewing this proposal? Or is this also at taxpayer expense, in addition to reducing our property values and quality of life?
- 8) How does the local emergency personnel address any issues with 320 kV DC and 345 kV AC, be it buried cables, vault / splice issues, to the converter station itself?

- 9) In the WPP <u>Summary of response to request for information</u>, it states that WPP expects a wide range of potential stakeholders to be interested in West Point as plans for the project are developed. Stakeholders listed in the summary include municipalities in which the converter stations will be sited. WPP will pro-actively engage the stakeholders both prior to the filing permit applications and through the Public Service Law Article VII process. WPP states that public outreach efforts should proceed in parallel with project development, beginning with conceptual-level information. Please provide us with details of your discussions with the Town to date, as you have already started the application with a route, and no alternatives.
- 10) In WPP <u>Summary of response to request for information</u>, under neighbor impacts; Public Safety, WPP indicates that the underground portions of the cable route are expected to be very short and *not routed through neighborhoods or densely populated areas*.
  What changed, that you did not investigate alternatives in the planned industrial areas adjacent to the Indian Point power plant, as indicated by the absence of alternatives in your own

to the Indian Point power plant, as indicated by the absence of alternatives in your own application?

How do you plan on working with our local officials to assure that local public concerns are suitable addressed?

11) Did you discuss the route with local officials prior to doing your studies and filing your application?

## 12) Noise levels -

A) What is the standard for testing? Are two (2) - 20 minute periods (Day / Night) on consecutive days the industry standard? (Noise level evaluation page 9). If so, why would WPP conduct 24- hour sampling for the station location, while only doing two 20-minute tests at the impacted resident's sampling location. In the noise level evaluation report it give pages of backup certifications for testing equipment, but where in the report does it list the equipment actually used, as well as the name and current certifications of the technician/operator?

B) The baseline readings for the location of the proposed facility were done in April, 2013.

What effect will removal of the existing vegetation, which absorbs some of the sound energy, in the area of construction of the new proposed facility, have on these readings? What effects will the elimination of this absorptive vegetation and replacing it with reflective metal panels on the butler style metal converter hall building and other enclosures have on these noise readings? C) The distances used to describe each location, on tables 4.13-3 and 4.13-4, indicate the measurements are from the center of the proposed Converter Station parcel; not the distance from the nearest noise generator, which with a 5 acre parcel, could be significant. What is the correct distance to use in calculating the sound dissipation over distance? If I understand it correctly, sound diminishes with distance, so **overestimating the distances would produce artificially low projected readings. This distance issue could also distort the numbers tabulated on table 4.13-10 – projected construction noise levels.** 

D) Sound energy dissipates with distance, but what about the effect on structures at the same elevation or higher, once trees are removed and the vegetation buffer is cleared? With the removal of vegetation and an additional new clear line of sight. this would affect the Washington Hill and old Hundred Farm portions of Verplanck. Why were these residents not notified of the project, and the potential ramifications?

E) What will the noise generated by this transformer facility sound like? What device would it be comparable to?

With the noise generators (fans, etc.) being at different distances from a residence or receptor of the sound, will the frequency be the same, or will it constantly oscillate?

Page 4-143 indicated that the houses at corner of Broadway and 11<sup>th</sup> are approx. 50 feet below the station elevation. If one were to look at the computer simulation from Letteri Field, Figures 4.12-2 and 3, the proposed facility to the field elevations appears to be much less than that, which I believe may affect and distort the noise computations, and the results. Could you please verify this difference in elevations?

F) Noise associated with construction – WPP indicates that the average individual is likely to accept noise associated construction, given its temporary nature. This may be the case, depending on one's definition of "temporary".

How long will the converter station take to build, including all buildings and equipment?

G) Some residences may experience a 6 dB increase in ambient noise if the proposed substation is operational. **Table 2 indicates a 5 dB change is readily noticeable**. Therefore, according to the WP proposal, residents can expect a readily noticeable increase in ambient noise levels. (Table 4.13-14)

13) <u>Power levels</u> – All of the recent notices indicate this proposal is for a 1000 MW installation and nothing more. However, even the Request for Proposal submitted for the application to the PSC indicates there is an option to expand to 2000 MW.

Is this correct?

IS WPP's project is intended to be a 1000 MW or a 2000 MW installation? If the capacity were expanded / doubled, how would that be done? Is it by doubling the size of the installation? Is it larger cables and larger buildings and larger noise source generators? Or is it to add a second separate system alongside the proposed 1000 MW – basically a mirror image? What would the revised number be for noise and EMF?

14) Please describe the <u>site control provision</u>, prior to December 2012, referenced in the documents (Exhibit 3, Alternatives 3.4.1)? Has WPP already purchased the property?

What affect will the potential Spectra Energy AIM new HDD 42 in gas main at the Verplanck landing site have?

## What, if any, will be the effect on the application if you were to change the route and find a more suitable location in the industrial part of the Village of Buchanan?

## 15) Safe thermal operation of the buried cables –

Thermal operation is not much of an issue with a series of cables buried 8 foot below the river.  $(4.5.2.2 - \text{sediment temperature at 4 inches below the river bottom is expected to increase less than 1 degree C during operation). More importantly, what will be the effect at the shallower 4 foot depth below a residential street, which many people use? Please explain how much heat these cables give off.$ 

There is a high water table in areas along the route. How are the wires kept dry? What are the ramifications, in a residential area, if an underground cable were to short out or arc in the vicinity of pedestrians or residences?

## 16) STATE EMF standards and guidelines for transmission lines – Table 4.14-2 –

This table gives guideline numbers for locations on the ROW and the edge of the ROW. Are these standard guidelines for overhead transmission lines, or for underground facilities?

Is this table a valid standard to use for cables buried beneath the sidewalks, lawns and roadways of a residential area?

Was this specific type of application addressed in calculating the table and its data? What were the assumptions for formulating this table?

What access to the ROW was assumed? In this area, when on talks about right of ways for transmission lines, it is usually a ROW that is secured, fenced or otherwise isolated. Did those formulating this table intend for it to be used in communities where their residents would daily utilize the ROW over the high voltage transmission lines for daily activities?

What, if any, standards exist specifically for transmission cables buried beneath the streets of residential neighborhoods.

- 17) With areas that have high water tables, can minor stray currents travel through water lines, drainage pipes, the metal components of drainage pipes / structures and possibly into the homes thru the water services? A current of one hundredth of one percent is still 34 volts AC. While it may be a VERY small percentage, with water, it could be lethal current.
- 18) Rock is visible at roadside in at least two areas, 11<sup>th</sup> street and 15th street to the cemetery. If hydraulic ram (machine-mounted jackhammer) excavation is necessary, what effect will it have on the water mains, and their continuous service? What about adjacent homes also founded on the same rock?

What effect will that noise have, on residents who live at higher elevations in Verplanck? How can that sound be mitigated?

- 19) Once this facility is built, if the noise is not as presented in these documents, what recourse do the residents of Verplanck have? Live with it? Like we did with the Gypsum plant when the Village of Buchanan approved it without input from Verplanck residents?
- 20) Based upon Figures 4.14-1 and 2, the duct bank installation will effectively create a longitudinal thermal concrete block for any utility crossings at customary depths, for the length of the project. Since this is a residential area, how are utilities / services to be maintained?

If a water main is on one side of the road, the service for a house on the other side of the road will have to be over 5 foot deep, to get under the duct bank, which brings in additional costs and effort any time work needs to be done.

- 21) Does prolonged exposure of the water mains, water services, storm sewers pipe and drain structures ins to these electric and magnetic fields have any adverse effect on the integrity of the underground pipes or structures?
- 22) Town Engineer is this type of installation considered a public utility facility that is permitted in any zone, or is a special permit required?If a special permit is required, what does that involve?Who is the owner of this facility? (Page 4-116)
- 23) Town Engineer does the Town of Cortlandt have an approved LWRP (Local Waterfront Revitalization Program)? (Peekskill is listed). If so, why not addressed in section 4.10.4.

- 24) Section 4.16 Cumulative impacts There are no known development proposals to be sited in the proximity to these land based sites and route. What about the Spectra Energy gas line FERC PF13-16-000?
- 25) What is the construction timetable? The report indicates 4 months of in river work, starting August 2015, and the system is to operational by the third quarter of 2016. When is the land portion of the work projected to commence? How long will it take?

These are my initial questions about this project.

Respectfully,

Bernard Vaughey 215 Broadway Verplanck, NY 10596